## Supplementary Material 1. Survey questions

## I. BASIC INFORMATION ABOUT YOU AND YOUR GI TRAINING PROGRAM

- 1. What is your role in the GI training program? [Check one]
  - a) Program Director (PD)/Endoscopy Training Director Advanced Endoscopy Training Director
  - b) Teaching faculty
  - c) Part-time teaching faculty Other [Free text]
- 2. How are you involved in endoscopy training?\* [Check all that apply]
  - a) I teach general GI procedures to trainees (EGD, colonoscopy, etc.)
  - b) I teach advanced endoscopy to trainees (ERCP, EUS, etc.).
  - c) I teach endoscopy part-time (for example, in private practice) I do not teach endoscopy.
- 3. Which country is your program located in? [Free text]
- 4. Which city is your program located in? [Free text]
- 5. What is the total number of general GI fellows (trainees) in your program? [Enter number]
- 6. What is the duration of your general GI training program over the years? [Enter number] Do you have an advanced endoscopy fellowship program? [Y/N]
- 7. How many advanced endoscopy trainees do you have in your program? [Enter number] How many faculty members in your program teach GI fellows? [Enter number]
- 8. What is the training setting for your program? [Check one or more]
  - a) Academic/University-based Hospital
  - b) Community with Academic Affiliation Community hospital
  - c) Other [Free text]
- 9. Has the COVID-19 pandemic affected the ANY aspect of GI fellowship training in your program? [Check one]

Yes [Survey continues]

Partially (trainees from other programs stopped rotating) [Survey continues]

No [Survey stops]

## II. IMPACT ON ENDOSCOPY TRAINING

- 10. PRIOR to the COVID-19 pandemic, how many procedures were trainees performing on average per week? [Check one] 0–5, 6–10, 11–15, 16–20, 21–25, ≥26
- 11. PRIOR to the COVID-19 pandemic: What % of all endoscopy procedures had trainee participation? [Check one] 0-25%, 26-50%, 51-75%, 76-100%
- 12. Have your trainees been allowed to perform ANY endoscopy procedures during the COVID-19 pandemic? [Y/N] Yes [Continue section]

No [Prompt new question]

- 13. Why were trainees not allowed to perform any endoscopy procedures?\* [check all that applies].
  - a) National policy or society guidelines Hospital policy
  - b) Decision by division Decision by PD Shortage of PPEs
  - c) Shortage of COVID-19 testing
  - d) Trainees assigned to different roles (assist with COVID-19 demands). Other [Free text]

[After this question, skip to the purple question below]

- 14. DURING the COVID-19 pandemic, how many procedures were trainees performing on average per week? [Check one] 0-5, 6-10, 11-15, 16-20, 21-25, 26+
- 15. DURING the COVID-19 pandemic, what % of all endoscopy procedures had trainee participation? [Check one] 0-25%, 26-50%, 51-75%, 76-100%



16. How did the COVID-19 pandemic impact the number of procedures performed by trainees p EGD, Colonoscopy, ERCP, EUS  No change Decreased by 1–25%  Decreased by 25–50%  Decreased by 51–75%  Decreased by 76–99%  None of these were performed by trainees during the COVID-19 pandemic  N/A - trainees never performed these at our program	
<ul> <li>17. What were the causes of reduced endoscopy performed by trainees during the COVID-19 par</li> <li>a) Decreased volume of procedures: National policy or society guidelines b) b) Decision by ho</li> <li>c) Shortage of PPEs</li> <li>d) Shortage of COVID-19 testing Shortage of negative pressure rooms</li> <li>e) Trainees assigned to different roles (assisting with COVID-19 demands)</li> <li>f) Illness amongst faculty or trainees</li> <li>g) N/A: no reduction in procedures performed by trainees. Other [Free text]</li> </ul>	
18. Were trainees allowed to perform procedures on COVID-19 POSITIVE patients? [check one] Yes No [prompt new question]	
19. Why were trainees not allowed to perform procedures on COVID-19 POSITIVE patients?* [Can a) National policy or society guidelines Hospital policy b) Decision by division Decision by PD Shortage of PPEs c) Shortage of COVID-19 testing Other [Free text]	Check all that apply]
<ul> <li>20. What are the other COVID-19 factors that affect teaching during endoscopy procedures?* [Clan) None</li> <li>b) Time pressure to complete procedures quickly</li> <li>c) More likely to take scope from fellow</li> <li>d) More difficult to interact due to distancing and PPEs More complex or difficult procedures</li> <li>e) Pressure from nursing, anesthesiologist, or other staffing Other [Free text]</li> </ul>	
21. What steps were taken to address the impact of the COVID-19 pandemic on endoscopy training	ng for fellows?*[Check all that apply]
<ul> <li>a) None</li> <li>b) Flexibility in trainee schedules</li> <li>c) Allowing trainees to work with multiple faculty members</li> <li>d) Allowing trainees to scope at other hospitals/sites</li> <li>e) Use of endoscopy simulator Online or virtual teaching</li> <li>f) Other [Free text]</li> </ul>	
<ul><li>b) Flexibility in trainee schedules</li><li>c) Allowing trainees to work with multiple faculty members</li><li>d) Allowing trainees to scope at other hospitals/sites</li><li>e) Use of endoscopy simulator Online or virtual teaching</li></ul>	ng the COVID-19 pandemic? [check one]
<ul> <li>b) Flexibility in trainee schedules</li> <li>c) Allowing trainees to work with multiple faculty members</li> <li>d) Allowing trainees to scope at other hospitals/sites</li> <li>e) Use of endoscopy simulator Online or virtual teaching</li> <li>f) Other [Free text]</li> <li>22. Do you think the COVID-19 pandemic will impact your senior fellows' preparation for perfortion? [Check one]</li> <li>a) No</li> <li>b) Maybe [Free text]</li> <li>c) Yes, but will likely graduate as planned Yes, may need to extend training</li> <li>d) Yes, senior fellows were graduated early due to COVID-19 pandemic demands</li> <li>e) As an educator, did you feel that endoscopy teaching was supported by your program during</li> <li>f) Yes, endoscopy teaching was supported by my program</li> </ul>	ng the COVID-19 pandemic? [check one]
<ul> <li>b) Flexibility in trainee schedules</li> <li>c) Allowing trainees to work with multiple faculty members</li> <li>d) Allowing trainees to scope at other hospitals/sites</li> <li>e) Use of endoscopy simulator Online or virtual teaching</li> <li>f) Other [Free text]</li> <li>22. Do you think the COVID-19 pandemic will impact your senior fellows' preparation for perfortion? [Check one]</li> <li>a) No</li> <li>b) Maybe [Free text]</li> <li>c) Yes, but will likely graduate as planned Yes, may need to extend training</li> <li>d) Yes, senior fellows were graduated early due to COVID-19 pandemic demands</li> <li>e) As an educator, did you feel that endoscopy teaching was supported by your program durir</li> <li>f) Yes, endoscopy teaching was supported by my program</li> <li>g) Neutral, I was left to decide how to approach endoscopy teaching No, priorities were shifted</li> </ul>	ng the COVID-19 pandemic? [check one] d away from endoscopy teaching
<ul> <li>b) Flexibility in trainee schedules</li> <li>c) Allowing trainees to work with multiple faculty members</li> <li>d) Allowing trainees to scope at other hospitals/sites</li> <li>e) Use of endoscopy simulator Online or virtual teaching</li> <li>f) Other [Free text]</li> <li>22. Do you think the COVID-19 pandemic will impact your senior fellows' preparation for perfortion? [Check one]</li> <li>a) No</li> <li>b) Maybe [Free text]</li> <li>c) Yes, but will likely graduate as planned Yes, may need to extend training</li> <li>d) Yes, senior fellows were graduated early due to COVID-19 pandemic demands</li> <li>e) As an educator, did you feel that endoscopy teaching was supported by your program during Yes, endoscopy teaching was supported by my program</li> <li>g) Neutral, I was left to decide how to approach endoscopy teaching No, priorities were shifted</li> <li>III. RESPONSE TO COVID-19</li> <li>23. How many confirmed COVID-19 cases have been admitted to your hospital to date? [choose</li> </ul>	ng the COVID-19 pandemic? [check one] d away from endoscopy teaching one]

26. Did trainees express concerns regarding their safety and risk of exposure to COVID-19?

Yes

No

I don't know

27. Have any of your trainees tested positive for COVID-19? (optional) (Check one)

Yes

No

I don't know

28. Have any of your teaching faculty tested positive for COVID-19? (optional) (Check one)

Yes

No

I don't know

29. What factor had the greatest impact on endoscopy training during the COVID-19 pandemic? [Check one]

PPE shortages

Suspension of elective procedures

Trainees assigned to cover ICU/ward teams. Endoscopy training was minimally impacted in our unit.

Other [free text]

30. Does your program have education focused on helping trainees cope with stress from COVID-19 and improving their well-being?

Yes

No

I don't know

31. What steps have been taken to physically distance trainees?\* [Check all that apply]

Minimizing the number of trainees in the office

Moving trainees to different sites

Use of telemedicine and virtual conferencing Limiting rounds on the wards

Staggered schedules for trainees Other [free text]

32. Have trainees been asked to assume roles outside the GI?\* [Check all that apply]

No

Maybe

Yes, trainees were asked to volunteer as ER providers

Yes, trainees were required to act as ER providers.

Yes, trainees asked to volunteer as hospitalists (internal medicine)

Yes, trainees were required to act as hospitalists (internal medicine).

Yes, trainees asked to volunteer as intensivists (ICU)

Yes, trainees required to act as intensivists (ICU)

Other [Free text]

33. What steps have been taken by your program to avoid excessive work hours for trainees?\* [Check all that apply]

Shortened rotations (for example, one week on and one week off)

Faculty taking on a larger role in patient care

Regular discussions with trainees

No steps taken

Online resources

Wellness activities (for example, virtual happy hour)

Increased monitoring of work hours

Other [Free text]

34. What has been the overall impact of the COVID-19 pandemic on endoscopy training? [Choose one]

Strongly negative impact [Free text to explain]

Negative impact [Free text to explain]

No impact [Free text to explain]

Positive impact [Free text to explain]

Strongly positive impact [Free text to explain]

35. Any other comments on the impact of COVID-19 on your training program? [Free text]

Questions# 2, 13, 17, 19-21, 31-33 are marked with an \* and have more than one option that can be selected