



AMERICAN ASSOCIATION FOR
THE STUDY OF LIVER DISEASES

COVID-19 & The Liver: The Trainee and Early Career Experience in Hepatology during COVID-19



Webinar Moderator

Bilal Hameed, MD

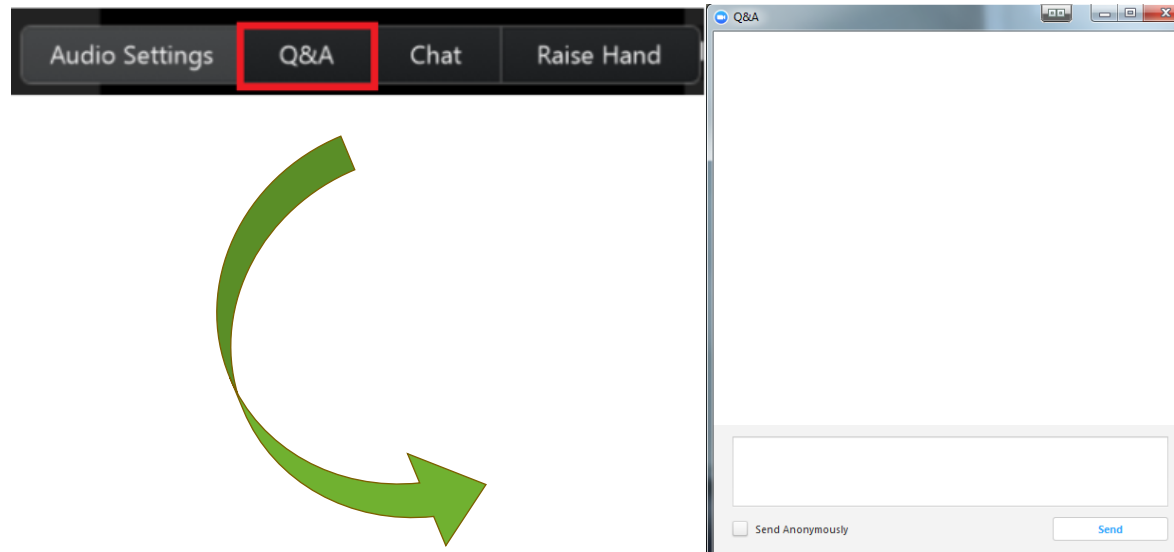
- Associate Professor of Medicine & Hepatology Clinic Chief, University of California, San Francisco

Webinar Agenda

- Housekeeping Items – Dr. Bilal Hameed
- Presenter & Panelist Introductions – Dr. Bilal Hameed
- Webinar Introduction – Dr. Bilal Hameed
- The Impact of COVID-19 on the Trainee Hepatology Educational Experience – Dr. Ani Kardashian
- Panel Discussion
- The Impact of COVID-19 on Hepatology Practice & Job Prospects – Dr. Vinay Sundaram
- Panel Discussion / Q&A

Webinar Q&A

- Submit your questions anytime during the webinar in the Q&A box at the top or bottom of your screen.



- Questions will be answered at the end of the presentations.

Webinar Presenter

Ani Kardashian, MD

- Transplant Hepatology Fellow
07/2019-06/2020, University of
California, San Francisco





Webinar Presenter

Vinay Sundaram, MD, MSc

- Director, Hepatology Outcomes Research & Associate Professor of Medicine, Cedars-Sinai Medical Center
- Chair-Elect, AASLD Membership & Mentorship Committee

**Charissa Y. Chang,
MD**

- Icahn School of Medicine at Mount Sinai (ISMMS)

Alyson N. Fox, MD

- Columbia University Medical Center

**Eric Esrailian, MD,
MPH**

- David Geffen School of Medicine at UCLA

**Hersh Shroff, MD,
MPA**

- Northwestern University - McGaw Medical Center

**Jorge A. Marrero, MD,
FAASLD**

- University of Texas Southwestern Medical Center

Webinar Panelists

AASLD's COVID-19 Clinical Oversight Subcommittee

- Co-chair, Oren K. Fix, MD, MSc, FAASLD, Swedish Medical Center (Washington)
- Co-chair, Elizabeth C. Verna, MD, MS, Columbia University (New York)
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- Bilal Hameed, MD, University of California (California)
- Laura M. Kulik, MD, Northwestern Medical Faculty Foundation (Illinois)
- Ryan M. Kwok, MD, Uniformed Services University (Maryland)
- Brendan M. McGuire, MD, University of Alabama (Alabama)
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- Nancy S. Reau, MD, Rush University (Illinois)
- Mark W. Russo, MD, MPH, FAASLD, Carolinas Medical Center (North Carolina)
- Michael Schilsky, MD, FAASLD, Yale University (Connecticut)
- Norah Terrault, MD, MPH, FAASLD, Keck Medicine of USC (California)
- Andrew Reynolds, (Patient Advocate)
- Raymond Chung, Massachusetts General Hospital (Massachusetts) (ex-officio)
- K. Rajender Reddy, University of Pennsylvania Medical Center (Pennsylvania) (ex-officio)

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- Member, Neil Shah, MD, University of North Carolina at Chapel Hill
- Member, Iliana B. Doycheva, MD
- Member, Udayan Apte, PhD, DABT, University of Kansas Medical Center
- Member, Valentina Medici, MD, FAASLD, University of California Medical Center
- Trainee, Nizar Senussi, MD, University of New Mexico



COVID-19 & the Liver: The Trainee and Early Career Experience in Hepatology during COVID-19

Bilal Hameed, MD

Associate Professor of Medicine

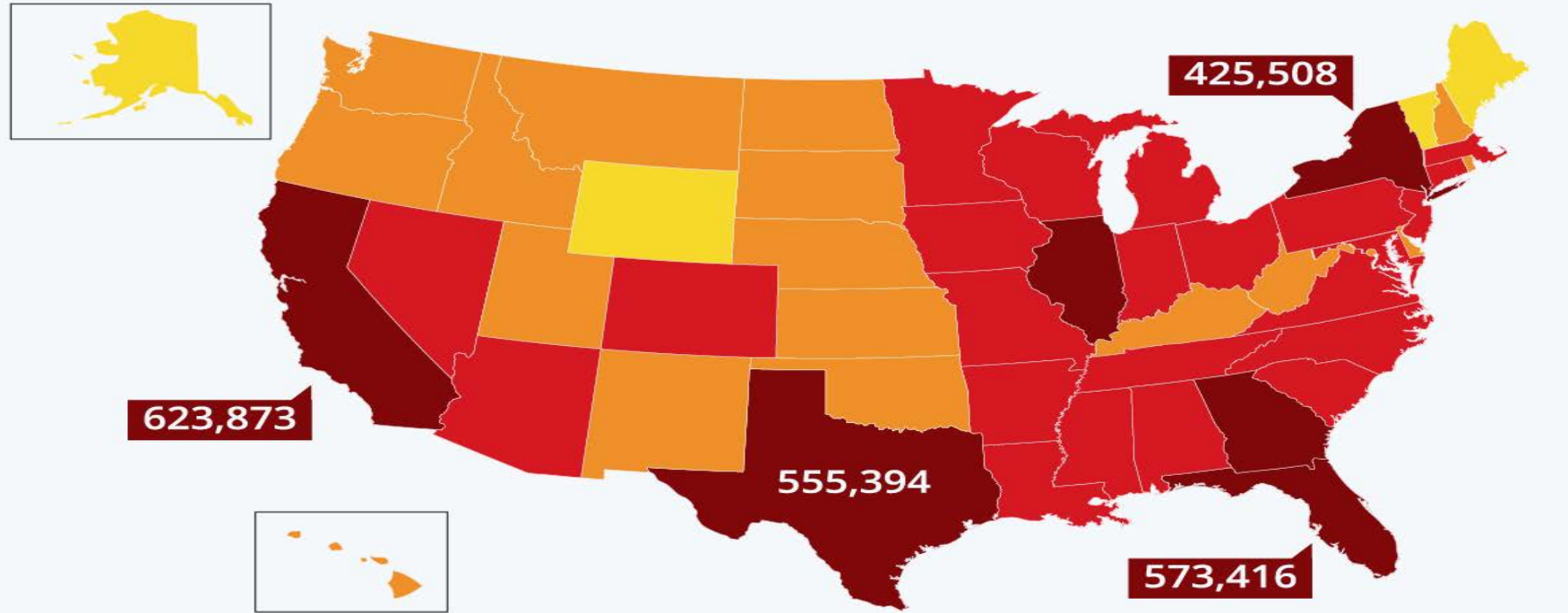
Clinic Chief, Hepatology

University of California, San Francisco

COVID-19 Cases are Increasing in US

Number of confirmed COVID-19 cases, by U.S. state*

0-4,999 5,000-49,999 50,000-199,999 200,000+

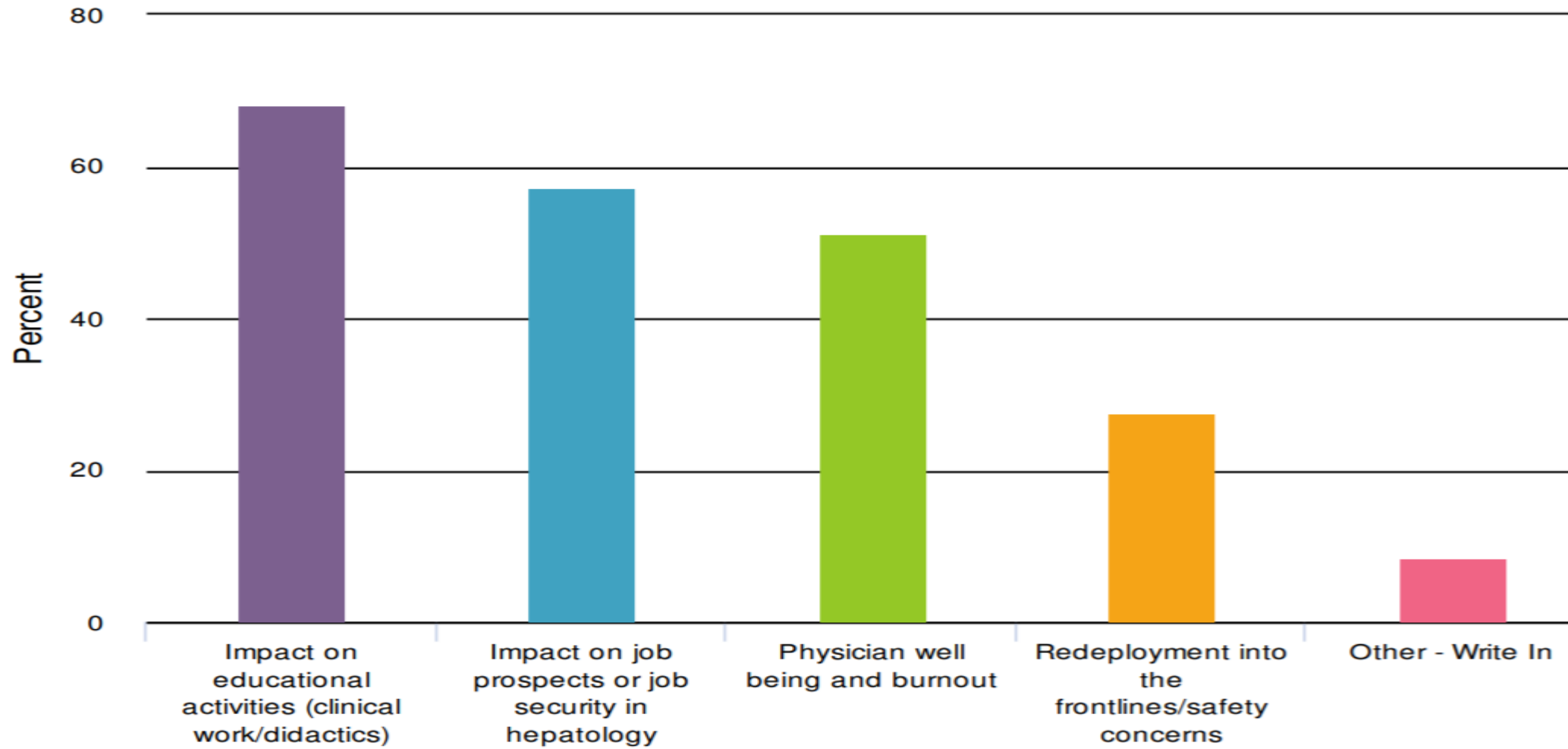


In the United States:

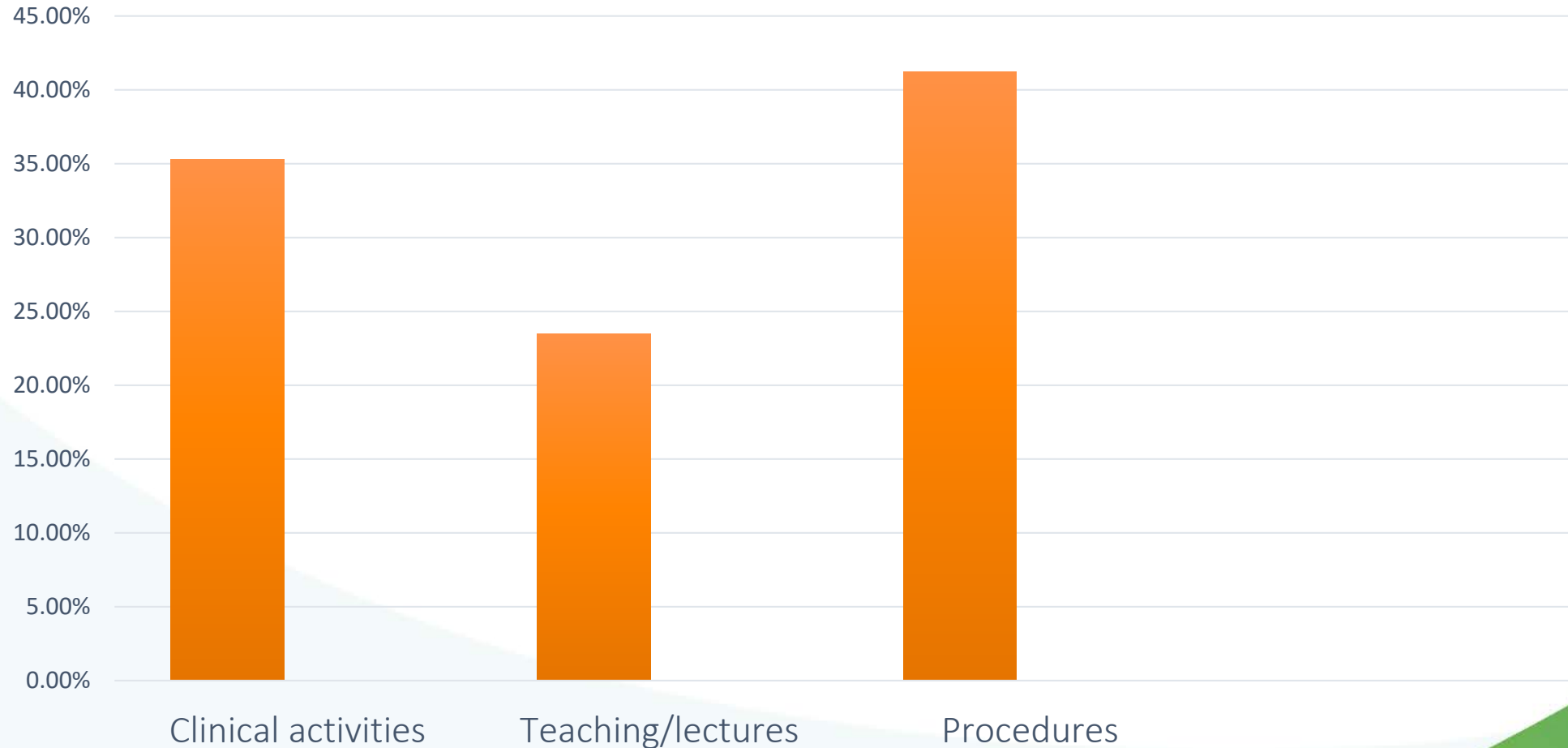
- 5.5+ million cases
- 1.7K+ deaths

Source: John Hopkins University

Which of the following issues concerns you as a result of COVID-19?



Which of your educational activities has been most impacted due to COVID-19





The Impact of COVID-19 on the Trainee Hepatology Educational Experience

Ani Kardashian, MD

Transplant Hepatology Fellow 07/2019-06/2020

University of California, San Francisco

Disclosures

None

Overview

- Educational experience pre- versus mid-pandemic
 - Inpatient and outpatient clinical rotations
 - Procedures
 - Formal didactics

Changes in Inpatient Clinical Rotations

Pre-pandemic

Pre-rounding by intern/nurse practitioner and fellow responsible



Multidisciplinary in-person sit rounds to form preliminary plans



Bedside rounds with entire team to confirm daily plans



Pandemic

Pre-rounding by intern/nurse practitioner and fellow responsible



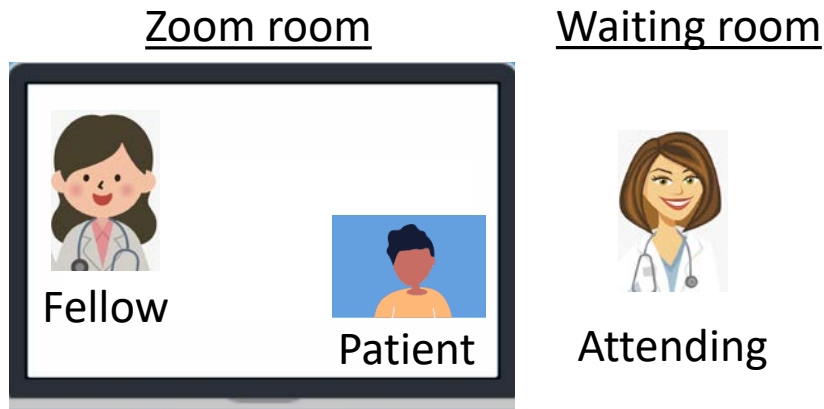
Rounds performed via Zoom videoconferencing to form prelim plans



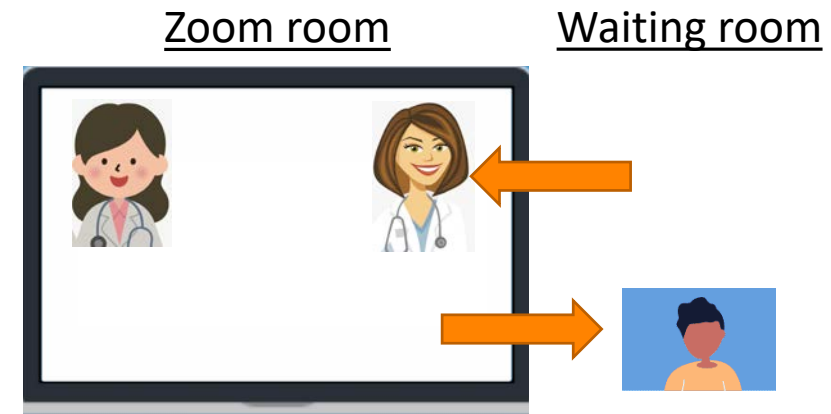
Attending only sees patient to confirm daily plans

Changes in Outpatient Clinics: New Workflow

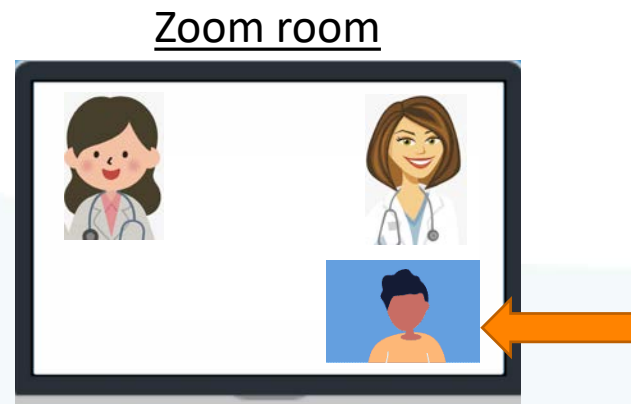
1. See patient



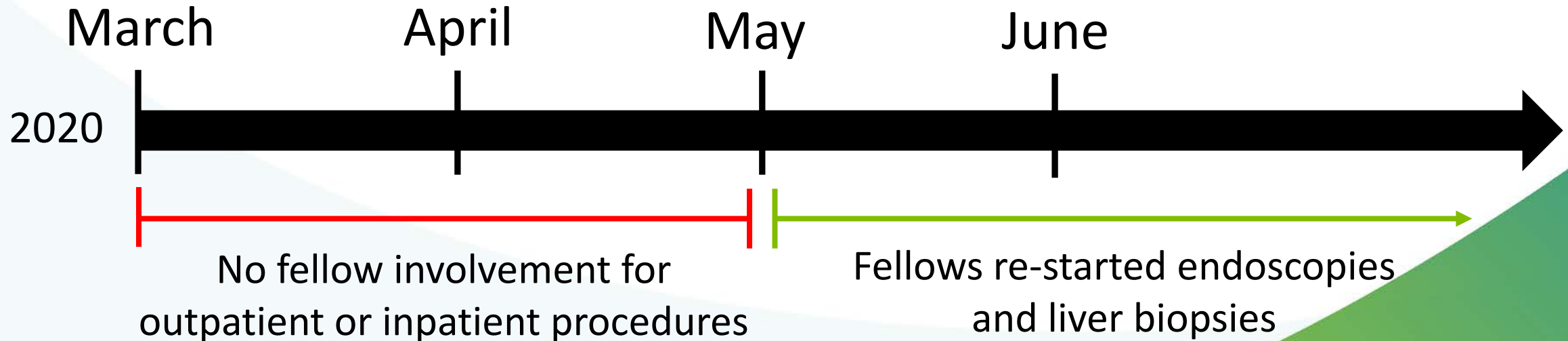
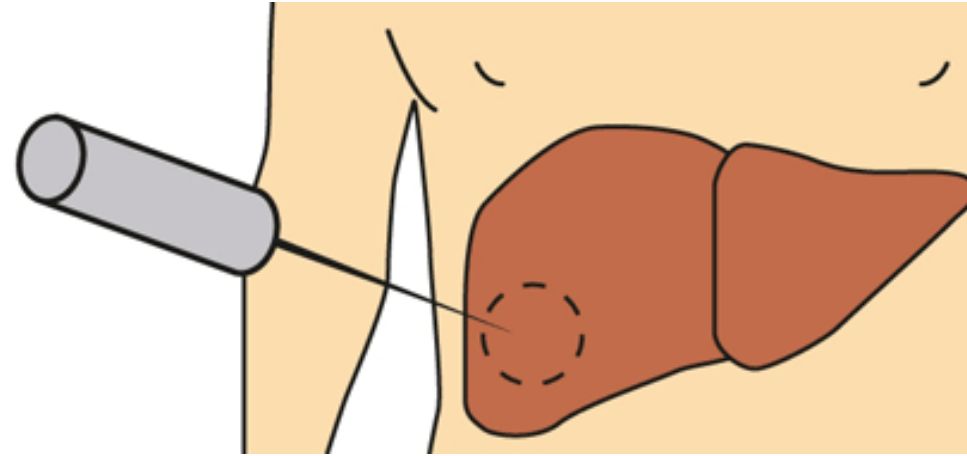
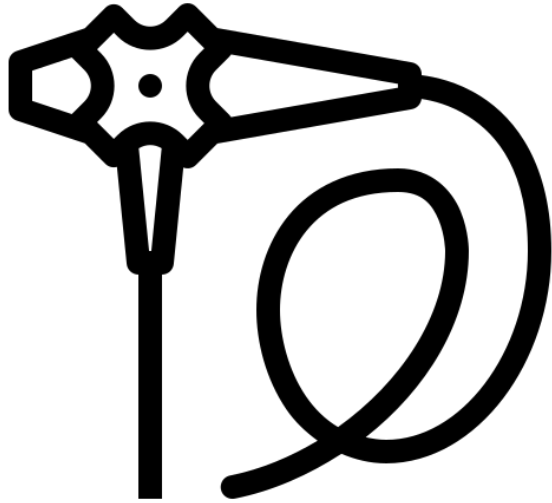
2. Staff case with attending



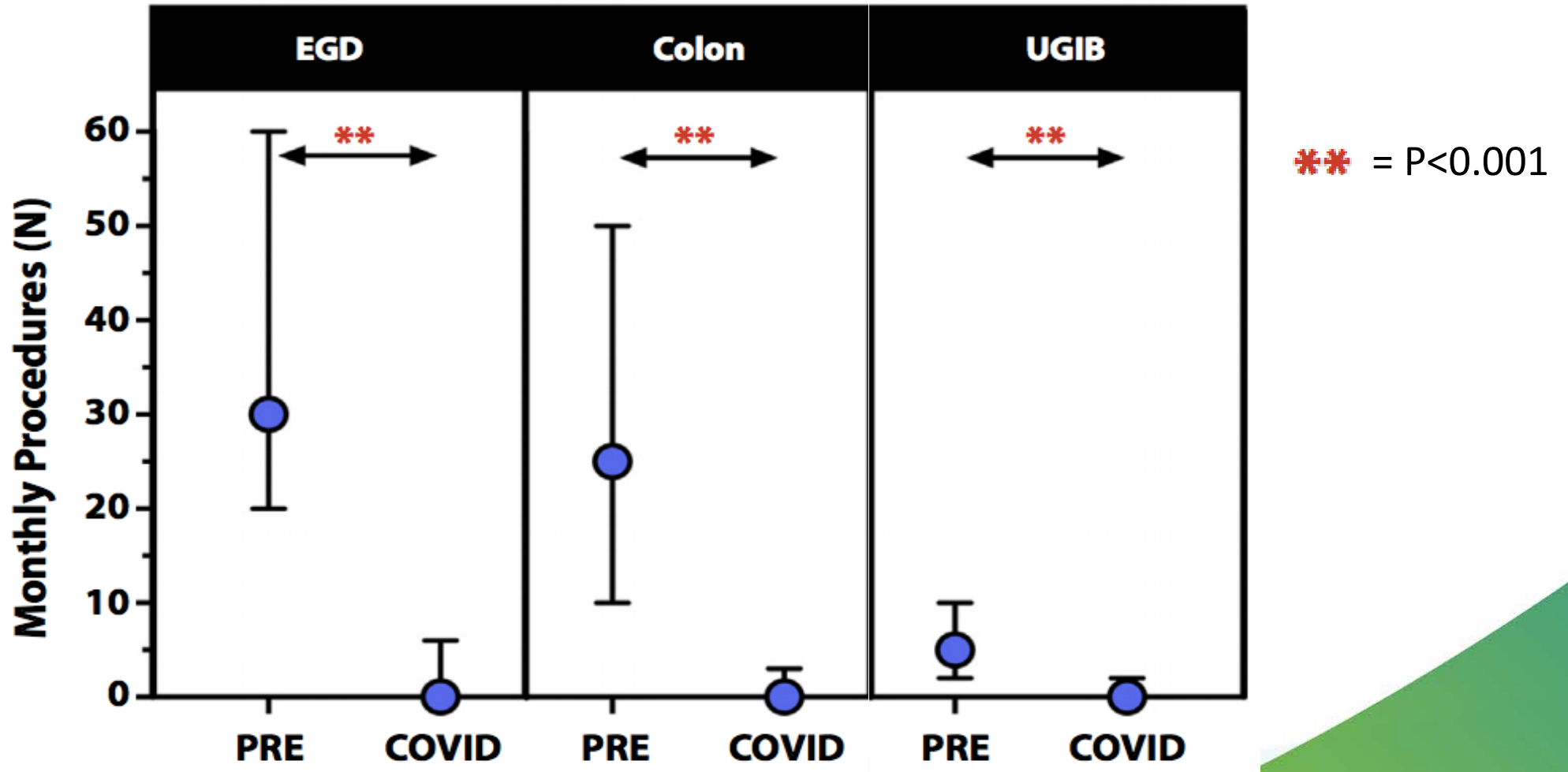
3. Bring patient back in



Changes in Procedures



Comparison of trainee-reported number of supervised procedures



Changes in Didactics

Pre-pandemic

Fellow core lecture series,
journal clubs, Grand Rounds,
Morbidity & Mortality
conferences



Pandemic



Wellbeing

- Weekly check-ins with PD and Associate PD
 - To provide feedback on programmatic changes
 - To discuss educational experiences, safety, re-deployment to other services
- Maintaining connections with friends, family, faculty

Future Directions and New Opportunities

Affected area	New opportunities for learning
Inpatient rotations	<ul style="list-style-type: none">• Assess when physical exam may change management
Outpatient clinics	<ul style="list-style-type: none">• Become effective in telemedicine and billing• Learn to triage urgency of clinic visit
Procedures	<ul style="list-style-type: none">• Learn to triage urgency of endoscopies and liver biopsies
Didactics	<ul style="list-style-type: none">• Virtual conferences are accessible to broader audience• More opportunities for formal teaching with greater ease

Table adapted from Shah *GIE* 2020

Please submit your questions to the Q&A Chat now.



Panel Discussion



Impact of COVID-19 on hepatology practice and job prospects

*Vinay Sundaram, MD, MSc
Director, Hepatology Outcomes Research
Associate Professor of Medicine
Cedars-Sinai Medical Center*

Disclosures

Vinay Sundaram is on the speaker's bureau for Gilead, Abbvie, Intercept and Salix

Clinical Demand for Hepatology

- Estimation of 4.5 million adults with chronic liver disease in US
- Despite significant advances in the treatment of hepatitis C, the prevalence of liver disease expected to rise
- Study by AASLD performed to assess current and future demand for hepatology

Main findings

- Prevalence of liver disease expected to increase by 33% between 2018-2033, primarily driven by rise in NAFLD
- There will be a significant and widening deficit of adult and pediatric hepatologists over the next 15 years
- Significant maldistribution of hepatologists away from rural areas, leading to potential for private practice in certain regions

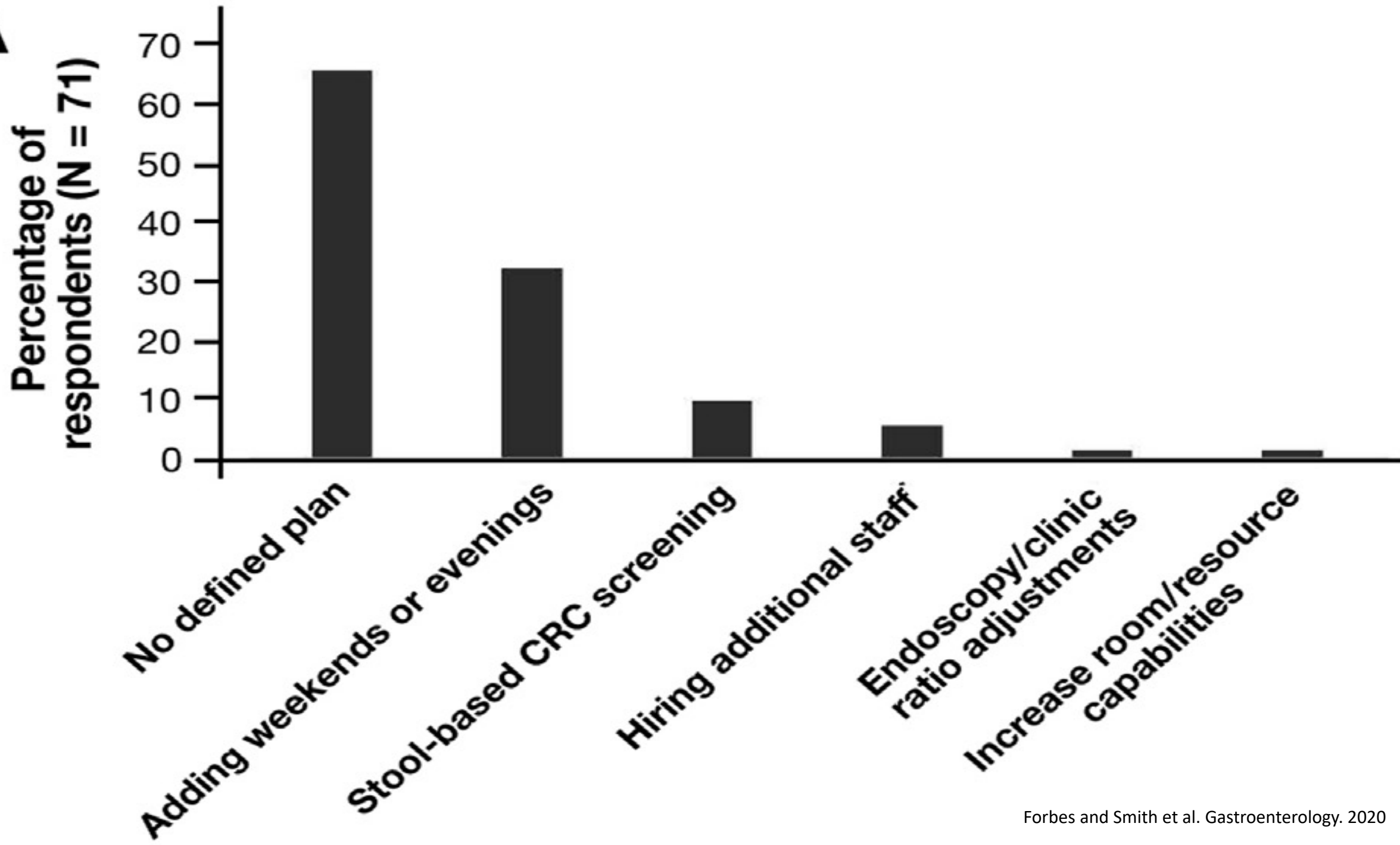
Demand	Baseline	2023	2028	2033
Projected supply	6,132	5,694	4,942	4,279
Projected Need	6,010	6,345	6,408	6,592
Excess Demand	122	-651	-1,466	-2,313
Percent deficit		-10.1%	-22.9%	-35.1%

Impact of COVID on GI practice

- Survey of 73 individuals across 62 US and 11 Canadian centers
- 63/73 centers were academic/teaching hospitals
- Responses submitted in March/April 2020

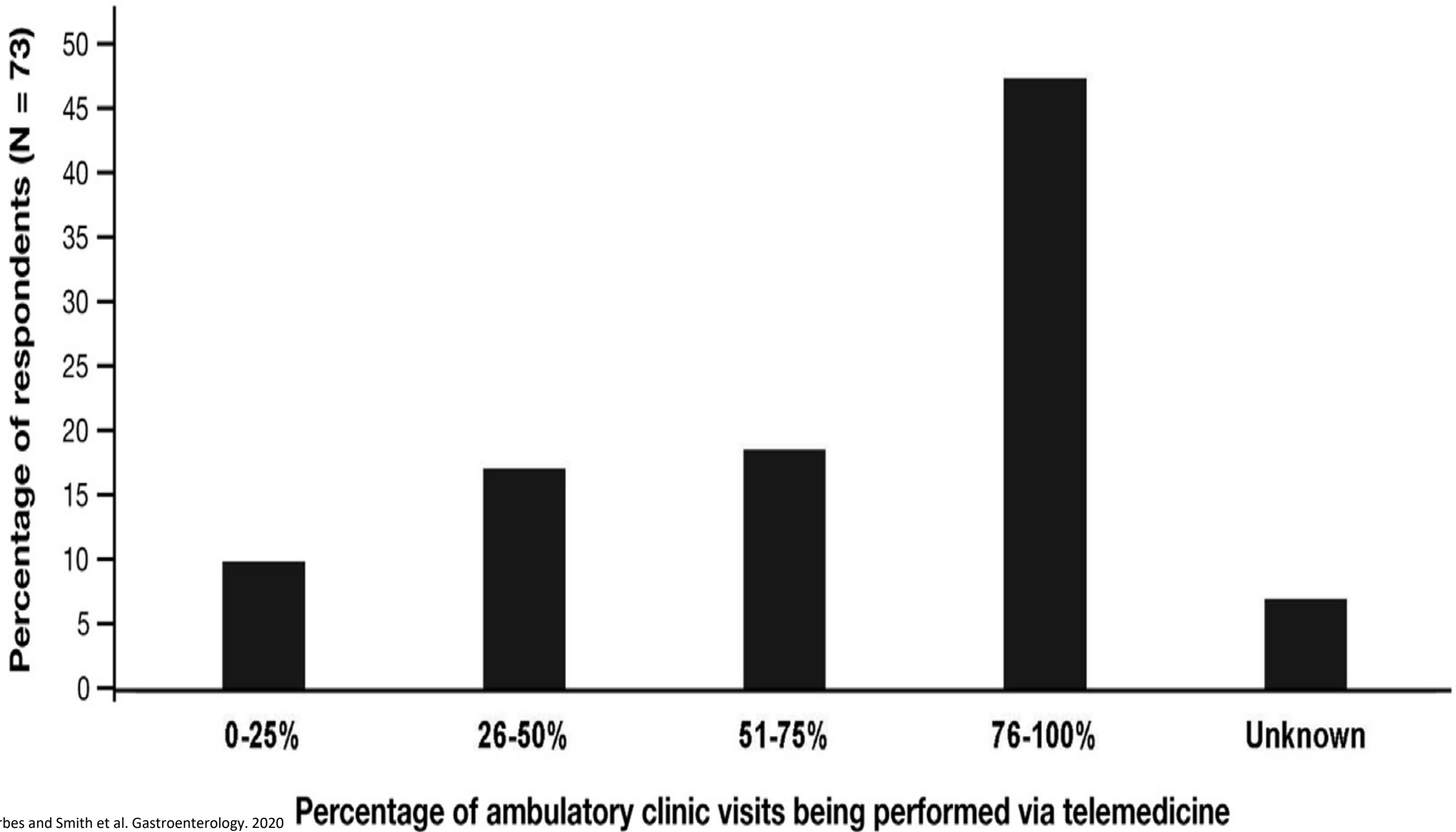
Changes in Endoscopy

- 65% of centers were operating at $\leq 10\%$ of their normal volume
- 25% of centers were operating at 25% of normal volume
- 97% of centers had postponed elective procedures, including screening colonoscopies

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Changes in Clinical Practice

- 55% of centers had partially closed clinics
- 21% of centers had fully closed their clinics
- 47% of centers had changed clinics to operate at > 75% via telemedicine



Summary

- Although COVID has negatively impacted the practice and finances of gastroenterology overall, the demand for hepatology remains high
- As hepatology is more visit based rather than procedural, clinic volume can remain high
 - Cedars Sinai: Work RVU's for hepatology increased compared to 1 year ago
- Liver transplantation is not an elective procedure but a life-saving surgery, and therefore transplant volume will likely remain stable

Please submit your questions to the Q&A Chat now.



Panel Discussion