Current Gaps in Medical Education as Illustrated by the COVID-19 Pandemic: Interviews with Physicians Across Various Medical

Specialties

Emmeline J Kim, MS3
Stephanie Yu, MS3, Rita S. Lee, MD & Aimee Pugh-Bernard, PhD
University of Colorado | School of Medicine



Study Aim

To understand the effect of the COVID-19 pandemic on physicians in various medical specialties across Colorado

Background

The COVID-19 pandemic had most heavily impacted:

- mental health
- physician burnout
- increased use of telehealth visits
- disproportionate impact of the pandemic on underserved populations

Methods

Interview Physicians

31 physicians across 19 specialties in Colorado in **April 2020**

Standard Interview Questions

Focused on the impact of the pandemic:

- in the context of physicians' practices
- the effect on patient care
- adaptations to practice and/or patient care
- the impact on trainees' education

Data Analysis

Audio files of interviews transcribed and analyzed to identify common themes

Identified themes that highlight gaps in current medical education that could be used as opportunities for positive change in medical education

Follow-up Survey

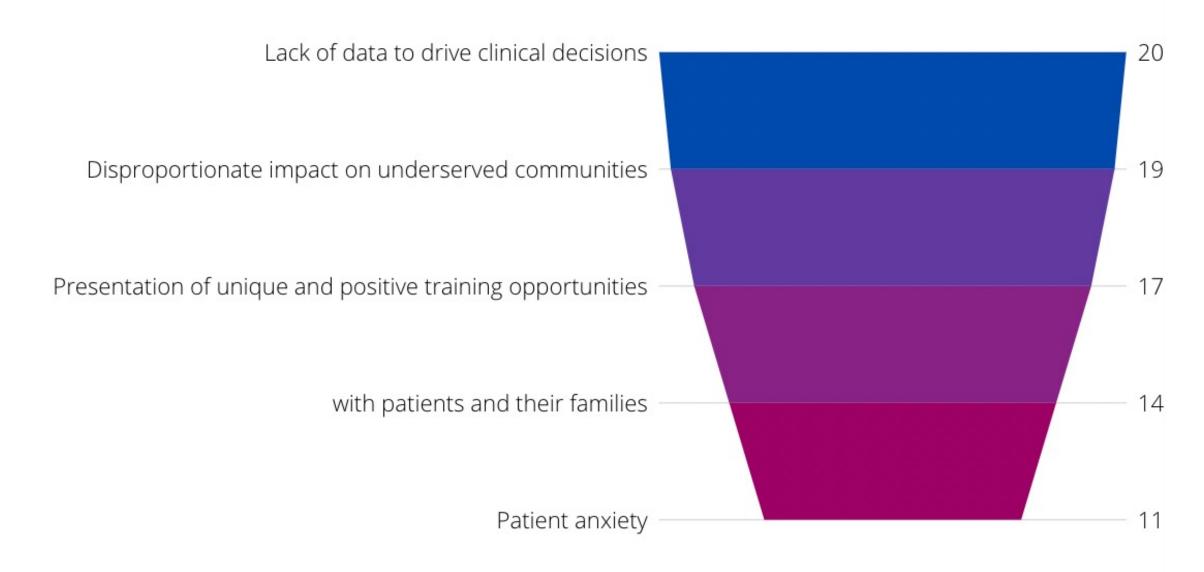
Follow-up survey in January 2022 included solutions proposed to address gaps in medical education identified in April 2020

Physician interviewed and their specialties

Addiction medicine	1
Anesthesiology	1
Critical care	4
ED	1
Family medicine	2
Family planning	1
Gastroenterology	1
Infectious disease	1
Internal medicine	2
OB/GYN	2

Oncology	1
Ophthalmology	1
Orthopedic surgery	1
Palliative care	2
Pediatrics	4
PM&R	1
Psychiatry	2
Radiology	1
Rheumatology	2
TOTAL	31

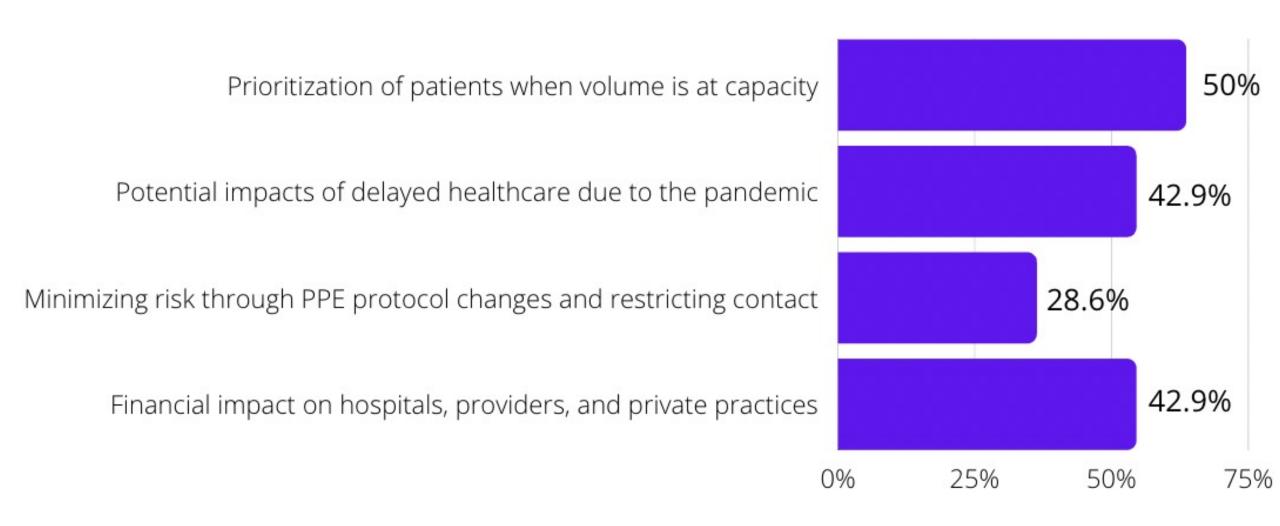
Results: Tally of themes in April 2020 Interviews



January 2022 follow-up survey results

Theme	Proposed Solution	"Strongly agree" with theme and proposed solution	Regarded issue as "very important"
Lack of data to drive decisions	Challenge students to navigate cases that may lack absolute answers to emphasize critical thinking and problem solving	57.1%	71.4%
Mental health impact	Provide more integrated training on mental health disorders to ensure future physicians treat patients as a whole and consider mental health regardless of specialty	42.9%	71.4%
Challenges in communication with patients and their families	Incorporate more training and practice with virtual health visits and communication via phone calls.	42.9%	50%
Disproportionate impact on underserved communities	Provide more education on the healthcare system in the US and topics such as health policy and health economics to give students the knowledge base needed to be able to make actionable change as future physicians	42.9%	89.7%

More themes that highlight opportunities to address gaps in medical education



Conclusions

- 1. Common themes identified during initial interviews present opportunities for positive change in medical education
 - Encourage students to grapple with the lack of data to drive clinical decisions
 - Increase training in teleheath
 - Incorporate strategies to solve the disproportionate impact on underserved during a pandemic
 - Incorporate strategies to improve the mental health impact of COVID
- 2. Follow-up survey allowed original physicians interviewed to reflect on additional topics for medical education
 - Increase teaching on how to triage
 - Emphasize training in preventive care

Implications

- Challenge trainees to think critically to better prepare them for the complexities of medicine
- More education on health equity, policy reform and advocacy, and health economics to equip future physicians with the tools needed for actionable change
- Students must learn to navigate the nuances of virtual care without sacrificing the quality of care
- Essential for physicians to address the mental health and well-being of patients regardless of specialty
- Need for increased teaching on how to triage appropriately
- Emphasize role of preventive care in medicine

Limitations & Future Directions

Limitations

- Small sample size (n=31)
- Two time points (April 2020, January 2022)

Future Directions

 Interview respondents to the follow-up survey for more granular detail on recommended changes to medical education

Acknowledgements

- Stephanie Yu, MS3, Carley Little, MD (CUSOM 2021), and Amanda Tompkins, MD (CUSOM 2021) for their contributions to this project
- Aimee Bernard, PhD and Rita Lee, MD for their mentorship
- All respondents to the survey without them our project would not have been possible

Literature Cited

- 1. Abdalla, M., et al. (2021). "Asynchrony Between Individual and Government Actions Accounts for Disproportionate Impact of COVID-19 on Vulnerable Communities." American Journal of Preventive Medicine **60**(3): 318-326.
- 2. Doebrich, A., et al. (2020). "COVID-19 and the need for disability conscious medical education, training, and practice." <u>Journal of Pediatric Rehabilitation Medicine</u> **13**(3): 393-404.
- 3. García-Iglesias, J. J., et al. (2020). "[Impact of SARS-CoV-2 (Covid-19) on the mental health of healthcare professionals: a systematic review.]." Revista Española de Salud Publica 94.
- 4. Germaine, P., et al. (2021). "Communication Strategies and Our Learners." <u>Current Problems in Diagnostic Radiology</u> **50**(3): 297-300.
- 5. Natsuhara, K. H. and H. T. Borno (2021). "The Distance Between Us: the COVID-19 Pandemic's Effects on Burnout Among Resident Physicians." Med Sci Educ: 1-5.