Enhancing Clinical Education through Telehealth

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### Statement of Need

In 2018, the University of Virginia School of Medicine introduced the new Patient Student Partnership Course (PSPC), in which medical students follow a patient longitudinally throughout their medical school training. The course aims to inspire patient based care by encouraging the students to establish a relationship with the patient and serve as their advocate while practicing clinical skills and contributing to the patient’s care. Six students were paired with By Your Side Pediatrics (BYS) patients who receive most of their primary care through home and telemedicine visits. Although students attend their patient’s clinical visits with specialists, the home-based primary care visits were a barrier to medical student attendance.

### Implementation and Usage

**Training:** Each medical student was trained by a telemedicine representative on the basic operation of the TytoPro device and given the opportunity to test all of the features during a mock physical exam on the telemedicine representative.

**Initial Contact:** Medical students were accompanied by a telemedicine representative to their patient’s house. During the visit, the patient connected to one of the BYS physicians during which the provider spoke to the family and student about their role in assisting with the use of Tyto devices. The students then assisted the family and provider by conducting a physical exam on the patient through the TytoCare device.

**Subsequent contact:** Medical students attended subsequent visits at the patient’s house with a telemedicine representative or alone. During these visits, students assisted the provider and family with the TytoCare device and the physical examination portion of the visit.

### Virtual Presence

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<thead>
<tr>
<th>Physician</th>
<th>Medical Student</th>
<th>Physical Presence</th>
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<tbody>
<tr>
<td>Clinical Guidance</td>
<td>Exam Findings</td>
<td>Physical Examination</td>
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Representation educational opportunities during a physician encounter using the TytoCare device

### Future Directions

As the medical students progress through school, they will be issued a provider account so that they are able to remotely check in on their patients to answer questions or assist providers with remote patient monitoring. This would be done with the supervision of an attending physician but also enable the medical students to have a certain degree of clinical independence.

If the program continues to be successful, the program can be expanded to include home visits directed by medical students with providers in other hospital departments. Additionally, the devices can be used in clinic, particularly with the stethoscope feature, so that students are able to hear the same sounds as the attending provider.

### References

- Images containing TytoCare devices obtained from [www.tytocare.com](http://www.tytocare.com)
- Map obtained from Google Maps

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<th>TytoHome Device with otoscope, stethoscope, and tongue depressor attachments</th>
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Map outlining the current distribution of patients with TytoCare devices around UVA