**Rebuttal for Reviewer 2:**

1. *Clarity whether or not the study design was “exploratory mixed methods design” or mere a “convergent parallel design”:* The reviewer discussed in much detail which design might better describe the method used in our study. In the sequential exploratory strategy a qualitative component is followed by a quantitative component (Creswell, JW.; Plano Clark, VL. Designing and Conducting Mixed Methods Research. 2. Thousand Oaks, CA: Sage; 2011). Aspects of the organizational environment (e.g., creative problem solving) were identified in the qualitative component and statistically confirmed or rejected in the preceding quantitative study phase, which is exactly what the authors did in this study. However, the reviewer suggested that the convergent parallel design might fit our methodology even better. In the convergent parallel strategy, quantitative and qualitative data collection occurred concurrently. The components are given equal weight, and the two datasets are analyzed and compared in parallel. Quantitative data identified factors statistically, which were integrated with qualitative data from in depth interviews with a subset of participants to understand how and why the identified factors influenced participants’ attitudes. In the method’s section of our study we lined out that the results of the first qualitative study part were the basis for the development of the online survey. Based on the qualitative study part, the questions for the qualitative study were formulated when students’ attitudes were expressed frequently. In this sense, the first (quantitative) phase informs the next, but the reviewer is right, that both phases are interlinked. Although our study integrates components of both strategies, the authors still think, that the sequential exploratory strategy describes our methods better than the convergent parallel design (see also: Curry et al Circ. Cardiovasc, Qual. Outcomes 2013, 6:119-123). As suggested by the reviewer, the authors specified in the method section that we used an additive rather than a parallel integrative strategy.
2. *Please, use male undergraduate students or undergraduate male students instead of ‘male and undergraduate students’ in the abstract or simply throughout the paper.* The manuscript has been changed accordingly.
3. *In the abstract, lines 23-27, I suggest to use the following expression or something like that. Around 38% of the students felt ill-prepared and could not answer AI-related questions because digitization in medicine and AI are not a formal part of the medical curriculum.* The manuscript has been changed accordingly.
4. *4. Page 2, line 42, ‘the computation of compounding factors,’ I did not understand what it means. I suggest the authors to replace this with appropriate phrase*. The reviewer is right. The phase has been changed into the “analysis” of compounding factors.
5. *The aim of the study was not stated clearly. For example, the first sentence should describe the general aim or the overall objective of the study in a more general term. However, the first sentence did not appear to serve this purpose. Also, the research questions are not clearly stated. It needs the careful wording of the study participants. Phrases like ‘2020 medical students’ generation,’ and ‘their level on confidence,’ are confusing for the readers. Also, the research questions lack describing the study setting. I suggest to re-write the aims and study questions more clearly*. The authors followed the reviewer’s suggestions and re-wrote this para as follows: “The overall objective of this study was to investigate the today’s medical students attitudes towards AI and other digital working tools. We wanted to understand if age, gender, semester level and curriculum type influences their views. This study also assembled information on students’ understanding of AI algorithms and digital applications in health care and assessed their level of confidence in working alongside these tools after graduation in patient care. It is our belief that this information may possess the means to employ digital tools including AI into the curriculum of medical students efficiently, enhancing their confidence in using them and therefor to better equip our future physicians with sufficient knowledge.”
6. *On page 2, line 111, the phrase ‘to affirm or dismiss,’ does not make sense. Replace this phrase with a more appropriate phrase.* The phrase in question has been replaced by “to confirm”.
7. *Page 3, lines 117-118, the statement has two issues. ‘The items were then tested through a pilot study consisting of a 117 group of 4 pre- and clinical students, mediated by AG and JE’. First, why did you use only 4 students for pilot testing? Second, what do ‘AG’ and ‘JE’ represent?* The authors choose 4 pre-clinical and 4 clinical students. The intention was - as outlined in the initial manuscript version - “… to understand how they perceive the subject of interest”. The wording has been specified, to clarify that in total 8 students tested the items but not 4 as the reviewer assumed. This number was considered sufficient a) to detect inconsistencies and b) to verify the correct meaning of the questions. AG and JE are two of the authors (first letter of the first and last name). In order to avoid any misunderstanding, this has been changed to “the authors” in the revised manuscript.
8. *Page 3, line 132, it says, Convenience sampling was used. I would ask, why did you use convenience sampling?* Convenience sampling is defined as a method to collect data from a conveniently available pool of respondents. We used it, because it is the most commonly used sampling technique as it's incredibly prompt, uncomplicated, and economical.
9. Page 4, table 1, the caption and the table content do not match. Revise either of them. The captation has been changed to “Characteristics of the study cohort.
10. *In the methods section, clearly describe the sampling procedure for the quantitative and qualitative study parts separately. Also describe the final study sample for both. I am suggesting this because the logic of quantitative sampling and qualitative sampling are different.* The sampling procedure was clearly described in the initial manuscript. For phase 1: “All participants of the first phase were students from from 1st to 6th year (undergraduate 1st to 2th year, graduate 3th to 6th year) from German Universities. The inclusion criteria were to actively study medicine and their agreement for their voluntarily participation. In the same way, the exclusion criteria were to have suspended their studies, as well as other exceptional situations. Prior to start, informed consent was obtained, which was followed by the collection of telephone numbers and email addresses. ... They were selected purposely and consecutively, in part by snowball until theoretical saturation was reached.” For phase 2: “For the second, quantitative study phase identical inclusion/exclusion criteria applied.” This referred to medical students of all semesters, excluding students from other faculties. “The online survey was sent to all medical faculties in Germany from which most forwarded the survey invitation by email to about 80 000 medical students to fulfill the principle of maximum diversity through convenience sampling method. Each contained an invitation letter and an information sheet.” Surely, sampling procedures in mixed method studies are phase depended different.
11. *Page 12, line 389, the statement which says, ‘The non-probabilistic sampling makes a generalization of the answers difficult,’ is confusing. I suggest to re-write this sentence.* The statement has been changed into: “The focus on German educational system and the fact that only a small fraction of the total number of medical students filled out the online survey makes a generalization of the answers difficult”.
12. *I suggest to remove the phrase ‘so called,’ that has been used in the conclusion section or any other section.* The authors agree and the phase “so called” has been removed.
13. *Page 13, lines 409-410, in the conclusion section, the statement which says, ‘This study also found significant differences between those groups indicating differences in subgroups of students from the quantitative survey.’ This is a confusing statement. Re-write this sentence clearly.* The authors agree and this statement has been re-written in the revised manuscript version.
14. *I suggest the authors to include a short section including the implications of the study after the conclusions.* The authors fully agree. Therefore, the conclusion paragraph has been split into the “Conclusion” paragraph, in which the study’s conclusions has been outlined, and into a the new para “Implications” where the usefulness of the integration of eHealth aspects (including AI) into the curriculum is discussed.