RESPONSES TO REVIEWERS

First of all, we would like to thank to the reviewers for their important comments to improve our paper.

Beyond changes performed according to the reviewers´ recommendations, we changed the order of the point 1. Enablers and Barriers and now is the point 3. Then, the actual order is 1. Telemedicine in chronic diseases, 2. Programs for telemonitoring IBD, 3. Enablers and barriers for the implementation of telemonitoring in IBD and 4. Models of telemonitoring in IBD. Due to these changes Table 1 is now Table 2, and viceversa.

Reviewer #1:

1)As a review, this paper uses a search strategy and nadir criteria. Therefore, a flowchart is needed as supplementary material to better describe the process.

Response: According to the reviewer´s recommendation, we have included the flow diagram of the search process in the supplementary material.

2) The search process of "Materials and Methods" in the abstract takes up too much space. In fact, this part only occupies about one-third of the text. The other two-thirds of the text is written according to a different search and construction approach. Specific legal, ethical, economical, and logistic issues are briefly described. The latter is of more interest to the reader. Therefore, the abstract needs to be rewritten.

Response: We detailed the search process in the supplementary material. Thus, we could reduce the extension of the “Materials and Methods” section of the abstract and then briefly developed the description of the existing barriers in the “Results” section.

We would like to point that after consensus we also included a pilot study of Walsh et al in Table 1, because it meets the selection criteria of our study, so the number of full reviewed and included papers are 97 and 20, respectively.

3) The logic of the article narrative is dubious: as the main concept of this paper, the definition and scope of telemonitoring should be presented in the introduction, not in subsection 2.2. 2.1 should be written as a separate subsection in order to give a brief history of the development of telemedicine and telemonitoring. A strategy of moving from the old to the new should be adopted in the description of telemonitoring programs, not the other way around.

Response: We have already integrated the definition and scope of telemonitoring in the introduction section.

Now, we present in a separated subsection the previous title 2.1.

4) As in the case of the problem described in 2). The majority of the 19 papers included appear in Part 2 of the paper. Therefore a detailed search approach needs to be added in the body of part 2. Alternatively, it could be considered as supplementary material and cited in the main text.

Response: According to the reviewer´s comment, we detailed the search strategy in a supplementary material, and we indicated its inclusion at the end of the introduction.

5) There are actually three different diagnostic models in telemonitoring.1, Patient self-diagnosis, mainly through PROMs, standard diagnoses at home, etc. Patients can use the instructions to determine disease activity and make decisions on their own. 2, Remote physician diagnosis. Through the patient's own upload, or automatically collected data, the physician remote reading and advice. 3, computer model-assisted diagnosis. Patients' risk level is determined by multiple monitorable indicators and informed to the physician or patient, which can be combined with 1 and 2. The authors should enumerate and discuss these three models separately.

Response: We have enumerated these three models separately. As telediagnosis is not the only resource of telemonitoring programs, we developed the similar concepts of self-management, remote providers´ management and computer-assisted telemanagement. We included the previously presented review of “PROMs”, “home-based tests” and “wearables” into the self-management section. We have also written new subsections for “remote providers´ management” and “computer-assisted telemanagement”, discussing the main features of these models.

Reviewer #2:

1.What are the criteria for selecting 19 out of 96 research reports?

Response: According to the reviewer´s comment, we detailed the search strategy in a supplementary material, and we indicated its inclusion at the end of the introduction.

We would like to point that after consensus we also included a pilot study of Walsh et al in Table 1, because it meets the selection criteria of our study, so the number of full reviewed and included papers are 97 and 20, respectively.

2.Table 2 Is there any app software for IBD research on mobile phones?

Response: The telemonitoring apps used on mobile devices are specified in the body of the text and as “mHealth” in the “Application” section of the Table 1.

Regarding commercial apps, we did not include tools never tested for their effectiveness and efficacy. Then, they are beyond the scope of our review. We remarked this in the supplementary material, when we indicate in the “study selection criteria” section that “We excluded commercial telemonitoring apps not tested for their effectiveness or efficacy”.

3. Are there any specific data on health economics?

Response: We included the main specific economic data of the cost-effectiveness studies about telemonitoring IBD performed to date. We also included a recent cost-effectiveness analysis performed during the COVID-19 pandemic.