Transitioning from bedside to webside

Frontiers in Medical and Health Sciences Education 2020

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Background

- Class suspension since Feb 2020
- Lack of patient contact and clinical exposure
Bedside → Webside

• Pilot project: since March 2020,
• Specialty clerkship Neurosurgery, 100 students

**Tutor**
- Identify *suitable* patients
- Clear teaching objectives
- Prepare patient for the process

**Students**
- Webside manner
- Telemedicine skills
- Small group (<5)

**Set-up**
- Quiet, well-lit consultation room
- High quality AV equipment and internet
- Large screen TV/computer
- ePR access
Professional attire and manners
Consultation room set up

😊 ☹

[Image of a consultation room]

https://telemedicine.arizona.edu/blog/telemedicine-patientprovider-experience-technical-quality-not-nearly-enough
Audiovisual and internet

• Best HD camera and screen
• Clear microphone and appropriate level
• High-speed and stable internet and hardware
• From both Doctor AND Patient side!
Introduction and consent

History taking

Adapted physical examination

Interpretation of investigations and management plan
Efficacy and feedback

- Junior students History taking sessions
- Adopted by other clinical specialties
- Prelude to Telemedicine curriculum
- Supplement with physical examinations sessions

How well were you able to learn the following tasks via Webside teaching?

Answered: 97  Skipped: 0

- Patient communication
- History taking
- Physical examination
- Clinical reasoning
- Investigation interpretation
- Treatment considerations

[Bar chart showing percentages of responses]

Tsang ACO et al., Medical Education, 2020
“Online history-taking session was a new experience. I can foresee that it would become increasingly popular.”

“The zoom bedside teaching is the most meaningful to me... We can finally practice our history taking skills... Having tasted it (Telemedicine) during our studies...made us better adapt to the future.”

“what impressed me most were the Zoom bedside for ENT... Their enthusiasm for setting up a telemedicine platform and teaching via Zoom has been a huge motivation for us to continue our studies...”
Take-home messages

- Transitioning from Bedside to Webside teaching

<table>
<thead>
<tr>
<th>✓</th>
<th>✗</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real patient encounter</td>
<td>Not all patients suitable</td>
</tr>
<tr>
<td>Webside manners</td>
<td>Mis-communication</td>
</tr>
<tr>
<td>Telemedicine clinical skills</td>
<td>No <em>physical</em> examination</td>
</tr>
<tr>
<td>Interpret scans / multi-media</td>
<td>Bedside equipment / drains</td>
</tr>
</tbody>
</table>
Beyond COVID: Reconsidering Clinical teaching

Clinical Skills

Bed-side
- Irreplaceable
- Patient-contact
- Physical examination and communication skills

Web-side
- Telemedicine skills
- Online and multi-media
- Multi-institution participation
- Live surgeries

Lab-side
- Simulation and ultra-realistic models
- Controlled environment for consistent and repeatable training

Tsang ACO et al., Medical Education, 2020
References

From bedside to webside: A neurological clinical teaching experience
Anderson Chun On Tsang | Pamela Pui-wah Lee | Julie Yun Chen | Gilberto Ka Kit Leung

Clinical skills education at the bed-side, web-side and lab-side
Anderson Chun On Tsang | Kendrick Co Shih, Julie Yun Chen
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