OBJECTIVE
To evaluate interprofessional (IP) education outcomes with implementation of a pilot pharmacotherapy consult service involving doctor of dental surgery (DDS), dental hygiene (DH), and doctor of pharmacy (PharmD) students in dental school-based clinics.

METHODS

PROGRAM DESIGN
- Pharmacy and dental faculty created a pharmacotherapy consult request decision pathway that allowed DDS and DH students to discuss their patients’ medication-related issues
- All students received an orientation on scopes of practice of each discipline and overview of consult types (Table 1)
- Consult services were conducted by pharmacy faculty and second-year PharmD students with a focus on education and clarification
- Pharmacy and dental faculty created a pharmacotherapy consult request decision pathway that allowed DDS and DH students to discuss their patients’ medication-related issues
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DATA COLLECTION
- Pre-post experience surveys were conducted at baseline and the end of the academic year assessing DDS, DH, and PharmD students’:
  - Knowledge of each discipline’s scope of practice using confidence scale statements
  - Perceptions of interprofessional communication using the Readiness for Interprofessional Learning Scale (RIPLS)
  - Overall program evaluation
  - Assessment of student clinical experience was evaluated through self-reflection, focus groups, and consult tracking technology.

RESULTS

What did DDS/DH students learn from collaborating with pharmacy faculty and students?

Pharmacy Faculty:
- Importance of complete medication histories
- How to counsel on diabetes care, medications, and symptoms of hypoglycemia for chronic disease states
- Recognition of oral side effects of medications

Pharmacy Students:
- Asking appropriate follow-up questions to obtain more information
- Drug-drug interactions and drug delivery mechanisms
- PharmD curriculum and their scope of knowledge

FOCUS GROUPS
Three additional focus groups with a total of 11 DDS students were conducted.

Emerging themes identified included:
- Ability to assess how medications on patients’ lists may impact oral health
- Appreciation of communication with other health disciplines to impact overall patient care

CONCLUSIONS
- Dental school clinic settings provide a rich opportunity for interprofessional interaction and results indicate benefits for student learning within the dental clinic environment
- Outcomes indicate the benefit of this IP practice collaboration and support continued integration of pharmacy practitioners within the dental school clinic practice environment
- Data collected from this study is being used to help guide and inform further development of interprofessional experiences between the schools as well as identifying ways to better frame interprofessional experiences to assess interprofessional education learning outcomes.
<table>
<thead>
<tr>
<th>Confidence in Knowledge of Dentistry Statement(^a)</th>
<th>PharmD Students (n = 6)</th>
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</thead>
<tbody>
<tr>
<td>1) Define basic dental terminology (including procedures and oral anatomy)</td>
<td>2</td>
<td>3.5</td>
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<tr>
<td>2) Recognize how a patient’s medications affect his/her oral health</td>
<td>3</td>
<td>6.5*</td>
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<tr>
<td>3) Describe common side effects of medications that affect oral health</td>
<td>3.5</td>
<td>7*</td>
</tr>
<tr>
<td>4) Recognize common dental documentation processes (including treatment plan, progress notes, medical history, general exam, periodontal exam)</td>
<td>2</td>
<td>3.5</td>
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<tr>
<td>5) Recognize which dental procedures may be impacted by certain patient medications (patient safety)</td>
<td>2.5</td>
<td>6*</td>
</tr>
<tr>
<td>6) Explain the types of diagnostic labs or point of care tests that are important to consider in a dental setting.</td>
<td>1.5</td>
<td>5*</td>
</tr>
<tr>
<td>7) Understand the types of lab monitoring that are important to consider in a dental setting.</td>
<td>1.5</td>
<td>4.5*</td>
</tr>
<tr>
<td>8) Describe most common medications used for dental procedures (including local anesthetics, antibiotics, pain medications)</td>
<td>3.5</td>
<td>5*</td>
</tr>
<tr>
<td>9) Understand the educational process to achieve a DDS degree (prerequisites, years of study, curriculum structure)</td>
<td>1.5</td>
<td>3.5*</td>
</tr>
<tr>
<td>10) Understand the educational process to achieve a DH degree (prerequisites, years of study, curriculum structure)</td>
<td>1</td>
<td>2.5*</td>
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<tr>
<td>11) Distinguish the difference between the role of a dentist and the role of a dental hygienist</td>
<td>2.5</td>
<td>5.5*</td>
</tr>
<tr>
<td>12) Recognize how consulting with a DDS or DH can improve patient care (scope of practice)</td>
<td>2.5</td>
<td>6.5*</td>
</tr>
</tbody>
</table>

\(^a\) Each item measured on a scale from 0 (cannot do at all) to 8 (highly confident can do).
\(^b\) Wilcoxon signed-rank test used to compare pre- and post- responses. Range reporting varied from 0-8
* Significant change from baseline (p-value < 0.05)