Promoting Older Adult Health with Interprofessional Education Through Community-Based Health Screening

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BACKGROUND
- The World Health Organization (WHO) defines interprofessional education (IPE) as "an experience that occurs when students from two or more professions learn about, from, and with each other."
- Established in 2002 at the University of Montana Skaggs School of Pharmacy, ImProving Health Among Rural Montanans (IPHARM) began conducting health screenings for Montanans in 2003 in a converted motorhome. In 2005, the Montana Geriatric Education Center (MTGEC) partnered with IPHARM and provided funding to expand the health screenings for older adults. These events took place in a variety of settings including senior centers, malls, pharmacies, and other venues across the state.
- In 2008, IPHARM began performing interprofessional health screenings and providing clinical training for health care students for different disciplines. Student, faculty, and clinician involvement over the years has included pharmacy, nursing, physical therapy, social work, speech pathology, medicine, and athletic training.
- According to Bennett PN, et al., IPE and activities may be more advantageous for student development by utilizing realistic environments for improving clinical knowledge and skills.
  - Increase communication between professions
  - Align education programs between schools
  - Decrease healthcare-related costs and intervention redundancy

METHODS
- Recruitment and training of a group of interprofessional students occurs under the supervision and mentoring of one or more healthcare professionals.
  - Nursing and pharmacy students are trained on bone density, A1c, and lipid panel point-of-care (POC) testing in their respective programs.
  - Physical therapy (PT), nursing, and pharmacy students are trained on vital sign testing and assessment.
  - PT students are trained on fall risk assessment by utilizing Stopping Elderly Accidents, Deaths, and Injuries (STEADI) risk assessment tool
- Patient education, counseling, and recommendations for follow-up or referrals are provided by the interdisciplinary student teams under the guidance and supervision of faculty and clinicians.
- Both in-person and online survey assessments are used to assess the effectiveness of the events and training from faculty or clinician, student, and patient standpoints.
- The clinician or faculty assessment originally included ten yes/no questions to evaluate a student’s professionalism and POC test competency where most students showed growth over the span of multiple events. It was later adapted to seven questions ranking students on a 5-point scale.

RESULTS
- Data from a 5-year snapshot demonstrates the number of events, students, older adults screened, tests performed, and how COVID-19 impacted health screening in Montana in 2020 and 2021.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Events</th>
<th>Students</th>
<th>Patients 55+ years of age screened</th>
<th>Tests Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>51</td>
<td>238</td>
<td>695</td>
<td>1263</td>
</tr>
<tr>
<td>2018</td>
<td>42</td>
<td>210</td>
<td>651</td>
<td>1117</td>
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<tr>
<td>2019</td>
<td>30</td>
<td>188</td>
<td>545</td>
<td>1222</td>
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<tr>
<td>2020</td>
<td>7</td>
<td>29</td>
<td>37</td>
<td>190</td>
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<tr>
<td>2021</td>
<td>8</td>
<td>26</td>
<td>53</td>
<td>131</td>
</tr>
<tr>
<td>Total</td>
<td>138</td>
<td>691</td>
<td>1981</td>
<td>3833</td>
</tr>
</tbody>
</table>

- Students evaluated the health screening events through online survey systems from 2017 to 2021, with 138 students responding.
  - 99% of respondents (n=137) indicated they were adequately trained for the event and over 98% (n=138) indicated that supervision at the event was helpful towards clinical education.
  - Over 98% of students (n=136) felt they had a positive impact on participants’ health education.
- Students shared what they learned from other health professions during this time period.
  - "It was helpful to see how the other students went about completing their assessments and comparing strategies they used to my own."
  - "I learned the roles of other disciplines, how our interactions with participants can overlap and mesh together."
- From 2008 to 2020, 2,263 participant assessment surveys were completed with 88% of respondents (n=2000) stating they had taken at least one action to improve their health and 96% (n=2112) indicating they were satisfied or very satisfied with their IPHARM visit.

CONCLUSIONS
In the last 20 years, IPHARM has continually increased rural access to health assessment screenings while providing interprofessional education opportunities for healthcare students across the state of Montana. Clinicians or faculty and students found benefit in participating in IPHARM events with notable improvements in POC testing competency and patient, student, and provider interactions. Participants reported being satisfied with events and most reported making one or more health improvements.

REFERENCES