DEVELOPING A UNIQUE ADVANCED PHARMACY PRACTICE EXPERIENCE:

CLINICAL TELEPHARMACY THROUGH TELECOMMUNICATION AND TELEPRECEPTING

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DISCLOSURE

I am the remote student in this presentation and completing this rotation was a requirement for both my college of pharmacy and for licensure with the state of Alaska. However, I have no relevant financial relationships to disclose.
Can an APPE rotation successfully be completed in its entirety remotely via telecommunication and teleprecepting? True or False?

Which is NOT a barrier to successfully completing an APPE via telecommunication?
- A. Time zone differences
- B. Technical and/or connectivity issues
- C. Political differences

What would you consider to be an absolute requirement for an APPE to be considered successful?
Upon conclusion of the program, the participant should be able to describe how an APPE rotation can be completed by a remote student entirely through teleprecepting and telecommunication.
Background

- The Veterans Integrated Service Network 20 (VISN 20) telehealth APPE
  - Well-practiced model of clinical pharmacy care to remote locations
  - Onsite students experience telehealth as practicing clinical telehealth pharmacist
- The novel idea to offer this experience entirely via telecommunication to a remote student was unprecedented.
- The remote student is part of an inaugural PharmD program in Alaska
- A unique APPE to learn about telehealth pharmacy practice
PURPOSE

This rotation was designed to offer the complete advanced pharmacy practice experience (APPE) to an inaugural pharmacy student located in Anchorage, Alaska, in its entirety through the innovative route of telecommunication and teleprecepting.
Methods

- Every day the remote student met via telecommunication with a preceptor located in Boise.
- The student attended meetings, topic discussions, and student presentations; presented topic discussions, a journal club, and a clinical case; shadowed providers, answered drug information questions, conducted patient appointments, and wrote progress notes, all through telecommunication.
- The student completed various projects across the continuum, such as a student-derived poster and a student-specific telehealth APPE guidebook.
- As a measure to establish parity between the student experiences, a detailed comparison of each students’ schedule was examined at the end of the rotation.
- Due to the unique circumstances of the remote student’s onboarding schedule, access to patient information was not granted until the end of week two and the comparison between student schedules began then.
### Results

<table>
<thead>
<tr>
<th>Onsite Student</th>
<th>Remote Student</th>
</tr>
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<tbody>
<tr>
<td>4 presentations</td>
<td>5 presentations</td>
</tr>
<tr>
<td>4 topic discussions</td>
<td>9 topic discussions</td>
</tr>
<tr>
<td>1 drug information q’s</td>
<td>3 drug information q’s</td>
</tr>
<tr>
<td>4 electronic consult q’s</td>
<td>5 electronic consult q’s</td>
</tr>
<tr>
<td>5 clinical pharm meetings</td>
<td>9 clinical pharm meetings</td>
</tr>
<tr>
<td>10 provider shadows</td>
<td>8 provider shadows</td>
</tr>
<tr>
<td>27 appts conducted</td>
<td>16 appts conducted</td>
</tr>
<tr>
<td>35 no show appts</td>
<td>9 no show appts</td>
</tr>
<tr>
<td>2 lost appts to technical issues</td>
<td>3 lost appts to technical issues</td>
</tr>
</tbody>
</table>
Results

Teleprecepted student vs. On-site student Comparison

- Presentations: Remote Student (5), Onsite Student (4)
- Topic Discussions: Remote Student (9), Onsite Student (4)
- Drug Info: Remote Student (3), Onsite Student (1)
- E-Consults: Remote Student (5), Onsite Student (4)
- Clinical/Pharmacy: Remote Student (9), Onsite Student (5)
- Provider shadowing: Remote Student (8), Onsite Student (10)
- Direct Patient Contact: Remote Student (16), Onsite Student (27)
- Patient No Shows: Remote Student (9), Onsite Student (35)
- Missed due Tech Issues: Remote Student (3), Onsite Student (2)
For both students, the types of patient appointments weighed heavily in diabetes, then tobacco cessation, and least in other chronic conditions.

Apartment types were recorded according to initial chief complaints and did not always accurately reflect all the disease states actually addressed in each visit.
Discussion

• Where the results show more exposure to direct patient contact and no show appointments for the onsite student, the remote student had more exposure to drug information/electronic consults questions, topic discussions, presentations, projects, and pharmacy/clinical pharmacy meetings.

Conclusion

• Teleprecepting a remote student via telecommunication proved to be successful in delivering an APPE experience comparable to an onsite student in exposure to types of disease states and overall clinical telepharmacy practice.
FUTURE CONSIDERATIONS

Improvements to technological barriers and increased exposure to direct patient care appointments could make the remote and onsite student experiences indistinguishable in the future.
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What would you consider to be an absolute requirement for an APPE to be considered successful? **Self reflection**
SPECIAL THANKS

• VISN 20 telehealth pharmacist preceptors for accommodating and providing a unique APPE rotation to the remote student under particularly special circumstances.

• ISU, especially Dr. Tom Wadsworth & Dr. Paul Black, for your tireless efforts to deliver excellent student opportunities!