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Understanding perceptions of global healthcare experiences on provider values and practices in the USA: a qualitative study among global health physicians and program directors

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ABSTRACT

Objectives The study aimed to qualitatively examine the perspectives of US-based physicians and academic global health programme leaders on how global health work shapes their viewpoints, values and healthcare practices back in the USA.

Design A prospective, qualitative exploratory study that employed online questionnaires and open-ended, semi-structured interviews with two participant groups: (1) global health physicians and (2) global health programme leaders affiliated with USA-based academic medical centres. Open coding procedures and thematic content analysis were used to analyse data and derive themes for discussion.

Participants 159 global health physicians and global health programme leaders at 25 academic medical institutions were invited via email to take a survey and participate in a follow-up interview. Twelve participants completed online questionnaires (7.5% response rate) and eight participants (four survey participants and four additionally recruited participants) participated in in-depth, in-person or phone semi-structured interviews.

Results Five themes emerged that highlight how global health physicians and academic global health programme leaders perceive global health work abroad in shaping USA-based medical practices: (1) a sense of improved patient rapport, particularly with low-income, refugee and immigrant patients, and improved and more engaged patient care; (2) reduced spending on healthcare services; (3) greater awareness of the social determinants of health; (4) deeper understanding of the USA's healthcare system compared with systems in other countries; and (5) a reinforcement of values that initially motivated physicians to pursue work in global health.

Conclusions A majority of participating global health physicians and programme leaders believed that international engagements improved patient care back in the USA. Participant responses relating to the five themes were contextualised by highlighting factors that simultaneously impinge on their ability to provide improved patient care, such as the social determinants of health, and the challenges of changing USA healthcare policy.

Strengths and limitations of this study

- Online questionnaires along with key informant interviews allowed for a more in-depth examination of physician and programme leader perspectives.
- Thematic analysis resulted in five nuanced themes that contributes to an expanded understanding of how global health work shapes a culture of healthcare practice back home in the USA, offering further points for research and exploration.
- Thematic saturation was not achieved through data analysis, as low questionnaire response rate and a small number of interview participants limit the generalisability of research findings.

BACKGROUND

Interest in the field of global health has been rapidly growing over the last decade,[1–3] as has USA support for international efforts aimed at improving health in low- and middle-income countries (LMICs).[4] As a result, many academic medical institutions and organisations have stepped up to meet this demand, offering more opportunities to study, work and conduct research in the field of global health.[5–8] As of 2016, more than one-third of all matriculated USA medical students reported volunteering internationally.[9] To offer medical students opportunities in global health, academic medical institutions establish partnerships with collaborators in LMICs, both public and private, in a range of settings.[10] These relationships vary by programme and school, with the majority providing short-term (typically no more than two months) training or service learning opportunities, such as global health clinical rotations for medical students and residents, direct service delivery engagements, research opportunities in the health sciences and

diverse training collaborations.[11] Some question the ethics of these engagements as forms of 'medical tourism', considering the population health status in the USA pales in comparison to other high-income nations[12 13] and because a growing number of foreign-born and foreign-trained physicians immigrate to the USA to practice medicine in underserved communities.[14] This healthcare workforce exchange may harm healthcare systems[15 16] and displace financial resources.[17]

With the proliferation of academic global health programmes has come a growing body of research and literature examining the ethics, achievements and potential unintended consequences of these programmes on non-USA communities,[2 18–24] as well as how these engagements influence the values and perspectives of global health students,[25] medical students[26–28] or residents.[29] But a gap remains in understanding how global health work influences the values and practices of USA-based physicians who have worked extensively, and/or those who continue to work intermittently, in a global health setting, and what impacts this work is perceived to have on the USA communities in which these physicians return to work and live. This qualitative study attempts to understand the perspectives of global health physicians and programme leaders in academic global health on how they believe their work abroad influences their viewpoints, values and healthcare practices back home in the USA.

METHODS

Participant and data collection

We recruited participants from two groups: global health physicians and global health programme leaders affiliated with academic medical institutions. We developed inclusion criteria to purposively reflect diverse perspectives based on duration of global health experience and positionalities within academic global health programmes. We initially used convenience sampling to recruit participants for the online questionnaire by first identifying academic medical institutions with accredited—by the Council on Education for Public Health or Liaison Committee on Medical Education—global health programmes through structured online searches, followed by snowball sampling through colleague recommendations and purposeful sampling to recruit additional interviewees. The study recruitment for the global health physician category required participants to match with the following criteria:

1. USA-trained postresidency physicians currently providing patient care and/or conducting healthcare research, training or mentorship (including education) for at least 1 month out of the year in a World Bank[30] defined LMIC and who are either:
   a. affiliated with an accredited global health programme supported by an academic medical centre or
   b. engaged in their work through another organisation or company (eg, an international/non-governmental organisation, consulting/technical assistance organisation or multi/bilateral development agency).
2. US-trained physicians who have at least 5 years of cumulative global health experience in a LMIC.

The study recruitment criteria for global health programme leadership required that participants be programme faculty or staff (programme coordinators, administrators and mentors) affiliated with an academic medical institution offering an accredited global health programme. Several selected participants fit the criteria for both global health physician and global health programme leadership, and their responses were analysed within both categories.

We designed the questionnaire and survey questions to elicit open-ended responses about global health physicians' personal experiences researching and practicing abroad, while programme leaders were asked questions regarding their experiences overseeing programmes and their perspectives on the field more broadly (see online supplementary file 1). Participants who fell into both categories were asked questions from both instruments. Recognising the ambiguity of key terminology such as global health,[31 32] we shared with participants the study's focus on healthcare practices in a global context prior to recruitment. The research instruments consisted of an online questionnaire developed and administered using a Research Electronic Data Capture database, comprised of open-ended questions and short response questions identifying demographic information.

We utilised an adaptive approach to designing the semi-structured interviews[33] by personalising questions to further explore the participant's expertise, positionality and questionnaire responses. Interviews were recorded, relevant portions were transcribed with structured notes and then coded (by NM-T) and analysed by hand using thematic analysis (conducted by NM-T, DC, SH and SB) in relation to identified questionnaire themes.[34] We have incorporated researcher comments—distinguished by bracketed text within direct quotations—to provide clarity to the quote based on information and context provided from the full interview. In the text below, the names of all participants remain anonymous, and are cited using a notational system to differentiate between global health physician and programme leadership participant groups, and if the quote comes from an interview or questionnaire; for example, *Global Health Physician* #1, *interview* (GHP, hereafter) or *Programme Leadership #3,* questionnaire (PL, hereafter).

Permissions

Participants were informed of the study objectives using an electronic information sheet as part of the initial questionnaire and electronic online consent was obtained before beginning any research procedures. Participants who were invited for interviews also gave additional verbal or written informed consent.

Patient and public involvement

Neither patients nor the general public were directly involved in the study design, data collection or analysis. The underlying research question was informed by a gap in the literature on understanding the impact that global health physicians have on domestic healthcare practices in the USA. We hope that these results will inform future research designs that explore these themes in-depth, and connect them with patient-centred outcomes research and other forms of community-based participatory research. We plan to pursue further dissemination of the results to the public and will consider strategies to engage the public.

RESULTS

We sent 159 recruitment emails to global health physicians and global health programme leaders at 25 different academic medical institutions. Eight global health physicians and four global health programme leaders completed the online questionnaire, while one global health physician and three global health programme leaders who completed the questionnaire agreed to participate in a semi-structured interview. In addition, we conducted semi-structured interviews with six global health physicians and two global health programme leaders who were identified through snowball and purposeful sampling. In total, participants represented seven unique academic medical institutions located throughout the USA and ranged from 33 to 68 years of age. Four participants reported beginning their global health work in the 2000s, two reported beginning in the 1990s and one each reported beginning in the 1980s and 1970s. We were unable to identify differences between programme leaders and global health physician responses, likely a result of several participants falling into both categories and similar motivations for participants in each category. We present in table 1 the domains of engagement in global health for these participants and the emergent themes identified through analysis of the qualitative data in table 2.

Table 1 Global health domains of engagement among participants

Participants	Category of work abroad
PL1	Care delivery, research, teaching/training, policy/advocacy, programme design/monitoring/evaluation
PL2	Research, teaching/training, programme design/monitoring/evaluation
PL3	Research, teaching/training, programme design/monitoring/evaluation
PL4	Research, programme design/monitoring/evaluation
PH1	Research, teaching/training, programme design/monitoring/evaluation
PH2	Research, teaching/training, policy/advocacy, programme design/monitoring/evaluation
PH3	Care delivery, teaching/training, programme design/monitoring/evaluation
PH4	Care delivery, teaching/training
PH5	Care delivery, teaching/training, policy/advocacy
PH6	Care delivery, research, teaching/training
PH7	Care delivery, research, teaching/training, policy/advocacy, programme design/monitoring/evaluation
PH8	Research, teaching/training, policy/advocacy, programme design/monitoring/evaluation

Improved and more engaged patient rapport and patient care

All eight of the interviewed participants indicated that their global health work had improved their ability to build rapport with and provide care for immigrant, refugee and low-income individuals in the USA. They attributed perceived improved patient rapport to a variety of reasons, such as being able to speak to patients in their own language, understand their cultural background and better understand the challenges unique to immigrant, refugee and patients of low-socioeconomic position. As one participant noted, 'If I bring some of these things up, then I break a barrier and have a good relationship very quickly' (*GHP #1*, interview). Another participant discussed similar experiences that have helped them build rapport in the emergency department where they work: 'I speak a couple languages which working abroad has taught me. I speak Spanish, I speak Creole, so…[with some patients] there is that automatic connection' (*GHP #3*, interview). Several participants remarked during interviews and in questionnaire responses that patient rapport is vital to the work of caring for patients, and that learning to speak another language was a direct result of their global health work.

Half of participants reported that their global health work improved the quality of care they were able provide to their patients back home. Participants reported this as being 'more efficient' as a result of taking better patient histories and physical exams, that they were less inclined to carry out 'unnecessary and invasive tests', or being more patient-centred[35] as they had a greater awareness to the patient's economic and/or cultural context. One participant reported that they were 'more likely to speak to a patient about options that did not include very aggressive care', and that they may be 'a little more comfortable' offering to 'do nothing' (*PL #6*, interview). The following participant quote also exemplifies this theme:

> Each time I practice abroad and then come back to the US, I find that I am more compassionate and empathetic, because I have been practicing how to focus on the person in front of me while I was away, and to think clinically (instead of focusing on the computer and the paperwork) (*GHP #4*, questionnaire).

Table 2 Themes: perceptions of how global health work influences patient care in the USA

Themes	Descriptors
Improved and more engaged patient rapport and patient care	Connection through language, cultural familiarity, better understanding of patient challenges, patient-centred care and less aggressive treatment
Reduced healthcare spending	More attention to patient history, increased reliance on physical exams and greater awareness to a culture of frivolous testing
Greater awareness to the social determinants of health and the limits of healthcare	'Connecting the dots', understanding social determinants of health, recognising similarities between healthcare access between USA patients and patients abroad
Rethinking the USA healthcare system	A more nuanced understanding of the USA healthcare system through comparison with healthcare systems in other countries
Values behind interest in global health	Global health attracts altruistically motivated individuals. Personal values were developed prior to global health work

Several participants doubted whether these improvements in patient care were significant and questioned whether they could be accurately measured. 'I don't feel that physician experience abroad translates into worsened quality of patient care in the US. I can't assume that it translates into improved quality of patient care in the US either' (*GHP #3*, questionnaire).

Reduced healthcare spending

The interviewees and questionnaire participants were divided on the extent to which their global health work experience translated into cost savings for USA patients. The majority, however, reported that learning to practice medicine with fewer resources translated into more reliance on patient histories, physical exams and less on medical tests. Several also reported a greater awareness of patterns of overspending in the USA healthcare system as one family physician wrote:

> I have been able to think more clinically and utilize my medical knowledge in a way that I cannot always do in the US. With limited resources, the physical exam and limited testing becomes critical in diagnosis and following up patient responses to treatment. When I return, I find that I do not need to rely on the technology as much and can focus on the patient. (*GHP #4*, questionnaire)

Participants who did not think that their global health work resulted in cost savings for USA patients expressed that they believed the differences in cost savings to be negligible. No participants reported feeling that global health work resulted in more costly care for USA patients or the healthcare system.

The social determinants of health and the limits of healthcare

Half of the study participants reported global health work gave them a better understanding of the broader, underlying factors that contribute to patient health, including the challenges of accessing healthcare. This was reported as either reinforcing participant's prior perspectives on the social determinants of health or as helping participants to recognise the social and political–economic factors related to health both abroad and in the USA. One global health physician working in internal medicine responded that their work abroad led to a broader sense of why their patients are 'how they are, so it is not just they are uneducated, it is also their father is an alcoholic and also that they are addicted to pain pills, and also that they are overweight'. Here, global health work 'helps you connect the dots between seemingly unconnected psychosocial things' (*GHP #3*, interview). This participant located this thinking within the social determinants of health more broadly: 'Poverty, corruption, gender inequality, lack of education, years of war and the subsequent post-traumatic stress disorder that affects an entire nation all are the biggest influencers of well-being' (*GHP #3,* questionnaire).

Several participants discussed the distinction between healthcare and health, often in the context of doubting the extent to which global health physicians could, themselves, improve health through providing healthcare in the USA or abroad. As one participant wrote,

> My experience working abroad has strengthened my belief that 'well-being' (or 'health' as defined by the World Health Organization) is very minimally influenced by the medical care I provide as an individual physician and also minimally influenced by the medical care provided by a healthcare system. (*GHP #3,* questionnaire)

These participants advocated for a more nuanced understanding of the factors that influence health and felt that their global health work either brought them to this realisation or reaffirmed their understandings of the social determinants of health.

Rethinking the USA healthcare system

Seven out of the eight interview participants acknowledged the importance of their global health work in helping to better understand the strengths and weaknesses of the USA healthcare system. This was attributed to a variety of factors unique to the field of global health, such as conversations with non-USA healthcare practitioner counterparts and experience working within non-USA healthcare systems, as these two responses reveal: 'I have had a lot of conversations with colleagues in Ukraine, because they are undergoing a lot of reform…we have a lot of talks about the kind of differences, weakness in each [Ukraine and US healthcare systems] and what is similar'

(*PL #7,* interview). 'Having the experience of working in many different healthcare systems… allows you to see in every variety and every system there are things that work well and things that do not' (*PL #6,* interview). Participants framed these comparisons on the weaknesses of the US healthcare system by discussing the motivations and standard practices of other healthcare systems. As one participant noted during an interview, 'The goal of many countries' healthcare system is to serve their citizens fully…They start off in a different place than where we are' (*PL #7*, interview).

Participants also contrasted the cultural role of healthcare in various settings. These discussions were focused on perceived changes or shortcomings in USA healthcare practices that negatively affected patient care, as well as physician satisfaction and prestige. One participant noted that they 'do not get the experience of saving lives in the US' and 'I do not get the same level of gratitude from the patients' (*GHP #3*, interview). This perspective was reiterated by another participant who discussed how they and other physicians 'look nostalgically to a time when there was more enthusiasm for the work that physicians did'; though, they 'try to keep the dissatisfying thoughts at bay'. This was attributed to them spending 'a lot of time doing paperwork, less time doing patient interaction or [having] meaningful patient interaction' (*PL #6*, interview). The following participant quote exemplifies how participants framed their perceptions of the USA healthcare system. They perceived a decline in the USA healthcare system and that global health work was seen as a more personally beneficial and altruistic endeavour:

> We do not practice evidence-based medicine anymore [in the US], we practice lawsuit-based and insurance-based medicine now. I am a hired gun here. I collect a paycheck and then go back [abroad]. (*GHP #3*, interview)

Several interview participants identified current and future potential challenges of infectious disease epidemics to the USA healthcare system, and the perceived benefits of global health work in primary, secondary and tertiary prevention. One participant noted, 'If we are not prepared to fight that pandemic, like Ebola or Severe Acute Respiratory Syndrome, in the place where it starts then that will eventually come to anybody anywhere in the world' (*PL #6,* interview). Another participant discussed epidemics and the perceived benefits of global health work to infectious disease control: 'I see a lot of infections when I'm overseas that then periodically show up here and I think I'm one of the few people that could actually like deal with [it]. So, it informs the technical aspect of my job' (*PL #6*, interview).

One of the primary research questions was whether a greater recognition of the strengths and weakness of the USA healthcare system could lead to a culture of change among global health physicians in their USA sites of practice. The participants responded in a variety of ways—most of which contained elements of doubt, cynicism, disinterest or a perceived greater ability to support impactful changes to foreign healthcare systems. Discussing their personal experiences with the US healthcare system, one participant noted: 'There are so many competing agendas, and it is the big money that is going to win out. I hate to sound cynical' (*PL #7*, interview). Another participant explained that their work providing technical expertise to the Kenyan Health Ministry 'can make public health decisions that have a big impact much more easily than anybody here [in the USA] can have' (*PL #6,* interview). Several participants discussed how they had previously been involved in US healthcare advocacy and reform work, but had either lost interest, were too busy with their global health work, or had felt that they were able to bring about more meaningful reforms in non-USA healthcare systems: 'One of the things is I used to follow US medical care, a lot, but I can't keep up, just because I try to keep up with things going on overseas…I used to know a lot about this stuff' (*PL #2,* interview).

Values behind interest in global health

All interviewed participants reported that their values were not changed by their global health work, but rather their values drove them to pursue global health in the first place—or allowed them to 'find a niche in which to put their values' (*PL #2,* interview), as one participant noted. Furthermore, five interviewees mentioned that global health was a field that self-selected for individuals with altruistic values: 'I think that many people who choose to do global health [have]. …stronger altruistic focus or willingness to devote their time' (*GH #1*, interview). Several participants mentioned that their values came from their familial upbringing, religious background or political ideology, and that pursuing careers in global health was a way for them to put their values into practice.

DISCUSSION

This exploratory study contributes to an expanded understanding of the ways in which global health physicians and academic global health programme leaders understand their work in relationship to the field of global health, and the perceived impact of this work on the USA healthcare system. Our analysis revealed that those who engage in global health work are deeply affected by experiences abroad, and in turn these experiences influence the way they practice medicine back home—even in the face of what participants perceive to be a challenging healthcare ecosystem. This was often described as a contradiction of values between the profit-driven USA healthcare system and the goals of these global health physician to provide high-quality, attentive, culturally sensitive and patient-centred care.

Study participant responses reflect a shared understanding of the ways in which the USA healthcare system treats patients as 'paying customers'—a product of the USA fee-for-service and for-profit healthcare model[36]—in comparison to the non-profit, universal or single payer

models of healthcare delivery experienced by global health physician participants while abroad. Participants said that the USA healthcare system manifests in problematic physician–patient relationships, too much time devoted to bureaucratic requirements, excessive fear of litigation, frivolous spending, overly aggressive medical care and a disconnect between care providers and the lived experiences of low-income and immigrant patients, all perspectives noted in other studies.[35 37–39]

Participants report that their personal values motivate them to pursue global health careers, a notion supported by studies on career choice selection[40] and short-term temporary global health residency electives.[29] They describe global health work as personally rewarding, a counterweight to personal frustrations resulting from the USA healthcare system. Several participants explicitly state that global health work is a return to their altruistic values, an opportunity to 'save lives', or to serve regardless of cost. In contrast, they describe practicing in the USA as prioritising pleasing the patients and the 'worried well' (as opposed to healing people, and understanding the broader roots of affliction), practicing 'insurance medicine' or 'liability medicine', or 'customer service'. They attribute these perceptions to either the volunteer nature of their global health work, their experiences working in non-USA healthcare systems, or witnessing different provider-patient relationships while abroad.

While a broader discussion of the promise and perils of short-term global health and medical mission work—of which academic global health programmes are just one example—is outside the scope of this study, it is worth reflecting briefly on some of these comments, which point to the problematic nature of many of these programmes. The idea of escaping from the confines of the bureaucratic US healthcare system into a LMIC medical setting can often propel well-intending physicians into potentially ethically problematic global health situations. They may be operating outside of the laws of the 'host' country, and be unfamiliar with the structural determinants of health in this new setting; and, as a result their work might undermine local healthcare delivery systems. These are situations we have seen in our collective global health work, and about which several participants spoke during interviews.

The most significant division among participants is whether they viewed their global health work as a vehicle for change on individual care, and/or systemic changes in the USA. Those that did report positive benefits of global health for improved patient-care and the changes to the USA healthcare system overall discuss these more at the individual level—such as reduced spending, better patient care and replicating interventions that had proven effective abroad. These findings are supported by similar research looking at the perspectives of short-term global health residency electives,[29] international clinical rotations[41] and other forms of global health engagement.[42] Additionally, several participants point to the role of global health physicians in preventing pandemics by being better prepared at recognising new infectious diseases, going to the source of the outbreak and identifying the need for the US healthcare system to take infectious disease threats more seriously.

A majority of participants reported having a better understanding of the weaknesses and strengths of the USA healthcare system as a result of their global health work. Other studies argue that global health experiences can serve the needs of the healthcare system by increasing the number of physicians who go into a primary care field and practice medicine in resource-poor settings.[41]

Participants who consider the impact of global health work on USA patient care point to USA national policies and the social determinants of health as being important for improving patient health. These narratives are supported by evidence that points to income and other economic inequalities as important drivers of poor population health,[43] and the realisation that, while the USA spends more money on healthcare than the rest of the world combined,[44] it continues to lag behind other high-income countries in life expectancy.[13] These participants suggest the need for domestic and foreign collective reforms to bring about significant health improvements.

Our study found that global health physicians and global health programme leaders do not feel greater agency to bring about policy or systems-level changes to the USA healthcare system because of their global health experiences. This could be the result of a multitude of factors, such as an increased awareness to the obstacles that stand in the way of reform, a recognition of the immensity of reform required or an understanding of the difficulty of bringing about positive changes in the current political context.

Limitations

The homogeneity of the research team is a notable limitation of this study, with lead researchers all from North America and predominantly white men, thus affecting the formulation of the research questions, the data received and the analysis conducted. We reached out to 159 individuals and programmes, 30 opened the questionnaire link, and only 12 completed the questionnaire (7.5% response rate). The study's small sample size was most likely a result of physician and programme leadership survey fatigue—which, the research team was told directly by several who declined to participate—limiting the generalisability of our findings. Future qualitative research on this or similar participant demographics should consider survey fatigue and explore ways to increase response rates, such as more in-person interviews and, if ethically feasible, participant observation. A more grounded research design that develops interview guides based on initial questionnaire responses will likely improve the scope and focus of participant responses, as well. While thematic saturation was not achieved, we hope that our identified themes can act as a starting point for future research on the topic of how global health work is perceived to impact USA patient care. One

example might be an experimental study investigating global health physician spending patterns compared with physicians who have not practiced abroad. We also feel that future research seeking to understand the growing interest in the global health field could investigate how perceived conflict of values between altruistically driven physicians and the USA healthcare system could act as a potential force in generating more interest in global health, and how the USA healthcare system or individual institutions could decrease physician discontentment associated with a conflict of care values.

CONCLUSIONS

This exploratory qualitative study only begins to scratch the surface of understanding the impact of global health work on USA patient care and the USA healthcare system. Among the five themes identified through questionnaires and interviews with global health physicians and global health programme leaders, two themes were centred on the impact of global health work on USA patient care: global health may improve patient rapport for physicians caring for immigrant and low-socioeconomic patients, may reduce healthcare spending by providers and may lead to more effective patient care. The other three identified themes were that global health work is largely motivated by altruistic values, leads to a greater awareness of the social determinants of health and gives rise to a better understanding of the strengths and weaknesses of the USA healthcare system. Participants saw these themes as interrelated, such as how global health work allows for more personally rewarding physician–patient interactions compared with the USA healthcare system, which was viewed as flawed, unwieldy and obdurate, and in need of reform.

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Contributors Conceived and designed the study: NM-T, DC, SH, SB and DM. Collected and analysed the data: NM-T. Wrote the manuscript draft: NM-T, DC and SH. Interpreted the results; edited and revised the manuscript draft; reviewed and approved the final manuscript draft: NM-T, DC, SH, BA, SM, SB and DM.

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Competing interests NM-T is a student at, DC and SB are faculty members at and DC and SH are employed part-time at a public university (University of Washington). DC and SH are employed by, and BA, SM and DM work in partnership with a non-profit healthcare company (Possible) that delivers free healthcare in rural Nepal using funds from the Government of Nepal and other public, philanthropic and private foundation sources. BA is a faculty member at a public university (University of California, San Francisco). SM and DM are faculty members at a private university (Icahn School of Medicine at Mount Sinai). DM is a non-voting member on Possible's board of directors but receives no compensation. All authors have read and understood BMJ Open's policy on competing interests and declare that we have no competing financial interests. The authors do, however, believe strongly that healthcare is a public good, not a private commodity.

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