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## What if I could become the doctor I always wanted to be?

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What if I could become the doctor I always wanted to be? This “medicine miracle question” embodies the discussion on a sustainable and humane health care system, which is increasingly fraught with reliance on efficiency, profitability, and digitalization. This question was posed to the ~10,000 members of the German Neurological Society (DGN) as part of an interactive, cross-media project entitled “*REImagine MEDICINE*,” including a total of 46 questions, organized in six chapters: 1. “Dream job doctor”; 2. “Who are you?”; 3. “My Neurology”; 4. “Workplace”; 5. “Medicine and business”; 6. “Doctor-patient relationship.” The primary goals of this project were to i) create a multi-layered view of the current situation in neurology and medicine; ii) encourage an intensive exchange of experience and ideas; iii) trigger a movement for change “from within” through a participatory project with and by doctors.<sup>1</sup>

Paradoxically, a system heavily geared to productivity and profit margins with decreasing emphasis on the central values of medicine and patient care is at risk of becoming ineffective and eventually harming its central actors. This is reflected by the high rates of burnout among doctors worldwide<sup>2,3,4</sup>, recently confirmed in a systematic analysis performed on 1439 members of the Resident and Research Fellow Section (RRFS) of the European Academy of Neurology (EAN). Indeed, doctors are the linchpin between the system and patients, and neurologists are particularly affected due to our discipline's central and growing importance in modern medicine and demographic change. Despite increasing recognition of the problem, this issue has not been sufficiently addressed within and with the medical community. A solution may be surprisingly simple: What if doctors are called upon to counteract according to the motto “What concerns everyone, only everyone can solve” as the Swiss writer Friedrich Dürrenmatt says. Who should take the lead in such a change process - politicians, economists, professional managers? Undoubtedly, all these professionals play essential roles in shaping health care policies and design; however, medicine primarily needs leadership from doctors who should act as subjects, not objects of change.

The *ReImagine MEDICINE* project aimed to spark such a process and consisted of three phases: an interactive online questionnaire with integrated visual tools and live feedback (phase 1), a downstream

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multistage analysis using the software-based online tool "INSIGHTS" (phase 2),<sup>5</sup> and a second round of questions re-assessing neurologists' views amid the Covid-19 pandemic in the early summer of 2020 (phase 3). For the latter, the pandemic served as an unexpected "experiment of nature" that dramatically challenged our health care systems and personnel while providing unprecedented opportunities for change. Indeed, one can experience first-hand how doctors (and scientists) start taking the lead for medicine at all levels, including a prime role as advisors at the top level of COVID-19 political decision-making.

Questions offered multiple-choice answer options and were supplemented with slider questions to allow for grading of several of the responses. While live feedback was provided for 17 questions to enable "online" comparison with other participants, a total of 3758 detailed free-text answers provided important and sometimes unexpected deeper insights. This also served as a powerful demonstration of the neurologists' personal and occasionally emotional involvement in the topic and readiness to thoughtfully respond to the questions from the neurologist's eye view. In phase 1, out of 1112 participants (47% females, mean age 42 years), only 6.3% reported having become the doctor they always wanted to be. Thirty-one percent had come very close to their vision, and 51% had achieved some of their goals. However, a remarkable 68% would again choose the medical profession, 70% felt that they could help shape their work environment, and every other doctor believes that the health care system needs to be fundamentally rethought and realigned. Even more interesting were the free-text entries, which highlighted 10 main issues, including "more time for the patient," "more flexible working conditions," "improvement of continuous education," "fair wages," "equal rights in hospital management," "adjustment of priorities," "promoting meaningful digitalization," "more interdisciplinary care" or "better communication with politics and society". The entries offered numerous concrete proposals for solutions, for example: Reducing bureaucracy in the area of documentation and clinic administration, more organizational authority to issue directives, fewer restrictions, greater appreciation of interpersonal medical services such as patient and family discussions, and assessment of treatment success based on patient satisfaction. The free-text answers

also served as the basis for the two INSIGHTS questions from phase 2: “What would you change specifically in your work environment to shape the medical profession for today and the future?” “What could be concrete solutions for acquiring and transferring knowledge that can be incorporated into everyday work and continuous education?” While the answers to the first question revealed essential points of discussion for a broader societal debate, the second question provided actionable opportunities for the DGN in its capacity as a medical society. In response to this need, in 2020 and 2021, the DGN has implemented a mentoring system and launched a new medical journal focusing on continuous education and special training courses for board certification. As these fundamental needs are not restricted to German neurology, the EAN has recently started a mentorship program that fosters international interactions.<sup>6</sup>

In the summer of 2020, along with a selection of items from phase 1, we posed the following question to the DGN membership: "Let's imagine a situation in 2021. A vaccine has ended the Corona pandemic. Everything is as it was before Corona - or is it different?" While ~50% of the neurologists did not expect any long-lasting changes for most of these items, two items stood out with 70% (“increased risk of infection”) and 59% (“possibility to shape the work environment”) of the doctors anticipating significant changes (Figure 1. A). Accordingly, in a survey among 222 RRFs members of the EAN, the majority (79%) predicted a significant impact of the Corona pandemic on their training and career.<sup>7</sup>

Collectively, the results of the DGN survey suggest a great readiness for an interactive solution-driven dialog among neurologists who are very willing to act as innovators, mediators, and agents of change. Undoubtedly, the patient remains the clear center of concern (Figure 1. B). In light of variable numbers of neurologists available, training duration and objectives, as well as socio-economic conditions across Europe, we encourage similar studies in other European countries to understand specific circumstances, needs, and potential.<sup>8</sup>

However, the underlying problem and its consequences are likely generalizable and call for an active role of the EAN in supporting the desired change process through active participation and education, including the implementation of clinician leadership training.<sup>9</sup> In conclusion, medicine - and our

growing discipline of neurology in particular - is at a crossroads where doctors and neurologists can and should choose to guide the direction of change and become the doctors they always wanted to be.

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## **Acknowledgments**

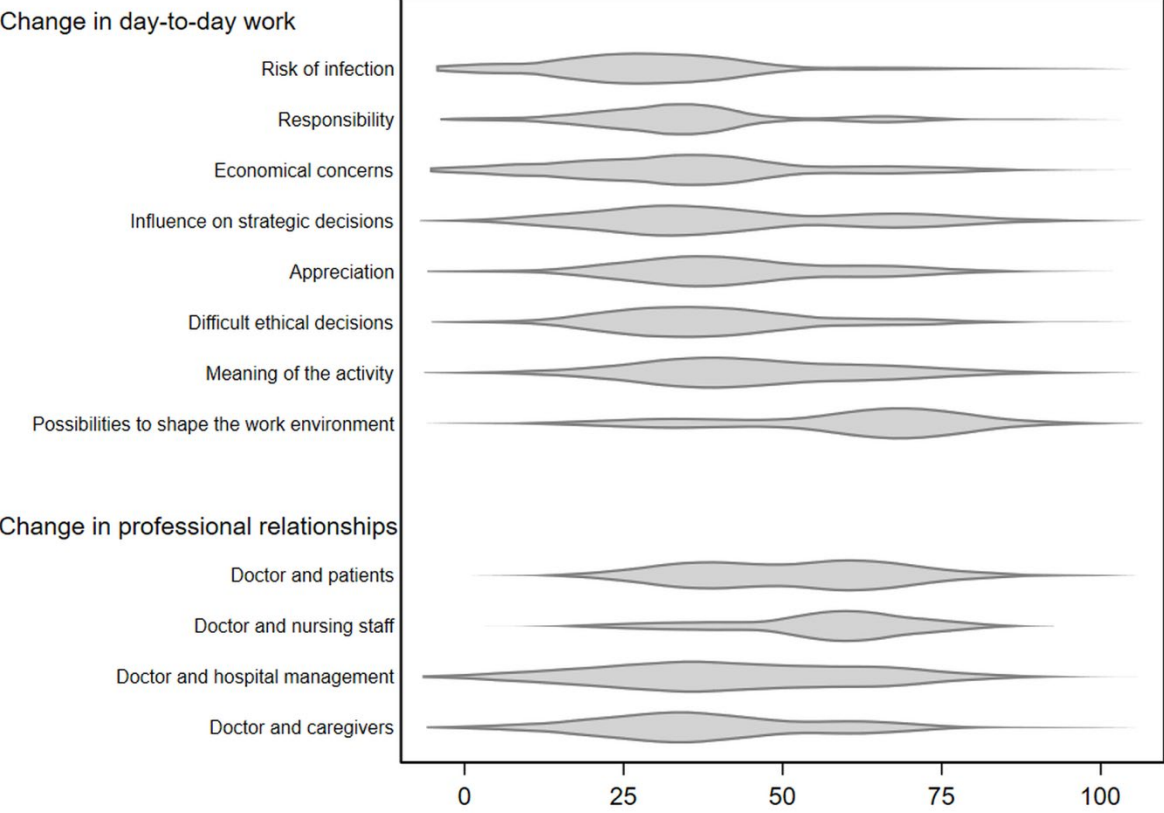
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Figure

A



B





## Figure legend

Changes in perception of the doctor's role through the pandemic. **A.** Violin plot depicting changes in day-to-day work and professional relationships in phase 1 (pre-pandemic) vs. phase 3 (4 months into the pandemic) of *RE imagine MEDICINE*. **B.** Word cloud generated from all 349 responses (5947 words) to the question „Imagine you could change your work environment. What would you do first tomorrow?“

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