Aims

- Explore resident engagement in current traditional model of noon conference
- Investigate the impact of “gamified” noon conference sessions on learner engagement and knowledge retention
- Evaluate the effect of “gamified” noon conferences on faculty participation

Background

- Educational noon conference/ morning report is an enduring and ubiquitous component of didactic instruction in internal residency training programs, yet there is little research investigating the most efficacious format of these sessions
- Novel formats in medical education have emerged to foster engagement, increase active learning, and promote retention
- One of these formats is gamification, which is the application of game design to traditionally non-game contexts. This teaching technique is a tenet of K-12 education theory, and could be applied to medical education.

Methods

Games

- **Medical Jeopardy**: Groups of learners compete with one another to answer questions covering core clinical topics.
- **DermBanz**: Two teams compete, with one rotating designated “guesser” on each. A dermatologic image is shown to all participants except the guesser. Team members give the guesser dermatologic physical exam descriptors and relevant clinical information about the condition to help them arrive at the correct diagnosis.

Study Design

- Game sessions will be held every other month
- During the non-game months, the same material covered in the game sessions will be delivered via a PowerPoint lecture format
- Participants will fill out an engagement survey and knowledge assessment at the beginning and end of the month. The results of the survey and assessment of those who received material via a traditional didactic format compared with the results of those who received the material via a gamified format will be analyzed.
- Faculty attendance will also be taken for each of the sessions listed above.
- Data collection has been on hold the last year due to limitations in group gathering.

Preliminary Results

**Figure 1. Learner engagement before and after DermBanz game session**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>PreTest</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like dermatology</td>
<td>61% (n=13)</td>
<td>61% (n=13)</td>
</tr>
<tr>
<td>Feel proficient at dermatology</td>
<td>7.7% (n=13)</td>
<td>7.7% (n=13)</td>
</tr>
<tr>
<td>Studied or prepared for this noon conference</td>
<td>100% (n=11)</td>
<td>100% (n=11)</td>
</tr>
<tr>
<td>Feel actively engaged at noon conference</td>
<td>100% (n=11)</td>
<td>100% (n=11)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engagement After DermBanz</th>
<th>PreTest</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>DermBanz increased my knowledge of dermatology topics</td>
<td>100% (n=11)</td>
<td>100% (n=11)</td>
</tr>
<tr>
<td>DermBanz was a fun way to learn dermatology</td>
<td>100% (n=11)</td>
<td>100% (n=11)</td>
</tr>
<tr>
<td>DermBanz increased my level of engagement at noon conference</td>
<td>100% (n=11)</td>
<td>100% (n=11)</td>
</tr>
<tr>
<td>I will prepare/study for the next DermBanz</td>
<td>50% (n=8)</td>
<td>50% (n=8)</td>
</tr>
</tbody>
</table>

Next steps/limitations

- We plan to resume data collection over a 6-month period now that in-person noon conference has resumed
- Will need to update survey to match pre- and post-test questions
- Limitations of study include other variables that might influence faculty attendance that don’t reflect engagement
- To obtain target number of respondents, may need to extend study period to one year

Discussion/Potential Impact

- Increase faculty participation at noon conference
- If gamified conference sessions show an increase in learner engagement, knowledge retention, and faculty engagement, this could lead to modifications in the current noon conference curriculum
- Additional traditionally didactic medical education sessions could be adapted to a gamified or interactive format

References
