### Background
- Pharmacist-physician collaboration is an essential component of team-based medical care and can drastically improve overall patient outcomes.
- Fostering collaborative relationships with physicians is emphasized throughout the course of pharmacy training, but may not be as emphasized in general medical training.
- The level of interaction between medical students, medical residents, and pharmacists varies widely between institutions.
- The University of Alabama at Birmingham (UAB) School of Medicine operates internal and family medicine residency programs and clinics in Huntsville where faculty and fourth year (P4) student pharmacists at the Harrison School of Pharmacy (HSOP) extensively interact with physicians and patients.
- Student pharmacists are available in the clinic on a daily basis to provide services including: patient counseling, medication reconciliation, and drug therapy consultations.
- Medical residents are encouraged to collaborate with student pharmacists in order to balance their workload and allow them to better focus their time on direct patient care.
- UAB operates a similar residency program in Selma, Alabama; however, no clinical pharmacist or student pharmacists are present at this site.

### Objectives
- To assess the opinions of medical residents toward:
  - The importance of pharmacist-physician collaborative relationships
  - The knowledge of student pharmacists and their ability to provide quality interventions in the outpatient clinic setting

### Methods
- Anonymous surveys were distributed to medical residents from the Huntsville internal medicine, Huntsville family medicine, and Selma family medicine programs.
- Additional questions regarding frequency and type of student pharmacist interaction were also included in the survey and results were analyzed using Qualtrics® survey software.
- Opinion of pharmacist-physician collaboration was assessed using the “Scale of Attitudes Toward Physician-Pharmacist Collaboration” (SATP-Q) survey instrument which includes 16 items, each answered on a four-point Likert scale.

### Results

#### A total of 54 surveys were completed (72% response rate)

<table>
<thead>
<tr>
<th>Level of Training</th>
<th>Huntsville Internal Medicine (n=15)</th>
<th>Huntsville Family Medicine (n=29)</th>
<th>Selma Family Medicine (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year resident—No. (%)</td>
<td>18 (34%)</td>
<td>23 (41%)</td>
<td>17 (32%)</td>
</tr>
<tr>
<td>2nd year resident—No. (%)</td>
<td>18 (34%)</td>
<td>23 (41%)</td>
<td>17 (32%)</td>
</tr>
<tr>
<td>3rd year resident—No. (%)</td>
<td>18 (34%)</td>
<td>23 (41%)</td>
<td>17 (32%)</td>
</tr>
</tbody>
</table>

#### What level of interaction did you have with pharmacists/Pharmacy students during your medical school training?

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Huntsville Internal Medicine</th>
<th>Huntsville Family Medicine</th>
<th>Selma Family Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensive</td>
<td>30%</td>
<td>51%</td>
<td>33%</td>
</tr>
<tr>
<td>Some</td>
<td>43%</td>
<td>34%</td>
<td>33%</td>
</tr>
<tr>
<td>Seldom</td>
<td>26%</td>
<td>3%</td>
<td>33%</td>
</tr>
<tr>
<td>No</td>
<td>3%</td>
<td>23%</td>
<td>51%</td>
</tr>
</tbody>
</table>

### Conclusions
- The majority of residents had little to no interaction with pharmacists prior to starting their residency; however, most of them reported utilization of currently available pharmacy consult services.
- While residents from the Selma campus have fewer opportunities for pharmacist interaction than those from the Huntsville campus, their attitudes toward collaboration with pharmacists were generally similar.
- Overall, medical residents generally agree that collaboration between physicians and pharmacists is beneficial and should be encouraged during the course of professional education.

### References

### Disclosures
The authors have no conflicts of interest or financial support to disclose.