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EDITORIAL

Hybrid working in radiology: the promise and the perils

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While the COVID-19 pandemic is not "over," it does seem likely that 2023 will herald a return to a more normal way of life for many radiology departments. The pandemic resulted in the biggest change to our work practices since the widespread introduction of PACS, some of it for the good and some less so. Given the nature of our digital work environment, diagnostic radiology is particularly well suited to remote working. It does remain, however, a clinical speciality, and so the return to on-site working does need to occur, albeit perhaps in a modified fashion. It is therefore an excellent time to now take the opportunity to evaluate the pandemic-related changes to our speciality and decide what to retain moving forward as we re-evaluate and refresh our work practices.

People overwhelmingly prefer having the option of working from home for at least part of the week. A recent survey of 10,737 knowledge workers showed that flexibility is the expectation, with 78% of respondents stating they want location flexibility while 98% want schedule flexibility [1]. Many people have indicated that they would even be willing to take a pay cut in order to do so [2]. The attractiveness of remote work arrangements is obvious — more time spent with family, less time wasted commuting and so on. It follows that, given the well-documented shortage of radiologists [3], job benefits such as the ability to work in a hybrid or fully remote model will become a factor in recruiting radiologists. Early concerns about potential productivity in remote workers have been largely allayed, and in fact, some research suggest that remote workers are *more* productive [4]. It is much easier to attend multidisciplinary rounds, especially if they are in another hospital site and we can now attend and participate remotely. Once we became accustomed to the role of online teaching, the benefits of this also became apparent, and colleagues or visiting professors from other hospitals around the world can now very easily give lectures or teaching rounds. Finally, if geographic limitations are no longer a concern, we now have access to hiring from a much broader pool of talent, and a radiologist from across the country might now be interested in taking a job with your group.

Given all these benefits, one might ask, why not wholeheartedly embrace this model and work from home as much as possible? There are several drawbacks to first consider. Firstly, despite multiple studies showing increased productivity from employees working remotely, the same studies and surveys have showed that workers are increasingly performing work-related tasks outside of normal working hours [5]. As a profession, medicine is notorious for work-life imbalance and having a fully remote work model runs the risk of blurring the lines between work and life even further. Having a workstation at home makes it much easier for your clinician colleague to call you for a "quick consult" when you're off, or for you to give into the temptation to go upstairs and prepare some cases for that week's rounds on a Sunday evening. When work is no longer strictly confined to the workplace, the boundaries are much less clear, usually to the detriment of our home life. This is especially important in an era of increasing radiologist burnout [6].

Secondly, we must remember that radiology is and should always remain a clinical specialty. We are not IT workers, and by painting ourselves as such, we put ourselves at considerable risk. The opportunity with which we could hire a new colleague from another part of the country is also a potential threat, as this means that our hospital administrators could also leverage this geographic flexibility to replace us with a remote-reporting group. After all, if all our physician colleagues see of us is our reports on a screen and occasionally our voices on a phone, what prevents a canny administrator replacing us with cheaper teleradiology alternative reading remotely? This is not even considering the collegiality and respect engendered by our technologists and radiographers seeing us in the hospital every day, knowing where they can find us if there is an issue. The same goes for our clinical colleagues. During the pandemic it was not uncommon to see clinicians in their sixties and seventies at the hospital every

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day, interacting with patients and with other physicians, while much younger radiologists were nowhere to be seen for weeks or months on end. It is true we were expected and instructed to work from home "where possible," and for many of us of course this is technically possible all the time. But if we treat ourselves like remote service providers we must not be surprised if others do the same. To engender a level of respect as a speciality, we must have "skin in the game," as the saying goes.

Thirdly, we have shown that the productivity of remote workers is actually increased rather than decreased. Indeed, radiology lends itself particularly well to measuring productivity, either in terms of scans reported or relative value units. However, it is also true that the in-house radiologist will always end up performing more duties than the remote worker. These range from "drive-by" questions from technologists and clinicians to the direct office phone calls from people who know you'll be there, and the welcome but time-consuming procedures which invariably end up on your plate. Our office door is (and always should be) open, but this brings extra work compared to our off-site colleagues, much of which is not captured in productivity statistics. Therefore, having part of a department fully or mostly remote and part coming to the office every day therefore runs the risk of creating a "two-tiered" system which will invariably breed a degree of resentment between the two groups.

Next, we must consider what having a fully remote team would mean in terms of communication and morale for the department. Most of us appreciate the value of our weekly case rounds, where we can have engaging discussions with friends and colleagues about diagnoses and other matters, both related to work and not. What is perhaps under-appreciated, however, is what this does for the *esprit de corps* of a department. Such meetings are a venue for collaboration and innovation, even though this is likely never explicitly stated in the agenda. This interactive environment is also very difficult to replicate remotely. The negative effects of remote work on such interaction and innovation are also borne out in the literature. One large study of over 60,000 knowledge workers showed that remote work caused collaboration networks to become much more heavily siloed, making it much more difficult for colleagues to collaborate and exchange information [7]. Another survey performed in 2020 showed that 39% of employees struggled to make a strong connection with colleagues, as these informal networks on which we rely on without really thinking about them falter in the remote age [8]. Even the use of asynchronous communication tools such as Slack or Teams in a department can only do so much to mitigate these effects. It is also very difficult to instill a sense of department culture on new employees remotely, and this too is widely acknowledged in the literature [9].

Finally, another factor to consider is the notion of so-called "proximity bias," whereby employees who are physically located in the office may experience more visibility, recognition and career progression versus those located off-site. This is especially concerning as there is increasing recognition on the role of mentorship in radiology [10], and the development of mentor-mentee relationships may be more challenging remotely. The same proximity effects probably also apply to radiology residents — recent surveys have documented significant concerns about less interaction with staff and residents, less case volume, and less procedural volume during remote work [11, 12]. We must also make sure that remote or hybrid work models do not exacerbate pre-existing inequity, or disproportionally affect certain groups, especially women [13].

Where does this leave us? There is likely no going back and hybrid work is here to stay for many departments. It is likely that many departments will continue to offer some degree of hybrid work, especially in order to remain attractive to future hires. However, we must remain cognisant of the downsides of remote work, both in terms of our own lives and our roles as visible clinical partners in patient care. As radiologists we do not need to be in the hospital every single day to do our jobs, but we must be there most days, engaging and interacting with technologists, patients, and clinical colleagues. To do otherwise would be to fundamentally undermine our role as a speciality, as well as introduce a potential existential outsourcing threat to our continued existence as on-site clinical partners in patient care.

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