

1 **Title:** NHS Nightingale North West: A Medical Student on the Front Lines

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7 **About the author:** Lewis Holt is a 4th year medical student studying the 6-year MBCHB course at the University
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9 Field Hospital.

10
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- 28 1. The experience of a fourth-year medical student working on the COVID front line in one of the UK's
29 Nightingale Field Hospitals during the COVID-19 pandemic.
- 30 2. Medical students deployed to care roles during a pandemic.
- 31 3. Experiences of redeployment of medical professionals and students during the COVID-19 pandemic in
32 the UK.

33
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36 *will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable*
37 *form. Please note that during the production process errors may be discovered which could affect the content,*
38 *and all legal disclaimers that apply to the journal pertain.*

1 THE EXPERIENCE.

2
3 *"I never lose an opportunity of urging a practical beginning however small for it is wonderful how often in such*
4 *matters the mustard seed germinates and roots itself"* – Florence Nightingale; ¹ fitting words for my strange
5 current circumstances. I have been working on the frontline against COVID-19 at a National Health Service
6 (NHS) COVID-19 field hospital, in the North West of the United Kingdom (UK), in the midst of a pandemic that
7 has shaken the globe. Deployed as a healthcare assistant, I found myself learning more along the way than I
8 could have imagined.

9
10 Life as a British medical student changed dramatically within the space of a fortnight in light of the COVID-19
11 crisis. The World Health Organization (WHO) officially declared the pandemic on the 12th March 2020 and by
12 the 13th March universities, placements, and exams across the UK had been suspended indefinitely.² Within a
13 week, all students were granted automatic progression and I moved into fourth year. All teaching was moved
14 online and learning updates were provided via regular videoconferences. I found myself with an idle mind, lots
15 of free time, and no way to spend it under a national lockdown. I was keen to maintain some form of clinical
16 work, as a leave absence from patient contact is not ideal for any healthcare student, but was met with resistance
17 from my family; they feared for my health and reiterated chilling scenes seen on the news from high dependency
18 COVID-19 wards across the world, worrying that this was what I was heading to face. It also meant my moving
19 away, to live in a hotel with my colleagues, as not to risk bringing COVID-19 home and risking the health of my
20 family. It was a very fast paced situation in a scary time. Nonetheless I wanted to help in whatever way I could,
21 so much to my families upset, I applied to be a care support worker; a nursing assistant role designed to assist
22 with basic needs and personal care of patients. This desire to help in a time of crisis has been echoed by medical
23 students worldwide, seen with students in the US assisting those in need within their communities.³ Similarly,
24 in the UK, a database called National Health Supporters was devised to put medical students in contact with
25 health professionals to alleviate pressures of basic needs such as child care and shopping, whilst preoccupied
26 with the emerging pandemic.⁴

27
28 The UK's national response to COVID-19 included the seemingly overnight construction of a series of field
29 hospitals across the UK, called the Nightingale Hospitals.⁵ The Nightingale ward structure dates back to the
30 time of Florence Nightingale and is eponymously named as such, utilizing long stretches of patient beds all
31 within the line of sight.⁶ My application was accepted in days and within the week I underwent induction to
32 prepare me for what I might face. The peak of the infection still hadn't hit by this point in the UK and it was
33 unclear whether our NHS would be overwhelmed with cases, a daunting prospect. By this point, the hospital
34 was still under construction but within two weeks it was completed, set inside a repurposed train station turned
35 convention center; a marvel of design and ingenuity. Days after completion we were sent in, working beneath
36 towering arched ceilings, as seen in **Figure 1**, it was a surreal experience for myself and I couldn't help
37 wondering how patients were feeling, many of whom had delirium and confusion.

38
39 The days started at 6AM, after watering and feeding myself, I would enter the personal protective equipment
40 (PPE) donning area, put on my kit for the day, which consisted of scrubs, a visor, fluid repellent surgical mask,
41 apron and gloves before heading through to the ward also known as the 'red zone'. This area was a central

1 corridor with branching rows of nightingale wards for hundreds of COVID-19 positive patients, built to prepare
2 for the worst-case scenario the UK could face. A strict one-way system was enforced; donning and doffing PPE
3 areas separated, with a specific sequence of steps to remove contaminated PPE safely. Different classes of
4 PPE were used depending on the environment and the level of intervention being used for the patient. The PPE
5 shown in **Figure 2** was our usual day to day PPE and was considered 'Light'. 'Heavy' PPE is required for aerosol
6 generating procedures such as resuscitation and was available in the event of an emergency. Nightingale North
7 West was designed as a step-down facility for patients on the road to recovery from COVID-19, so these types
8 of interventions were rarely required.

9
10 COVID-19 is a harrowing and unpredictable infection. The crackly breathing of patients can be heard from the
11 end of the bed, many patients struggling with labored breathing and supported by high flow oxygen. Removal
12 of the masks for even minutes resulted in desaturation to critical levels; already frail patients were truly worn out
13 within hours as a consequence. Some patients sadly did not recover during their time with us, but for the first
14 time I experienced caring for end of life patients, and it was moving to support and be there with them in their
15 final days. There were, however, many positives, in the form of patient discharges, both staff and patients were
16 elated when a patient had finally swabbed negative for COVID-19 and were clapped off the wards, by lines of
17 healthcare workers, to be reunited with their families after weeks in hospital.

18
19 As the Nightingale now goes into standby and the COVID-19 curve is flattened, I feel proud to have been part
20 of this outstanding team. I am glad our services are no longer needed, as it means we are winning the fight
21 against this awful disease, but I am still nervous for the future. As I prepare to continue my medical studies, I
22 wait for the call that the hospital is to reactivate in response to a second wave; however, only time can tell if we
23 will be needed once again.

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16 Adv Nurs. 1996 Apr;23(4):820-6.
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1 **FIGURES AND TABLES.**

2

3 **Figure 1.** The towering ceilings reminding us of the hospital's past as a train station. The large clock remained
4 illuminated throughout the night shifts and was quite a sight.



5

1 **Figure 2.** Myself and Celia, one of the clinical nurse advisors in our full PPE kit.

