Review Comments

1. Comment: Please, clarify how you determined the required sample size because it is not clear to me.

Reply: I added a section for sample size calculation to Page 6 (Line 110) of the revised manuscript.

Changes in the text:

Sample Size

According to Aphinives's cross-sectional study, the mean and standard deviation of the time spent in interval care in the emergency department were 6.7± 5.19 hours, with a 5% precision from the standard deviation.4 The sample size was calculated based on estimating an infinite population mean which resulted in the minimum required sample size of 1537.

2. Comment: hospital reorganizations have been profound during COVID-19 pandemic, with inevitable repercussions on patients' path. In this light, please consider this paper: Acta Biomed. 2021 May 12;92(2):e2021097. doi: 10.23750/abm.v92i2.11159. PMID: 33988143; PMCID: PMC8182622.

Reply: I included your proposed citation regarding hospital reorganization on Page 11 (line 217).

Changes in the text:

In the present study, the patients in the during COVID-19 pandemic group who received X-ray examinations had an EDLOS >4 hours, in line with a study by Van der Veen et al., which found that X-ray examinations increased the duration of service at the ED and was consistent with the finding of Casalino et al.10, 13 In addition, the X-ray room of our hospital is far from the ED. Therefore, during the pandemic of COVID-19, patients had to be transported in a transfer stretcher with a negative pressure cover to prevent the spread of COVID-19. This process takes longer and increased the EDLOS during the COVID-19 pandemic. This finding suggests that the structure of healthcare facilities should be reorganized to improve the management of patient flow which may involve establishing a dedicated pathway for both COVID-19 and non-COVID-19 patients.

3. Comment: I cannot find the factors used to adjust the multivariate logistic regression analysis (age?, sex?, other?). Please, reply.

Reply: I explained how the multivariable model was developed on Page 6 (Line 105).

Changes in the text:

Statistical analysis

The analysis and presentation of data were separated into two groups according to the types of data as follows:
1) Qualitative data, including sex, comorbidities, mode of arrival, triage level, and diagnosis expressed as

frequency and percentage, and 2) Quantitative data, including age and time of visit expressed as the average, standard deviation, median and interquartile range as appropriate. We analyzed the factors affecting EDLOS >4 hours by logistic regression analysis. The multivariable model was developed by including covariates with a p-value < 0.1 from univariable analysis, which adjusted for age, comorbidities, visiting hours, x-ray examination, numbers of procedures performed, specialty consultation, MEWS score, and diagnosis. Subsequently, the stepwise backward regression method was used to select the final model. The statistical analyses were performed in Stata version 15.1 software (StataCorp LLC, College Station, TX, USA) and considered statistically significant for p-values <0.05.

4. Comment: I think that infected patient's quality of life after COVID-19 changed significantly. Persistence of symptoms, low functional capacity and dyspnoea probably will affect future medical consultations and ED visits. Please, consider as above this paper: J Clin Med. 2023 Jan 29;12(3):1058. doi: 10.3390/jcm12031058. PMID: 36769705; PMCID: PMC9918008.

Reply: I added considerations about the potential impact of COVID-19 complications on future ED visits to Page 12 (Line 226).

Changes in the text:

This study had several limitations. First, the outcomes of this study reflected from a single university hospital in Thailand. The flow of patients in ED may differ from those of other hospitals depending on the ED design, bed capacity, and local practices. Second, time stamps for each patient intervention were not recorded in our study. It would allow us to better understand which observation specifically had the greatest effect on lengthening EDLOS. Lastly, the aspect of human resources and staffing were not considered in this study. This may play a crucial role in managing patients in a timely manner. In the future, it is undeniable that the care of patients affected by COVID-19 and its complication will change significantly. Considering the changes in patients' quality of life, the persistence of symptoms, ongoing chronic lung problems, all of these factors would eventually impact the pattern of medical consultations and ED visits.