

## Peer Review File

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### Reviewer A

1. What does it mean for the hospital to have remained "COVID-negative"? Does this just mean that the hospital did not care for COVID patients? It seems unlikely given just general trends in the population of the US that the hospital did not at some point have an asymptomatic COVID worker or patient? I would try to be as specific as possible w/ the language here. I also must admit that I am not a fan of describing hospitals as "COVID-negative" as it carries the potential for misuse in patient marketing. I do not think hospitals that cared for or continue to safely care for COVID patients should be disadvantaged by such wording.

- Reply 1: As our hospital is a single specialty, orthopaedic hospital with majority of cases being elective, the protocol is designed to not perform surgery on any patients who test positive for COVID-19. We also do not have an emergency department which decreases the possibility of unplanned patient arrivals that could be COVID positive. Despite negative daily screening and available tests for both workers and patients, it is possible someone could be asymptomatic or sub-clinically affected by COVID-19; however, to the best of our ability we designed a protocol to monitor for the disease and delay any positive COVID-19 persons for elective surgery, thus remaining COVID-19 negative. But we completely agree with the sentiment that hospitals that safely care for COVID patients should not be disadvantaged by the wording and will make changes to the manuscript to reflect that.
- Changes in the text: We added to the text the fact that we do not have an emergency department at our hospital and the remarks on hospitals that care for COVID patients (see page 5; line 66, page 15; line 308 and page 14; line 283).
- "The COVID-19 negative status of the hospital was also maintained due to the lack of an emergency department at our institution."
- "Our institution is a unique, orthopaedic only specialty hospital without an emergency department, which has remained COVID-19 negative."
- "As an orthopaedic specialty hospital without an emergency room, the scope of care of our institution is outside of the scope required to treat patients with COVID-19. Within our larger hospital network, our institution was tasked with accepting transfers of patients who were COVID-19 negative in order to free up hospital beds for our partners treating COVID-19. The term we use is only meant to describe the infrastructure in our hospital as well as lack of patients

presenting to us in a non-elective fashion, which provides the opportunity to rapidly increase surgical volume as the state reopens. “

2. After pre-op COVID testing, were patients instructed to self-quarantine to avoid any additional exposure?

- Reply 2: That is correct – patients were instructed to self-quarantine following state guidelines to avoid additional exposure before their surgery.
- Changes in the text: We have added this information to the text (see page 9; line 171).
- “After COVID-19 testing, all patients will be instructed to self-quarantine to avoid additional exposure.”

3. Who at the hospital decides what phase you are in? At least in my state, there is considerable disagreement about where we are and a lack of appreciation for the fact that we have gone backwards.

- Reply 3: The Governor of Massachusetts, Charlie Baker, and his Reopening Advisory Board composed of business community, public health officials and municipal leaders from across the Commonwealth, administer a comprehensive plan to safely reopen the state via phases listed on the government website. ([www.mass.gov/info-details/reopening-massachusetts](http://www.mass.gov/info-details/reopening-massachusetts)). We are fortunate to have clear governance as you astutely point out disagreement can disorganize healthcare efforts.
- Changes in the text: We have made changes to reflect this information in the text (see page 8; line 139).
- “These phases are decided on by the governor of Massachusetts and his Reopening Advisory Board.”

4. How were symptomatic workers encouraged to actually stay home? Was sick time increased or the pay model restructured? This was a big issue at our hospital during the first couple of months of COVID.

- Reply 4: In response to workers being requested to stay home if symptomatic, employee paid sick leave was increased to eliminate the financial incentive for potential symptomatic workers to not stay home.
- Changes in the text: We have made changes to reflect this information in the text (see page 6; line 102).
- “In order to encourage workers to stay home if symptomatic, the institution increased employee paid sick leave to eliminate the financial incentive to keep working.”

5. What interaction did you continue to have w/ the state health department?

- The president of our hospital, David Passafaro, held daily meetings with the state department of public health to ensure continued diligence in regulations.
- Changes in the text: We have made changes to reflect this information in the text (see page 8; line 140).
- “In addition, the president of the hospital held daily meetings with the state department of public health to ensure up to date information was utilized.”

6. You reference a Table 2 but it was not in my PDF.

- Reply 6: Our apologies. Table 2 was mistakenly not added to the manuscript.
- Changes in the text: We have added the Table 2 to the end of the manuscript (see page 24; line 413).

7. Why were there no COVID outcome measures? Why not track the proportion of patients who tested COVID positive w/in 2 weeks of surgery? Why not track the proportion of staff who became COVID positive? Given that you are not creating a bubble situation (and not saying you should) then these seem relevant?

- Reply 7: We completely agree that these are important measures to consider. As we continue to monitor the success, progress and failure of the protocol resuming elective surgery, we will monitor these outcomes. The current study is focused on the protocol itself and not outcome measures. We certainly agree future research should report on these incidences and we will include these metrics into our next study to better understand the pandemic.
- Changes in the text: We have added this outcome measure to our monitoring text (see page 13; line 260).
- “Secondary outcome measures will include patient satisfaction regarding their in-hospital experience and also post-operative care once discharged, as well as number of patients testing positive for COVID-19 within two weeks of surgery and the proportion of staff who tested positive”

## **Reviewer B**

The authors present a descriptive review of a possible procedure to return back to elective surgery in a single orthopedic institution in the US. The article is well written and demonstrates consistency within its structure. Although the presented structure is not transferable to all fields of orthopedics (trauma surgery, spinal shock cases), the guideline might be helpful for orthopedic hospitals with high rates of elective cases. In addition, the presented concept seems partly transferable to possible future pandemics

or severe flu seasons.

In the reviewer's opinion the following points might strengthen the article and help the reader to comprehend essential points:

1) The four phases to restart elective surgery should be visualized in a table.

- Reply 1: We completely agree and believe the addition of the missing Table 2 will help to visualize the phases of restarting elective surgery.
- Changes in the text: We have added a table (Table 2) to the manuscript (see page 24; line 413).

2) A summarizing figure/timeline with the main categories of the article ("Prior to Day of Surgery; Day of Surgery; Monitoring Success") and some bullet points explaining them might be helpful.

- Reply 2: We completely agree and have added another figure to summarize to algorithm used.
- Changes in the text: We have added a Figure 2 to the manuscript (see page 21; line 403).

3) A PubMed search using the terms "elective surgery AND covid AND orthopedics" results in over 200 results, many dealing with a similar topic and discussing possible return to elective surgery. As COVID-19 is a global pandemic, are there any essential differences compared to other guidelines (e.g., compared to Europe/Asia, compared to other procedures in the US)? The authors should briefly discuss this. For example, compared to:

Zorzi C et al. Elective Orthopaedic Surgery During COVID-19: A Safe Way to Get Back on Track. JB JS Open Access. 2020

Vles GF et al. Returning to Elective Orthopedic Surgery During the COVID-19 Pandemic: A Multidisciplinary and Pragmatic Strategy for Initial Patient Selection. J Patient Saf. 2020

- Reply 3: This is a very important point. As there are many reports of strategies for safe return to elective surgery such as the studies you provided, we certainly agree that it would improve the manuscript to discuss our study in this context and have made changes to the manuscript to reflect that.
- Changes in text: We referenced and discussed the study provided above (see page 15; line 301).
- "As COVID-19 is a global pandemic and strategies exists throughout the world for a return to elective surgery (Zorzi, Piovan & Screpis et al 2020), our protocol represents an example of a United States hospital where domestic regulations and rates of COVID-19 differ. Further, our protocol represents a single specialty

orthopaedic only institution with no emergency room – and our model may apply more or less depending on the nature of other hospitals. But we believe our example may be valuable for others to consider.”