

"Active Consulting" During and Post COVID-19: Opportunities for Clinicians to Move More

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Introduction

Prior to the COVID-19 pandemic, the majority of clinical work for most healthcare professionals involved face-to-face consultation with patients. Throughout the working day, in both inpatient and outpatient settings, clinicians had many opportunities to expend energy by breaking up their sedentary time with physical activity. In the hospital setting, working on wards and in emergency departments has always required physical movement among staff in order to provide effective care for patients. This has remained a necessity despite the COVID-19 pandemic. In many hospital settings, the energy expenditure of staff may even have increased due to the wearing of personal protective equipment (PPE)¹.

In the outpatient and community settings, however, the arrival of the COVID-19 pandemic has resulted in rapid changes to traditional consulting practices which may have detrimental effects on the levels of sedentary behaviour and physical activity among clinicians in these environments. Almost overnight, when the first wave of COVID-19 infections was reaching its peak, most clinicians in outpatient and community settings switched to remote consulting where possible, using telehealth methods such as telephone and video²⁻⁴. There are many advantages of telehealth, such as reduced transmission of communicable diseases, and the potential for better time-efficiency^{2,4}. There are also numerous disadvantages, such as reduced patient rapport, and less ability to pick up on non-verbal cues and incidental findings^{2,4}. The pros and cons of remote consulting could be debated extensively, and vary depending on the clinical and situational context. Regardless of the positive and negative consequences of this rapid shift towards remote consulting, it is likely that it is here to stay. Addressing all of the good and bad points of remote consulting is beyond the scope of this paper. Instead, this paper examines the effects of remote consulting on the sedentary behaviour and physical activity of healthcare professionals.

Sedentary Behaviour and Health

Sedentary behaviour is when someone is awake, in a sitting, lying or reclining posture⁵. In a healthcare context, this would include when a clinician is sitting behind a desk while consulting with a patient via telephone or webcam. Sedentary behaviour is viewed as a separate entity from physical inactivity⁵.

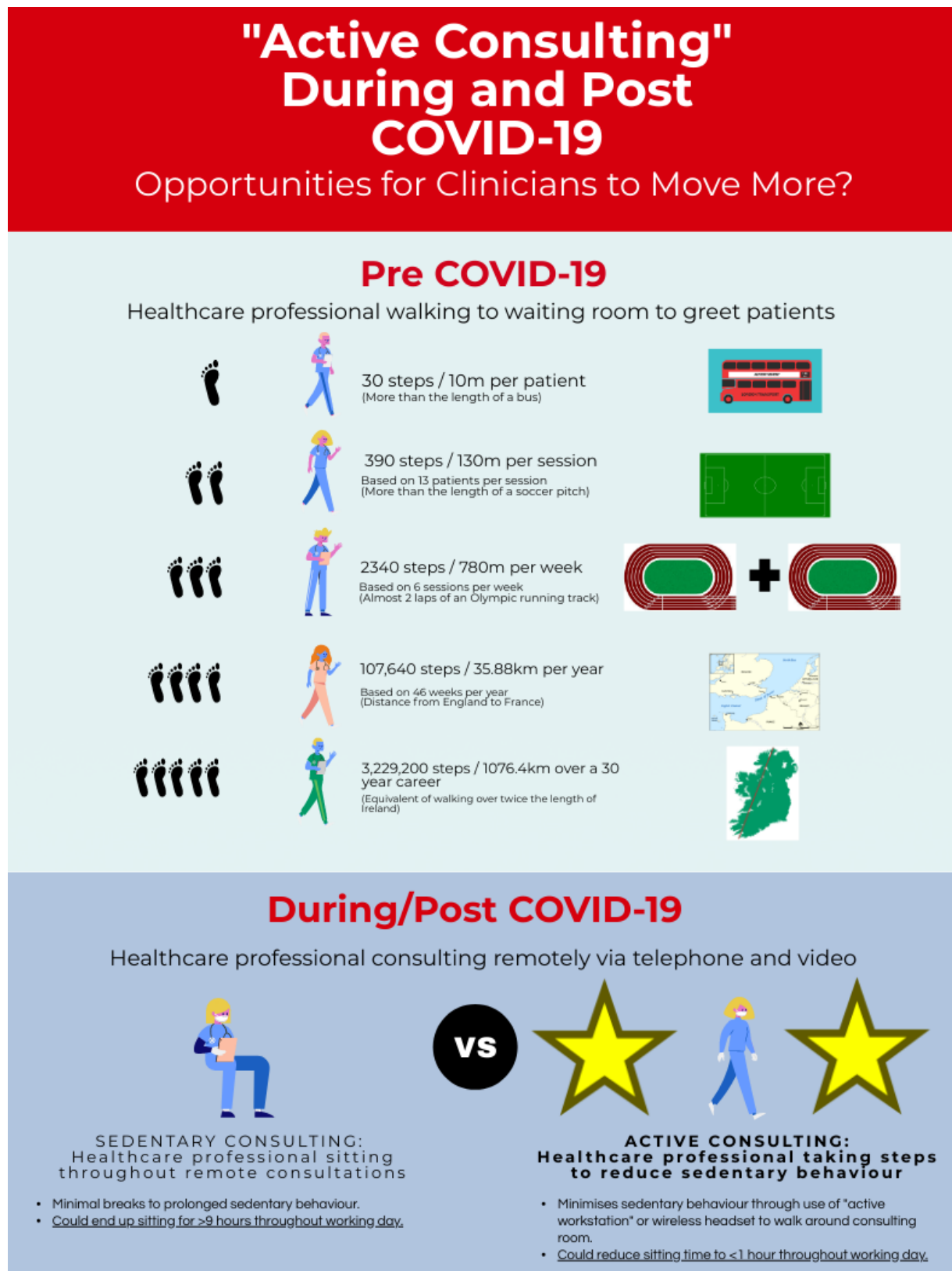
Physical inactivity is instead defined as insufficient levels of physical activity, that is, not achieving the current physical activity recommendations⁵. The effect of sedentary behaviour on health was first examined by the epidemiologist Jeremy Morris, in mid twentieth century London. Morris and his colleagues demonstrated that bus drivers had higher rates of mortality due to coronary heart disease than bus conductors⁶. It was postulated that the main variable to account for the difference in cardiovascular mortality between the two groups was their levels of sedentary behaviour throughout the working day, as bus conductors were much more physically active than their more sedentary, bus-driving colleagues⁶. There has been an increasing volume of evidence to demonstrate the negative health effects of sedentary behaviour ever since. Sedentary behaviour is associated with increased all-cause mortality, even when allowing for confounding variables⁷⁻¹⁰. These findings demonstrate a dose-response relationship, whereby increasing sedentary time corresponds with increasing mortality rate⁷⁻¹⁰. The increased mortality rate among more sedentary individuals is felt to be due to the association between sedentary behaviour and many adverse health outcomes, such as cardiovascular disease, obesity, type 2 diabetes, dementia, mental health issues, and breast, colorectal, endometrial and ovarian cancer⁷⁻¹⁰. In light of these findings, the National Physical Activity Plan for Ireland aims to promote an active way of life with less time spent being sedentary¹¹. It is important to note that non-exercise activity thermogenesis (NEAT), i.e. movement and posture changes during activities of daily living, overall accounts for greater energy expenditure than deliberate exercise in the vast majority of the population¹². Although it is debatable the extent to which levels of sedentary behaviour can be attenuated by physical activity, sedentary behaviour is an independent risk factor for increased mortality⁷⁻¹¹. This means that even if an individual achieves the recommended levels of physical activity, they will still have a lower risk of mortality if they also take steps to minimise their levels of sedentary behaviour. Given that many clinicians spend the majority of their waking lives in work, it is therefore crucial to consider levels of sedentary behaviour and physical activity in the workplace.

Sedentary Behaviour and Telehealth

In outpatient and community settings, with increased remote consulting and reduced face-to-face consulting, previous opportunities to break up sedentary time with movement (such as examining patients and walking to the waiting room) are now less frequent than in the pre COVID-19 era. Instead, clinicians are spending more time talking on the phone or using the computer screen, traditionally performed while sitting down. If we are not careful, changes during and after the COVID-19 pandemic mean that healthcare will become an increasingly sedentary occupation for many staff. As detailed above, this could have detrimental effects on the personal health of a significant proportion of healthcare professionals. One example is in the General Practice medical setting, as detailed in figure 1. Prior to the COVID-19 pandemic, a General Practitioner (GP) who walked to the waiting room to greet patients was able to break up their sedentary time every 10 to 15 minutes. A GP seeing 13 patients per session, working 6 clinical sessions per week, walking 30 steps to the waiting room per patient, would therefore have walked 390 steps per session. Over time, this would amount to 2,340 steps per week and 107,640 steps per year (based on working 46 weeks/year). Over a 30-year career, this would amount to 3,229,200 steps, the equivalent of walking over twice the length of Ireland. Prior to the COVID-19 pandemic, even if not all GPs were walking to the waiting room to greet patients, they still had to get out of their seat to open the door for patients, examine patients and wash their hands. During and post COVID-19, with the vast majority of patient interactions taking place remotely, GPs may now have much less physical activity, and much more sedentary time throughout the working day, leading to a consequential higher risk of the associated negative health outcomes. The increased risk of weight gain through reduced non-exercise activity thermogenesis is especially relevant given the increased morbidity and mortality among obese individuals affected by COVID-19^{13,14}.

It is important to ensure that staff in healthcare settings do not end up replicating the findings observed by Jeremy Morris in post-World War Two London⁵, with those working in outpatient settings resembling the sedentary bus drivers and those in inpatient settings resembling the physically active conductors.

Figure 1. "Active Consulting" During and Post COVID-19



“Active Consulting”

Instead of remote consulting leading to increased sedentary behaviour among many clinicians, it should instead be seen as an opportunity for clinicians to reduce their sedentary behaviour by engaging in “active consulting” (fig. 1). In the past, there were fears that the use of standing desks by clinicians would be detrimental to patient interaction, due to the clinician looking down at the patient. With telehealth, this perceived power imbalance is no longer an issue, as the patient is not in the same room as the clinician. Telephone and video consultations can therefore be held while standing up, while the availability of wireless headsets opens up the option of walking around the consulting room or even, for the early adopters, using a treadmill desk while talking with the patient. If remote consulting results in greater time-efficiency, clinicians may have more opportunities to exercise, such as during lunchbreaks or by taking “exercise snacks,” short physical activity breaks throughout the working day.

Healthcare professionals working in outpatient and community settings have significant levels of patient contact and opportunities for health promotion. Clinicians who are more physically active are more likely to recommend physical activity to their patients, and patients are also more likely to make healthy lifestyle changes if they believe their clinician follows the health advice themselves¹⁵. It could therefore be argued that reducing sedentary behaviour and increasing physical activity among clinicians could lead to health benefits for both the clinicians themselves, at an individual level, and their patients, at a population level.

To reduce the burden of overweight and obesity requires cultural change away from a society that is becoming increasingly sedentary, towards one which is increasingly physically active. This culture change requires buy-in and engagement at all levels of society. By engaging in “active consulting,” healthcare workers can be at the forefront of these changes, leading by example in order to reduce their sedentary behaviour and improve both their own health and the health of their patients.

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Sedentary behaviour; Physical activity; Health promotion.

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None declared.

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