PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	What is Clinician Presence? A qualitative interview study comparing physician and non-physician insights about practices of human connection
AUTHORS	Brown-Johnson, Cati; Schwartz, Rachel; Maitra, Amrapali; Haverfield, Marie; Tierney, Aaron; Shaw, Jonathan G; Zionts, Dani; Safaeinili, Nadia; Thadaney, Sonoo; Verghese, Abraham; Zulman, Donna

VERSION 1 – REVIEW

REVIEWER	Victor M Montori, MD Mayo Clinic, USA; Patient Revolution, USA
REVIEW RETURNED	09-Apr-2019

GENERAL COMMENTS	This is an outstanding report from an important project to arrive at a description of what presence means or should mean in clinical care, using informants from within and adjacent to health care. The result is not surprising but still helpful in moving this field forward with some formality. I have two relatively minor concerns. The minor concern is with the title. The authors may want to consider replacing "art" with "practices." While these two words can be synonymical, the idea of practices will direct the reader's attention to some of the findings that suggest ways (or practices) the informants identified to achieve presence. The other minor issue is with the use of purposeful in the description of presence. Purposeful here I believe is used to convey the notion of intentional. But it does raise the issue that presence may need to be pursued with a purpose in mind. In clinical care, the purpose of presence may be, for example, to be able to correctly understand the problematic human situation the patient is facing and that demands action, and to identify the action that the problem demands. In this way it may be different or similar to pursuing presence in art, journalism, or law. Do the authors believe presence should be advocated and practiced on first principles? Or perhaps presence is an antidote to burnout? Or perhaps presence is a practice integral to the job of caring, joining in suffering, and practically contributing to advancing the problematic situation of patients? Elaborating this point may contribute to the understanding that presence should be purposeful because it should be both intentional and contribute to care. Did you gain any insights about this from your informants?

REVIEWER	adrienne boissy Cleveland Clinic
REVIEW RETURNED	27-Apr-2019

GENERAL COMMENTS	Thank you for the opportunity to review the manuscript. It is well written and focuses on an important issue of how we maintain relationships with our patients in a complex environment. What I struggled with the most in reading is understanding how these gestures and reported efforts on the part of clinicians are distinct from relational communication techniques. For example, some of the behaviors mentioned are attending to the story, making eye contact, slience, reflective listening, physically leaning in, not interrupting (making space for their story), setting agenda - all of these are well-documented techniques in effective communication. This makes me less certain what is actually new in this paper and contributing to new knowledge in the field. In addition, there is no capture of how these behaviors actually translate or are interpreted by the patient. Although the clinicians may think these behaviors make them present, what is the impact on the patient and are the conclusions shared? The ability to "be present" seems best evaluated by the patient, not the clinician doing it, as we often overestimate our ability to communicate effectively with patients. It feels like we miss this piece here, and its an important piece given that not everything we do is effective for any given patient. The absence of actual empathy is also concerning to me (techniques like physical mirroring of emotional tone, nonverbal continuers, physical touch when appropriate, and validation) are how connection is created but are not mentioned here. Please know I do think "being present" is an important skill, but I don't think we have achieved capturing what this is independent of well known and well-studied communication techniques here. You comment briefly on how clinicians prepare themselves to engage with the suffering of their patients (returning to present, taking breaks), which is unique and worth expanding on. For the paper to be strengthened, I would like to distinguish being present from effective communication skills and also assess whether (and how) patient load, time for a given patient, the existence of a pre-existing relationship, burnout, and patient perspectives influence each other and the impact on trust and patient perception.

REVIEWER	Sharifah Munirah Syed Elias International Islamic University Malaysia, Malaysia
REVIEW RETURNED	09-Jun-2019

GENERAL COMMENTS	1. State the research design clearly e.g qualitative research design 2. Research question is not clearly stated 3. The concept of trustworthiness is missing in this study. the authors need to explain the concept of trustworthiness in relation to the study 4. Discussion section is too short and need more elaboration

REVIEWER	Elizabeth Alvarez Assistant Professor McMaster University Canada
REVIEW RETURNED	14-Jul-2019

GENERAL COMMENTS	Thank you for the chance to review this manuscript. It is an interesting topic that fits into the growing fields on mindfulness and physician burnout. N=40 is a good number of interviews. However, some clarifications need to be included. I will state several overarching areas of improvement and then give specific comments 1) Generally, it is not clear why non-physicians are being asked about clinician or physician presence. It seems that the interviewees were being asked about presence for them in their roles, not what would it mean for physicians or clinicians to be present. Either these findings should be classified as 'professional presence' or the methods need to have more detail as to why this method was chosen and how what was learned from non-physicians could be used to understand 'clinician presence'. This is throughout the paper. 2) There is a lack of background making the case as to the importance of this topic and this study. The background needs more citations and a stronger link to the study. 3) Methods – the research design is not clearly explained. Design principles methods and 'human-centered design approach' are not common knowledge and these need to be explained to the reader. The citation for your methods comes from a business organization, but this should have scientific citations or describe why the use of business research methods are best and innovative for your research question. What theoretical basis and research paradigm are behind these methods? This needs to be explained, especially if you are transferring them from business to health research. I would expect from design research that you are planning an intervention or end-point, I don't see that expressed in the paper. This relates to point 1 about how can non-clinicians answering questions about non-clinicians be used to create a definition for 'clinician presence'. How was recruitment carried out? De-identification and data management are not discussed. 4) Was member checking conducted? Given that non-clinician answers were used to devise a definition for clinicians, member checking with the clinicians would help validate the findings. 5) Was a reflexive journal kept, and if so, who maintained it? How were biases addressed? 6) Discussion - How does your definition of presence compare to other literature on presence? 7) Discussion – you mention strategies such as decreasing intrusiveness of the electronic medical record – how is it recommended this be done – were any solutions offered, or is there literature that relates to this topic?

	Specifically (sorry, the line numbers did not line up with the lines, so I put in what I felt was closest): Page 4 – describe the study design in the abstract and add more details Page 4, Setting – recommend to change “center” to “centers” Page 5, line 5 – recommend to change “technology” to “technological” Page 5, Strengths and limitations, 1st point – recommend to add “is” between “study” and “the” Page 5, Strengths and limitations, 1st point – here “physician presence” is used but “clinician presence” is used in other parts of the paper. I recommend to select one and use consistently. Physician is more specific than clinician, as clinicians can include other healthcare providers. The distinction should be made and how this was decided. Furthermore, only family physicians were interviewed from the physician pool – are the findings generalizable to other areas of medicine? Page 5, Strengths and limitations, 2nd point – “design principle methods” are stated here but not in the abstract and not defined in the paper. Page 6, Lines 13-15: as a physician, there are many more challenges than the ones listed, including lack of administrative support, competing demands, litigious environment, increased complexity of patients, etc. The background needs to be strengthened generally. These statements, as limited as they are, need citations, and I would encourage a more thorough literature review, with citations, to strengthen this section and the study. What is the end-point of presence? Page 6, Line 17: define “humanistic” Page 6, Line 27 and on: There is much written on the topic of mindfulness. Describe mindfulness, with citations, and describe why the concept of “presence” is an important one within this perspective Page 6, Line 52: what is the difference between “primary care” and “family physicians” – did some have specialty training and others did not? Page 6, Line 54: describe “community safety-net clinic” Page 7, Line 3: Need to describe “human-centered design approach” and “analogous inspiration” from a methodological standpoint. See point 3 above. Page 7, Lines 24-28: As per point 1 above, these questions are not addressing physician or clinician presence. Please clarify why this is relevant and how this was used in the analysis to understand physician presence. As above, what is the endpoint of presence? What were these questions leading to? In other words, in what context were you asking about the need to, for example, build trust? And, how would this relate to the concept of presence? Page 7: Was inductive or deductive coding used? Did you have preset codes, and if so, what were they? Page 8, Lines 8-10: “Including non-medical participants in our study effectively obtains a public perspective on the definition of clinician presence.” See point 1. This is debatable in that the questions do not seem to be asking about clinician presence.

	Page 8, Lines 19-22: See point 1, but this definition seems more appropriate for general “presence” and not for clinician presence. Page 8, Line 38: remove quotation mark in middle of quote Page 9, Line 21: recommend to change “e.g.” with “for example,” Page 9, Lines 23-26: Is “in real time” the definition of “present”? If so, please provide citation. If not, please provide definition of root with citation. Page 9, section on “presence requires conscious navigation of time”: I am really surprised that there were no examples of managing time constraints within the clinical encounter/other workplaces? That would seem to be one of the more prominent challenges in current practice and with the concept of “presence” as described in the study. Is this covered under setting boundaries? If so, I would elaborate on this. Member checking would be useful for this type of validation. Page 9, Lines 48 & 50: recommend to remove brackets and add “, such as…” and change “e.g.” for “such as” Page 9, Line 55: here you have administrative demands, but I don’t see this being carried through for any of the overarching findings or implications, especially given the purpose of the methods, which has yet to be more clearly defined – to create better work environments?? Remember that individual physicians do not have often have much choice over the use or type of electronic medical record – this is typically an administrative decision, based on the practice type and age of the practice. Highlighting things that are getting in the way, without a way to change things, is a very important finding for physician burnout. This will be more clearly interpreted with a more robust introduction. Page 10, Line 8: What did the participants mean by “holding space” or “letting enough space in.” Page 11, Line 5: “Presence involved learning to step back, pause, suspend expectations, and receive and connect with someone’s story” Findings should not be introduced in the discussion section. I did not see these in results – how do they fit in with your themes, how was this developed? Page 11, Lines 23-35: What about the administrative demands discussed in the results section? This section of the discussion seems to put the onus on the clinician. Systematic issues are not addressed in this study, but these are a large part of what is contributing to physician burnout. I still don’t understand how other non-clinical interviewees can generalize their experiences to the clinical encounter to make these learnings relevant. Page 11, Line 39: add “is” between “study” and “the” Page 11, Line 44: this is the first time you discuss “analogous contexts” – this should be in the methods section and explained. What other “design principles” are there? And, which were used in this study? I am not convinced by the argument that having non-clinicians in the study can help understand “physician presence.” Make this argument stronger in methods. Page 12, Line 6 – “Intentional practices” again makes it seem that physicians have control over their work environment and can make these changes. What about system supports? We certainly learned about good clinical skills in my medical training. Is this really a training issue or is this about the barriers in practice? I am seeing a lot of training here, which I agree is part of the problem, is

	this a researcher bias? Would be good to address. The concern is that placing the onus on the clinician is not helpful when/if clinicians do not have much control over their own environments, for example, expected productivity. This could, in fact, have unintended consequences of increasing expectations without adding supports, which could worsen burnout. There are some recent articles on this subject, which would be good to reference. Clinicians were approached from a variety of practice settings, but it would be good to understand the relationship(s) between the researchers and the participants. Were there any potential concerns expressed by participants or felt by the researchers in not addressing systematic concerns, such as repercussions? I think this manuscript has great potential once it is elaborated further. Good job.

VERSION 1 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 1
Reviewer Name: Victor M Montori, MD
Institution and Country: Mayo Clinic, USA; Patient Revolution, USA
Please state any competing interests or state 'None declared': None

Please leave your comments for the authors below

1.1 This is an outstanding report from an important project to arrive at a description of what presence means or should mean in clinical care, using informants from within and adjacent to health care. The result is not surprising but still helpful in moving this field forward with some formality.

1.1 Response Thank you!

1.2 I have two relatively minor concerns.
The minor concern is with the title. The authors may want to consider replacing "art" with "practices." While these two words can be synonymical, the idea of practices will direct the reader's attention to some of the findings that suggest ways (or practices) the informants identified to achieve presence.

1.2 Response: Excellent suggestion, in particular because our resulting intervention, the "Presence 5," utilizes five "practices" to underscore how providers can best enact Presence. We have revised the title as follows:
"What is Clinician Presence? A qualitative interview study comparing U.S. physician and non-physician insights about practices of human connection"

1.3 The other minor issue is with the use of purposeful in the description of presence. Purposeful here I believe is used to convey the notion of intentional. But it does raise the issue that presence may need to be pursued with a purpose in mind. In clinical care, the purpose of presence may be, for example, to be able to correctly understand the problematic human situation the patient is facing and that demands action, and to identify the action that the problem demands. In this way it may be different or similar to pursuing presence in art, journalism, or law. Do the authors believe presence

should be advocated and practiced on first principles? Or perhaps presence is an antidote to burnout? Or perhaps presence is a practice integral to the job of caring, joining in suffering, and practically contributing to advancing the problematic situation of patients? Elaborating this point may contribute to the understanding that presence should be purposeful because it should be both intentional and contribute to care. Did you gain any insights about this from your informants?

1.3 Response: Thank you for this prompt. We do see that the choice of purposeful could mean both deliberate, and with a specific goal. We have added a paragraph in our results to explore this issue, grounding our findings in the data (p.10-11): “Our definition of presence as “purposeful” practices intentionally includes both deliberate practices – practices that you intentionally choose to do – and also doing practices for a purpose, with the goal of achieving specific results. Deliberate practices and goals overlapped, informing our choice of the word “purposeful,” and included: making an agenda “so we’re clear” (physician); making a connection (high school health educator); determining how truthful people are being (enforcement agent); identifying skills and resources people need to get tasks done (software company director); listening to understand, not to develop a response (hospice volunteer); trying to empower patients (physician); supporting the feeling of making a difference (physician); and engendering trust through participant empowerment (documentary filmmaker). We see in our data that presence is central to the goals of patient care, including connecting and listening, and also to the care of the humanity of the provider, promoting resiliency for them through feeling that they make a difference.”

Reviewer: 2
Reviewer Name: adrienne boissy
Institution and Country: Cleveland Clinic
Please state any competing interests or state ‘None declared’: none declared

Please leave your comments for the authors below
Thank you for the opportunity to review the manuscript. It is well written and focuses on an important issue of how we maintain relationships with our patients in a complex environment.

2.1 What I struggled with the most in reading is understanding how these gestures and reported efforts on the part of clinicians are distinct from relational communication techniques. For example, some of the behaviors mentioned are attending to the story, making eye contact, silence, reflective listening, physically leaning in, not interrupting (making space for their story), setting agenda - all of these are well-documented techniques in effective communication. This makes me less certain what is actually new in this paper and contributing to new knowledge in the field.
2.1 Response: We appreciate this insight and have added information about how presence incorporates and also extends beyond relational communication techniques in a new section of the discussion (p. 14-15) entitled, “Presence vis-a-vis connection, empathy, and mindfulness”
2.2 In addition, there is no capture of how these behaviors actually translate or are interpreted by the patient. Although the clinicians may think these behaviors make them present, what is the impact on the patient and are the conclusions shared? The ability to "be present" seems best evaluated by the patient, not the clinician doing it, as we often overestimate our ability to communicate effectively with patients. It feels like we miss this piece here, and its an important piece given that not everything we do is effective for any given patient.

2.2 Response: We absolutely agree with this statement, and are currently in the process of fielding a Presence 5 pilot where primary outcomes revolve around patient perceptions. Our outcomes from this pilot will not be available in 2019, so within the manuscript we have foreshadowed this need in the limitations (p16-17):

“Second, the study was limited to the perspective of primary care clinicians and other professionals. Future efforts should evaluate the impact of presence on patients, particularly since research has documented that physicians often overestimate their ability to communicate effectively.”

2.3 The absence of actual empathy is also concerning to me (techniques like physical mirroring of emotional tone, nonverbal continuers, physical touch when appropriate, and validation) are how connection is created but are not mentioned here.
Please know I do think "being present" is an important skill, but I don't think we have achieved capturing what this is independent of well known and well-studied communication techniques here.
You comment briefly on how clinicians prepare themselves to engage with the suffering of their patients (returning to present, taking breaks), which is unique and worth expanding on.
For the paper to be strengthened, I would like to distinguish being present from effective communication skills and also assess whether (and how) patient load, time for a given patient, the existence of a pre-existing relationship, burnout, and patient perspectives influence each other and the impact on trust and patient perception.

2.3 Response: Thank you for this comment. Please see our 2.1 Response, which outlines our new section results section: “Presence vis-a-vis connection, empathy, and mindfulness”
We have also added a caveat section to directly address the need for presence to be situated in systematic as well as individual change (p17):
“In addition, the study’s focus on individual practices to achieve presence has the potential to obscure the critical need for system-based interventions that address time pressure and technology intrusions. To be clear, while our findings suggest that presence is a central and important part of high-quality care that can support wellness for both patients and providers, the full onus of system change should not be placed on physicians. Misplacing the burden of responsibility solely on individual physicians without addressing system-level issues could in fact have unintended consequences of increasing expectations without adding support, which has been linked to increased burnout.”

Reviewer: 3
Reviewer Name: Sharifah Munirah Syed Elias
Institution and Country: International Islamic University Malaysia, Malaysia
Please state any competing interests or state ‘None declared’: None declared

Please leave your comments for the authors below

3.1. State the research design clearly e.g. qualitative research design

3.1 Response: We now specify that this is a qualitative study in the manuscript title and abstract.

3.2. Research question is not clearly stated

3.2 Response: We have revised the end of the introduction to more clearly specify the research question (p.7):
“Our research around defining presence seeks to outline the important elements of clinician presence, and to specifically decouple it from patient-provider communication, which is bi-directional. Clinician presence in our view can be enacted by physicians, with or without active patient reception. Although the term is commonly used, our research question centered on identifying a universal definition for clinician presence using qualitative data from interviews with primary care physicians and non-medical professionals from diverse fields in which human connection is central.”

3.3 The concept of trustworthiness is missing in this study. The authors need to explain the concept of trustworthiness in relation to the study

3.3 Response:
We are now including our interview guide as table 3, which includes questions about what participants do to build trust. We also connect trust to presence through empathy and emotional awareness in our updated Discussion.

3.4. Discussion section is too short and need more elaboration

3.4 Response:
In response to this comment and other reviewer comments, we have substantially expanded our discussion, adding material about research in patient-provider communication, connection, empathy, and physician mindfulness.

Reviewer: 4
Reviewer Name: Elizabeth Alvarez
Institution and Country: Assistant Professor, McMaster University, Canada
Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below
Thank you for the chance to review this manuscript. It is an interesting topic that fits into the growing fields on mindfulness and physician burnout. N=40 is a good number of interviews. However, some clarifications need to be included.

I will state several overarching areas of improvement and then give specific comments

4.1) Generally, it is not clear why non-physicians are being asked about clinician or physician presence. It seems that the interviewees were being asked about presence for them in their roles, not what would it mean for physicians or clinicians to be present. Either these findings should be classified as 'professional presence' or the methods need to have more detail as to why this method was chosen and how what was learned from non-physicians could be used to understand 'clinician presence'. This is throughout the paper.

4.1 Response:
Utilizing non-physicians for insight about physicians is core part of the novelty of this project, and a strength of the study. Our sample of non-physician interviews intentionally included participants representing all career areas in the US. We have also added information about Human Centered Design in our Methods section, which addresses this issue (p.8):
"Considering the scale of barriers that medicine is facing, from rising costs to provider shortages, some have called for researchers and planners to look for solutions outside of medicine. One such approach is human-centered design, which leverages insights from stakeholders at every level of design practice, and has been specifically called for in terms of building resilience in medicine.12 We employed a human-centered design approach that leveraged analogous inspiration, a strategy that has been used by engineers when there is little precedent: analogous domains must be examined as a starting point from which possible context-dependent solutions can be developed.13 Since little has been systematically documented about clinician presence in medicine, we intentionally wanted to reach beyond medicine to gather insights from analogous domains. In general, human-centered design and analogous inspiration gives us the opportunity to learn for elegant solutions that may already exist, but have not yet been utilized in the medical setting."

4. 2) There is a lack of background making the case as to the importance of this topic and this study. The background needs more citations and a stronger link to the study.

4.2 Response:
We have expanded the background to make a clearer case that presence may provide support for physician burnout, which has reached a critical point in the US (p.6-7).

4.3) Methods – the research design is not clearly explained. Design principles methods and 'human-centered design approach' are not common knowledge and these need to be explained to the reader. The citation for your methods comes from a business organization, but this should have scientific citations or describe why the use of business research methods are best and innovative for your research question. What theoretical basis and research paradigm are behind these methods? This needs to be explained, especially if you are transferring them from business to health research. I would expect from design research that you are planning an intervention or end-point, I don't see that expressed in the paper. This relates to point 1 about how can non-clinicians answering questions about non-clinicians be used to create a definition for 'clinician presence'. How was recruitment carried out? De-identification and data management are not discussed.

4.3 Response:
We have elaborated on our use of human-centered design principles in our Methods section (p.8). We are indeed planning an intervention, and have added text to that effect (p.16, Please see our 2.2 Response).

4.4) Was member checking conducted? Given that non-clinician answers were used to devise a definition for clinicians, member checking with the clinicians would help validate the findings.

4.4 Response:
We member-checked through an intensive design process for an intervention that is described in a separate manuscript that is currently under review. We held three focus groups/ideation sessions wherein we discussed this definition and solicited feedback from primary care providers.

4.5) Was a reflexive journal kept, and if so, who maintained it? How were biases addressed?

4.5 Response:
We addressed these comments in our revised Methods section (p.9):
"These elements were iteratively refined into a framework using inductive coding, which enabled us to define elements of presence as they emerged from the data. Since there was not an established definition of presence prior to this work, we did not have preset codes. We discussed the definition and coding as a full research team (12 individuals with backgrounds in medicine, implementation science, health services research, physician wellness, health communication, and linguistics) weekly over the course of a month. Detailed meeting notes were kept by two project managers, and we referred back to these meeting notes from session to session. To address biases, we debated discrepancies, but also recognized and listened to minority opinions. Research suggests that this kind of disagreement and welcoming of minority viewpoints results in better-quality coding and decision-making. A working definition of presence, plus the major themes supporting this definition, were presented to our advisors and refined during discussions with the team and advisors."

4.6) Discussion - How does your definition of presence compare to other literature on presence?

4.6 Response:
We added a section to our introduction to address this concern (p.6):

"Working concepts of "presence" incorporate practice-oriented insights from across clinical care and research—including provider burnout, patient-physician communication, and patient-centered care—and diverse other fields, ranging from business to education. However, there is little literature on "clinician presence." Other studies addressing this concept have been focused in niche areas such as psychology/psychotherapy, palliative care, or family and caregiver healthcare experience. These few studies have presented clinician presence as a state of mindfulness, "compassionate silence" originating from within a contemplative practice, or a patient-provider "shared presence" that relies on engagement of both parties."

4.7) Discussion – you mention strategies such as decreasing intrusiveness of the electronic medical record – how is it recommended this be done – were any solutions offered, or is there literature that relates to this topic?

4.7 Response: We added the following solutions to our discussion (p.16):
"Specific approaches from the literature include sharing the screen so that the EHR is fully integrated into the visit, providing panel management support or scribe services, leveraging technical solutions to help support clinical decision-making, and maximizing the efficiency of the EHR."

Specifically (sorry, the line numbers did not line up with the lines, so I put in what I felt was closest):

4.8 Page 4 – describe the study design in the abstract and add more details
4.8 Response: Word count limits dictate that we are not able to add much to the abstract.

4.9 Page 4, Setting – recommend to change "center" to "centers"
4.9 Response: To clarify, we updated our language about setting: "academic medical center, a Veterans Affairs facility, and a federally-qualified health center serving primarily Spanish-speaking immigrants" and "Physicians were recruited from primary care clinics in an academic medical center, a Veterans Affairs clinic, and a federally-qualified health center."

4.10 Page 5, line 5 – recommend to change "technology" to "technological"
4.10 Response: Updated. Thank you.

4.11 Page 5, Strengths and limitations, 1st point – recommend to add "is" between "study" and "the"
4.11 Response: We updated strengths and limitations to the following:
- Strengths of this study are its novelty; this is the first study to use human-centered design principles and methods to systematically define clinician presence.
- Limitations included a modest dataset (n=40), which is acceptable for a qualitative investigation, and which adequately addressed thematic saturation and coherence.

4.12 Page 5, Strengths and limitations, 1st point – here "physician presence" is used but "clinician presence" is used in other parts of the paper. I recommend to select one and use consistently. Physician is more specific than clinician, as clinicians can include other healthcare providers. The distinction should be made and how this was decided. Furthermore, only family physicians were interviewed from the physician pool – are the findings generalizable to other areas of medicine?
4.12 Response We have chosen clinician since there is little research on presence in healthcare, and since part of the strength of this study is that we gathered data from diverse professions, which would be applicable to any clinician, not just physicians.

4.13 Page 5, Strengths and limitations, 2nd point – “design principle methods” are stated here but not in the abstract and not defined in the paper.
4.13 Response We have expanded our discussion of human centered design in our Methods (See 4.1 Response).

4.14 Page 6, Lines 13-15: as a physician, there are many more challenges than the ones listed, including lack of administrative support, competing demands, litigious environment, increased complexity of patients, etc. The background needs to be strengthened generally. These statements, as limited as they are, need citations, and I would encourage a more thorough literature review, with citations, to strengthen this section and the study. What is the end-point of presence?
4.14 Response: Noted. Our introduction has been expanded.

4.15 Page 6, Line 17: define “humanistic”
4.15 Response: We have glossed humanistic as “patient-centered.” This concept really encompasses addressing patients in medicine first as human beings, while acknowledging that physicians (and other providers) are also firstly human, and secondly clinicians.

4.16 Page 6, Line 27 and on: There is much written on the topic of mindfulness. Describe mindfulness, with citations, and describe why the concept of “presence” is an important one within this perspective
4.16 Response: We have expanded our introduction to address literature around burnout, mindfulness interventions, and the limited existing literature about clinician presence.

4.17 Page 6, Line 52: what is the difference between “primary care” and “family physicians” – did some have specialty training and others did not?
4.17 Response: We have clarified. “internal medicine and family medicine physicians practicing in primary care”

4.18 Page 6, Line 54: describe “community safety-net clinic”
4.18 Response: We updated the description to “a federally-qualified health center serving primarily Spanish-speaking immigrants.”

4.19 Page 7, Line 3: Need to describe “human-centered design approach” and “analogous inspiration” from a methodological standpoint. See point 3 above.
4.19 Response: We have included more information about human centered design in our methods (See 4.1 Response).

4.20 Page 7, Lines 24-28: As per point 1 above, these questions are not addressing physician or clinician presence. Please clarify why this is relevant and how this was used in the analysis to understand physician presence. As above, what is the endpoint of presence? What were these questions leading to? In other words, in what context were you asking about the need to, for example, build trust? And, how would this relate to the concept of presence?
4.20 Response: We have included our interview guide as Table 3.

4.21 Page 7: Was inductive or deductive coding used? Did you have preset codes, and if so, what were they?
4.21 Response: We updated our methods (p.9):
"These elements were iteratively refined into a framework using inductive coding, which enabled us to define elements of presence as they emerged from the data. Since there was not an established definition of presence prior to this work, we did not have preset codes."

4.22 Page 8, Lines 8-10: "Including non-medical participants in our study effectively obtains a public perspective on the definition of clinician presence." See point 1. This is debatable in that the questions do not seem to be asking about clinician presence.
4.22 Response. We have withdrawn this sentence from the manuscript.

4.23 Page 8, Lines 19-22: See point 1, but this definition seems more appropriate for general "presence" and not for clinician presence.
4.23 Response: Our goal from the beginning was to define clinician presence. Definitions for presence exist in the popular press, but have not been validated to our knowledge, and have also not been rigorously studied. Since we are embarking on a systematic study of clinician presence, we felt it was imperative to have a testable definition, and chose this method of inquiry (qualitative data from immediate stakeholders and analogous professions) to give us a systematic perspective of what clinician presence already is, how it might be different or similar to general presence in other professions, and, looking towards expanding or bolstering clinician presence, inspiration about what clinician presence could become, or how it could be supported.

4.24 Page 8, Line 38: remove quotation mark in middle of quote
4.24 Response: Thank you.

4.25 Page 9, Line 21: recommend to change "e.g." with "for example,"
4.25 Response: Updated. Thank you!

4.26 Page 9, Lines 23-26: Is "in real time" the definition of "present"? If so, please provide citation. If not, please provide definition of root with citation.
4.26 Response: The goal of this sentence was not to connect "in real time" to the "present", and we have updated our language accordingly (p.11):
"Echoing its root in the concept of being in the present, presence was defined as not thinking ahead but instead returning to the current moment. An enforcement agent also referenced presence as being aware "in real time.""

4.27 Page 9, section on "presence requires conscious navigation of time": I am really surprised that there were no examples of managing time constraints within the clinical encounter/other workplaces? That would seem to be one of the more prominent challenges in current practice and with the concept of "presence" as described in the study. Is this covered under setting boundaries? If so, I would elaborate on this. Member checking would be useful for this type of validation.
4.27 Response: We added a paragraph to our results to address this issue (p.13):
"Physicians also utilized up-front expectation setting and help from team-members to support boundaries on time. For instance, physicians would communicate from the start of the visit with patients about boundaries of time, for example for the patient who arrived late: "[it's] gonna be a short

visit." However, physicians were reluctant to interrupt patients on account of time, even if the visit was running over. In team-based practices, staff would also support boundaries around time by establishing visit length expectations during the rooming process, and knocking/entering the clinic room to communicate when a visit had gone too long."

4.28 Page 9, Lines 48 & 50: recommend to remove brackets and add ", such as…" and change "e.g." for "such as"
4.28 Response: Thank you.

4.29 Page 10, Line 8: What did the participants mean by "holding space" or "letting enough space in."
4.29 Response: We included more in our results about space to help address this question (p.12-13): "Interviewees used space as a metaphor. In addition to referring to the literal physical environment, the use of "space" also referenced the emotional and relational environment. Discussion of space was both literal "the sound, the seats, the space, the rooms set up in a circle," and metaphorical "presence allows the space for the unknown and clinicians aren't comfortable with the unknown." Participants (physician, recreational therapist, design researcher, health promotor) often equated presence with space, as in "holding space," or "letting enough space in."

4.30 Page 11, Line 5: "Presence involved learning to step back, pause, suspend expectations, and receive and connect with someone's story" Findings should not be introduced in the discussion section. I did not see these in results – how do they fit in with your themes, how was this developed?
4.30 Response: Thank you for this astute observation. We had included this kind of information in our table, (eg. slowing down as part of conscious navigation of time), and have pulled this information up from our table into the body of our results.

4.31 Page 11, Line 39: add "is" between "study" and "the"
4.31 Response: Good catch!

4.32 Page 11, Line 44: this is the first time you discuss "analogous contexts" – this should be in the methods section and explained. What other "design principles" are there? And, which were used in this study? I am not convinced by the argument that having non-clinicians in the study can help understand "physician presence." Make this argument stronger in methods.
4.32 Response:
We added information about human-centered design and sampling to our methods.

4.33 Page 9, Line 55: here you have administrative demands, but I don't see this being carried through for any of the overarching findings or implications, especially given the purpose of the methods, which has yet to be more clearly defined – to create better work environments?? Remember that individual physicians do not have often have much choice over the use or type of electronic medical record – this is typically an administrative decision, based on the practice type and age of the practice. Highlighting things that are getting in the way, without a way to change things, is a very important finding for physician burnout. This will be more clearly interpreted with a more robust introduction.
Page 11, Lines 23-35: What about the administrative demands discussed in the results section? This section of the discussion seems to put the onus on the clinician. Systematic issues are not addressed in this study, but these are a large part of what is contributing to physician burnout. I still don't

understand how other non-clinical interviewees can generalize their experiences to the clinical encounter to make these learnings relevant.
Page 12, Line 6 – "Intentional practices" again makes it seem that physicians have control over their work environment and can make these changes. What about system supports? We certainly learned about good clinical skills in my medical training. Is this really a training issue or is this about the barriers in practice? I am seeing a lot of training here, which I agree is part of the problem, is this a researcher bias? Would be good to address. The concern is that placing the onus on the clinician is not helpful when/if clinicians do not have much control over their own environments, for example, expected productivity. This could, in fact, have unintended consequences of increasing expectations without adding supports, which could worsen burnout. There are some recent articles on this subject, which would be good to reference.
Clinicians were approached from a variety of practice settings, but it would be good to understand the relationship(s) between the researchers and the participants. Were there any potential concerns expressed by participants or felt by the researchers in not addressing systematic concerns, such as repercussions?

4.33 Response:
Our team has definitely discussed the limitation of focusing on clinicians instead of the system, and we welcome this comment as an invitation to address this concern with the following additional paragraph in our limitations section (p.17):
"In addition, the study's focus on individual practices to achieve presence has the potential to obscure the critical need for system-based interventions that address time pressure and technology intrusions. To be clear, while our findings suggest that presence is a central and important part of high-quality care that can support wellness for both patients and providers, the full onus of system change should not be placed on physicians. Misplacing the burden of responsibility solely on individual physicians without addressing system-level issues could in fact have unintended consequences of increasing expectations without adding support, which has been linked to increased burnout."

4.34 I think this manuscript has great potential once it is elaborated further. Good job.
4.34 Response: Thank you!

VERSION 2 – REVIEW

REVIEWER	VIctor Montori Mayo Clinic, USA
REVIEW RETURNED	04-Sep-2019

GENERAL COMMENTS	Excellent revisions. One final suggestion is to use the word clinician rather than provider. Clinician would be more consistent with the spirit that inspires your work. A clinician is anyone with the privilege of being by the side of (the bed of) the patient. As such, it invokes a professional duty to be there to care, with presence a key feature of their participation as healers. "Provider" comes from an industrial language, and I perceive industrial healthcare is the antipodes of your proposal.

REVIEWER	adrienne boissy Cleveland Clinic
REVIEW RETURNED	18-Sep-2019

GENERAL COMMENTS	I very much appreciate that you took the comments to heart and the paper feels stronger as a result. the new section on empathy skirts two important points: 1. in our research, we reduced burnout

	with the single intervention of comm skills training, in part I believe because by being present and investing in relational communication, we heal others and even ourselves. This is the brilliance of what you highlight. Second, if empathy has multiple components, and one is cognitive empathy, the ability to imagine, but not feel, everything another person feels, this is the muscle to build to protect from emotional exhaustion of burnout. Thank you for the hard work and I look forward to hearing how all this lands on patients!

REVIEWER	Elizabeth Alvarez McMaster University, Canada
REVIEW RETURNED	21-Sep-2019

GENERAL COMMENTS	Thank you for addressing the reviewer comments. The paper flows better and is strengthened with more links to other literature. I have 5 minor points: Page 7, Line 42 - in the methods section you mention interviewing 10 providers but not how many non-physicians. I would generally leave these numbers for the results, but either way, present consistently. Page 7, Line 52 - I would replace anonymous with de-identified. Why make a distinction between the handling of transcripts between clinicians and non-clinicians, what happened with the non-clinician transcripts? Please clarify. Page 12, Line 53 - suggest to remove dash "-" after administrative Page 13, Line 44 - suggest to remove dash between "team" and "members" Did participants sign informed consent? I would mention that under methods.

VERSION 2 – AUTHOR RESPONSE

Reviewer(s)' Comments to Author:

Reviewer: 1

Reviewer Name: Victor Montori

Institution and Country: Mayo Clinic, USA

Please state any competing interests or state ‘None declared’: None

Please leave your comments for the authors below

1.1 Excellent revisions. One final suggestion is to use the word clinician rather than provider. Clinician would be more consistent with the spirit that inspires your work. A clinician is anyone with the privilege of being by the side of (the bed of) the patient. As such, it invokes a professional duty to be there to care, with presence a key feature of their participation as healers. "Provider" comes from an industrial language, and I perceive industrial healthcare is the antipodes of your proposal.

1.1 RESPONSE: Thank you for the suggestion. We have updated “provider” to “clinician” throughout the manuscript.

Reviewer: 2

Reviewer Name: Adrienne Boissy

Institution and Country: Cleveland Clinic

Please state any competing interests or state ‘None declared’: none declared

Please leave your comments for the authors below

I very much appreciate that you took the comments to heart and the paper feels stronger as a result. the new section on empathy skirts two important points: 1. in our research, we reduced burnout with the single intervention of comm skills training, in part I believe because by being present and investing in relational communication, we heal others and even ourselves. This is the brilliance of what you highlight. Second, if empathy has multiple components, and one is cognitive empathy, the ability to imagine, but not feel, everything another person feels, this is the muscle to build to protect from emotional exhaustion of burnout. Thank you for the hard work and I look forward to hearing how all this lands on patients!

2.1 RESPONSE: We are gratified to hear that we addressed Reviewer 2 concerns and appreciate the additional comments connecting empathy, presence, relational communication, and burnout. To emphasize these important points, we have added a sentence and reference in the Empathy section of our manuscript: “In this vein, interventions building communication skills with emphasis on presence-like relational communication have been associated with reducing burnout.”

Reviewer: 4

Reviewer Name: Elizabeth Alvarez

Institution and Country: McMaster University, Canada

Please state any competing interests or state ‘None declared’: None declared

Please leave your comments for the authors below

Thank you for addressing the reviewer comments. The paper flows better and is strengthened with more links to other literature. I have 5 minor points:

4.1 Page 7, Line 42 - in the methods section you mention interviewing 10 providers but not how many non-physicians. I would generally leave these numbers for the results, but either way, present consistently.

4.1 RESPONSE: Thank you! We do provide information about the non-physicians in a paragraph further down, but I've moved that information up since it seemed confusing.

4.2 Page 7, Line 52 - I would replace anonymous with de-identified. Why make a distinction between the handling of transcripts between clinicians and non-clinicians, what happened with the non-clinician transcripts? Please clarify.

4.2 RESPONSE: Because these data originate from two different IRB applications (exempted for non-medical professionals due to anonymity, approved for physicians with de-identification), we have clarified:

"Ethical approval was exempt for anonymous interviews with non-physicians by the Stanford IRB protocol 43314, September 27, 2017; and approval was granted for de-identified interviews with physicians as part of the Presence study by the Stanford IRB, protocol 42397; October 26, 2017. Interview recordings and transcripts were stored in PHI and HIPAA-compliant secure files, and were only available to research staff. Transcripts for clinicians were deidentified, retaining only information about role (eg. MD 1). Files were anonymous in the case of non-medical professionals, where signed informed consent was waived due to IRB exemption (#43314). Physician participants signed informed consent in accordance with IRB #42397."

4.3 Page 12, Line 53 - suggest to remove dash "-" after administrative

Page 13, Line 44 - suggest to remove dash between "team" and "members"

4.3 RESPONSE: Thank you. These changes have been updated.

4.4 Did participants sign informed consent? I would mention that under methods.

4.4 RESPONSE: We have clarified this information in our methods. Please see 4.2 Response.