



Brief Report Foreign Healthcare Workers and COVID-19 in Europe: The Paradox of Unemployed Skilled Labour

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Abstract: This report provides an overview of the skilled migrant health workforce and their contribution to health systems in European countries, particularly in relation to the COVID-19 pandemic. Migrant workers at all skill levels have worked in key areas during the pandemic. Skilled migrant health workers, particularly medical practitioners and nurses, make up a significant portion of the frontline health workforce and are essential to keeping health systems in developed countries running. While skilled migrants often face fewer hard barriers (entry control policies: visa policy, work permit schemes, labour migration quotas), this workforce faces soft barriers (e.g., lack of recognition of foreign educational credentials and other restrictive or discriminatory measures) in accessing the host nation's labour market, as evidenced during the COVID-19 pandemic. This article explores this phenomenon, focusing on Italy's health sector and foreign health professionals' dynamics. The report concludes by proffering some practical policy recommendations to promote the inclusion of migrant health professionals in the health and social care systems in the context of the COVID-19 pandemic.

Keywords: migrants' health workforce; barriers; COVID-19

1. Introduction

High-skilled migration is a widely supported facet of the current global immigration system, and several skilled migration initiatives have been designed to attract skilled labour from the global south (Boucher and Cerna 2014; Weinar and von Koppenfels 2020). Consequently, in recent years, Europe has expanded its political focus on promoting and attracting high-skilled migrants to join the so-called global race for talent (Zorlu and Hartog 2008). It is a points-based system with emphasis on applicants' education and work experience, serving as a model for new policies designed to attract more highly skilled migrants (Schittenhelm and Schmidtke 2011). The attention has been on highly skilled migrants from outside the European Union (EU) to increase competitiveness by increasing the talent pool (Platonova and Urso 2012). Many factors have influenced the inclination for this migration system, including: (a) in economic terms, the belief that higher-wage workers are more likely to make a positive contribution to public finances (Dustmann and Frattini 2014); (b) the assumption that this group of migrants serve as engines of economic growth, innovation, entrepreneurship, and productivity (Bailey and Mulder 2017; Nathan 2014); (c) the assumption that they integrate easily and quickly into the host society (cf. Weinar and von Koppenfels 2020); and (d) from a policy perspective, public opinion suggests that the native population prefers the immigration of highly-skilled migrants over other migrant groups (Heath and Richards 2019; Naumann et al. 2018), thus becoming the quintessential and unproblematically sought-after migration system (Bielewska 2018). The recruitment of this group is primary over more traditional low-skilled labour immigration used to fill primarily short-term positions with workers who are not seen as attractive (Platonova and Urso 2012, p. 22).

Europe is facing several labour market challenges driven by interrelated factors including an ageing society, rapid technological changes, and increased demand for labour in certain sectors. Therefore, there is an increase in demand for certain categories of labour, especially medium- and high-skilled workers (EMN 2015, 2019). The labour force shortage



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Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). in Europe was laid bare by the COVID-19 pandemic, especially in the health sector. The COVID-19 pandemic has highlighted the importance of migrants at all skill levels—low-, medium-, and high-skilled migrant workers—in alleviating labour shortage problems and making significant contributions to the EU's economies in many vital sectors. In the health sector, migrant health professionals (e.g., physicians, nurses, family caregivers, health, and personal care workers) were engaged in the front lines of the epidemic in various health service departments (see, e.g., Fernández-Reino et al. 2020) and played an essential role in keeping the health systems operating in European countries.

Yet, while Europe makes access to the labour market easier for skilled labourers, there are still multiple barriers that prevent full labour market absorption and success. Highly skilled migrants face fewer hard barriers (entry control policies: visa policy, work permit schemes, and labour migration quotas) as the EU has eliminated these obstacles. Yet, skilled migrants face a wide range of soft barriers (e.g., lack of language skills, lack of recognition of foreign educational credentials, lack of country-specific knowledge and work experience, and uneasy access, particularly to certain sectors of the labour market) that effectively limit the ascension of the migrant worker into the labour market (see, e.g., Weinar and von Koppenfels 2020, p. 49).

Focusing on the experiences of skilled migrant health professionals (medical doctors and nurses), the methods used by receiving countries in recruiting health workers from abroad, and some of the barriers the skilled labour force encounters in accessing the labour market in host countries, particularly in light of the COVID-19 pandemic, this research explores the following questions: What are some of the policy measures adopted to recruit skilled migrant health workers in Europe, particularly during the pandemic? How can we best explain the obstacles faced by skilled migrant healthcare professionals in accessing the host countries' labour market? The last question is briefly explored focusing on Italy's health sector and skilled migrant health labour force recruitment policy measures, with attention to the effects of the ongoing pandemic.

This report is organised into five sections. After this introductory section, Section 2 focuses on the research methodology, while Section 3 describes international migration and the healthcare workforce. It then provides a summary of healthcare professionals' recruitment procedures from abroad during the COVID-19 pandemic in the EU. The paper then zeroes in on the migrant labour force in Italy's health sector and COVID-19 pandemic dynamics in Section 4. The final section concludes the report by reflecting on the research findings and offering practical policy recommendations to improve the inclusion of the skilled migrant health labour force into the health system.

2. Methodological Note

This report is an excerpt from a research project conducted between July 2020–June 2021. The data analysed came from a desk review of existing academic and non-academic research publications and datasets, including quantitative and qualitative statistics and administrative data at the national, regional, and supranational levels. This research focuses on third-country (non-EU) nationals and, where possible, refers to EU citizens who have moved for work as part of intra-EU mobility. The primary sources of datasets and quantitative statistics consulted were the Organisation for Economic Cooperation and Development (OECD), the European Union Labour Force Survey, and the International Labour Organisation. The broader study explores the policy instruments for selecting migrants, particularly high-skilled and medium-skilled migrants, for employment reasons in different EU countries. It then examines how different groups of migrants are integrated into the labour market and how they are accompanied by the process of their socio-economic integration. Additionally, the research investigates the methods used by receiving countries in recruiting health workers from abroad, particularly in light of the recent global emergency, which is the main focus of this report. Within the broader project, we have focused mainly on traditional migrant destinations (e.g., the UK and Germany), current receiving countries (e.g., the Netherlands), and new migrant destination countries

(e.g., Spain and Italy). The case studies were selected to ensure representativeness by region and migration context or history in Europe. The prerogatives of regulating labour entry continue to be held firmly by nation-states. Thus, there is a need to focus on these individual states, study the different labour migration selection systems used, examine integration measures, and highlight how the lessons learned from these cases can shape migration policies.

3. International Migration and the Healthcare Workforce

The COVID-19 pandemic has affected countries and the life worlds of all segments of the population worldwide, albeit to varying degrees (Bonizzoni and Dotsey 2021). The pandemic is still sweeping across the globe, though with less intensity, and wreaking havoc on countries, including through the loss of life (6,866,434 deaths and 759,408,703 million confirmed cases as of 7 March 2023),¹ disruption of the global production supply chains, curtailed mobility, and a deepening economic crisis. In Europe and other parts of the world, the pandemic has forced nation-states to close international borders, making cross-border mobility challenging as nation-states seek to restrict the spread of the virus. Additionally, to varying degrees, governments have adopted internal, drastic lockdown measures to contain the spread of the virus and the pandemic's onslaught. There was also an extraordinary race by scientists to develop vaccines who successfully delivered a safe and efficacious vaccine within nine months (Lewis et al. 2023). Moreover, during the pandemic, strategies were developed to keep people healthy, including strategies to boost people's immune systems and reduce stress (see, e.g., Roviello et al. 2022).

Here, the pandemic has devastated already fragile health facilities and professionals, particularly in the countries hardest hit by the pandemic. Indeed, workforce shortages have been an issue in global health systems over the years, and the COVID-19 pandemic has made the situation even more prominent (Poon et al. 2022). In diverse dimensions, the pandemic has brought to light structural issues and precarious conditions that characterise health systems around the world. In recent decades, the *state* has found itself increasingly unable to meet the requirements of the population while being the primary actor in the provision of public and welfare services. This is caused by a shift towards neo-liberal, market-driven economic policies, both in developed and developing countries. Decades of austerity measures, such as underfunding, contracting, or downsizing the provision of public services, have gone hand in hand with these policies (see, e.g., Navarro 2020). In the context of the health sector, the result of these policies is a weak and underdeveloped public health system characterised by inadequate and overburdened staff, corruption, poor labour conditions, dilapidated health facilities and equipment, and growing health insurance premiums.² Many health professionals have been driven to leave the field (both in developing and developed nations) or migrate to other nations, notably those with higher incomes, in search of better working and living conditions.

Over time, almost all Western nations have either trained fewer health professionals than they require or are unable to sustain their current health workforce. Consequently, health systems depend on the migrant workforce to sustain their health systems worldwide. The migrant health workforce is not a new phenomenon, as health systems in the UK, US, and Australia have heavily relied on the foreign workforce since the 1970s.³ The majority of Western nations covertly or explicitly recruit a large portion of their healthcare workforce from upper-middle-, middle-, or low-income countries.⁴

Europe's labour market has been plagued by a number of issues brought on by numerous interconnected factors, including an ageing society. The population of over-80s will increase from 6.1 per cent in 2020 to 9.4 per cent in 2040 and 12.5 per cent in 2060 in the EU27 area (here, the EU27 refers to 27 European Union Member States after the UK officially leaves the EU on the 31 January 2020).⁵ Countries such as Italy and Germany have experienced hyper-ageing demographics, with fertility rates falling below replacement levels. The ageing of the European population has led to a high demand for healthcare, hence the need to attract and retain healthcare professionals to meet the current

and projected increase in demand for geriatric care. Therefore, the EU faces a shortage of personnel in some health professions and areas of medical specialty. According to the data from the World Health Organisation (WHO), the overall lack of healthcare workers in the EU28—all EU countries including the UK—was estimated at 1.6 million in 2013, which would require an average annual growth rate of more than 2 per cent to offset. Because this growth rate has not been achieved, the projected shortage in the EU28 is expected to reach 4.1 million in 2030: 0.6 million physicians, 2.3 million nurses, and 1.2 million other health workers (Michel and Ecarnot 2020).

Europe is comprised of high-income countries that have long been the destinations of migrants from throughout the world, primarily those from low- and middle-income countries. These flows appear to be influenced by colonial ties and common languages. This general pattern holds true for healthcare workers as well (Dussault et al. 2009). This is somewhat evident in cases such as those in the UK and France regarding the recruitment of medical professionals. However, this is not necessarily the case because countries with short contact or no colonial or linguistic traces have become key destinations for migrant health professionals (see Table 2). Some countries, such as Cuba and the Philippines, have a long history of producing foreign-trained health professionals and sending them to other countries with which they have signed bilateral agreements.

An important initiative at the European level to promote the inflow of skilled foreign workers is the so-called EU Blue Card (Directive 2009/50/EC). This directive binds all EU member states except Denmark and Ireland. The motivation behind this initiative was the perceived limited success of national programmes aimed at attracting skilled foreign workers. The basic idea was that a broader set of European-wide labour market opportunities would instead give the continent an edge in the global competition for talent. Consequently, a key provision of the EU Blue Card is the increased access it provides to EU labour markets. The directive provides preferential access to employment for highly-skilled migrant workers, including engineers, natural scientists, mathematicians, IT specialists, physicians, and other highly-skilled healthcare professionals trained in countries outside of Europe. However, data from Eurostat shows that it has attracted fewer workers than expected. In 2019, only 36,806 blue cards were issued in all of the EU, with the majority of these issued in Germany (28,858).⁶ As a result, in May 2021, parliament and council negotiators agreed on a revision of the 2009 EU Blue Card Directive to make it easier for employers in the EU to hire people from elsewhere.⁷ Other approaches or policy measures put forward to attract skilled labour include the Intra-Corporate Transfer Directive (2014/66/EU) and Directive 2016/801/EU (for details, see Mavrodi 2015). In addition to supranational policies, EU member state governments have introduced direct national measures to actively recruit skilled migrants as they seek to take advantage of the global competition for talent, often through bilateral and multilateral agreements (see, e.g., Cebolla-Boado et al. 2016).

It is thus notable here that the recruitment of health workers from outside Europe is primarily done through bilateral and multilateral agreements, and several countries have adopted methods to recruit health workers from abroad. Germany, for example, has entered into several bilateral agreements to recruit healthcare workers. Two special recruitment projects have been developed due to the shortage of qualified nurses: one with Vietnam and one with Serbia, Bosnia and Herzegovina, the Philippines, and Tunisia. The project involves knowledge transfer, language training, and internships (OECD 2020, p. 49). In the UK, international recruitment of health workers occurs in three main ways:⁸

- 1. Active recruitment by employers or recruitment agencies. Typically, this entails marketing UK job openings in the target country, setting up interviews there, and processing applications for successful candidates;
- 2. Passive recruitment, by which foreign or European professionals individually follow career choices, often after moving willingly to the UK; and
- 3. Refugee entrants, for whom programmes are underway to make it easier to employ refugee physicians and nurses.

OECD data shows that many developed countries depend on migration for their healthcare workers, particularly doctors and nurses. Table 1 shows foreign-trained doctors and nurses (stock) working in some EU countries. Over the years, these numbers have increased in some countries, such as Belgium, France, Italy, and Germany. On the one hand, OECD data show that the number of medical and nursing graduates has increased significantly in most EU countries over the years; on the other hand, the shares of foreign-trained doctors and nurses also continue to increase. However, not all foreign-trained physicians are foreigners; this group also includes people born in the destination country who went to study abroad before returning. The same is true of foreign-trained nurses. The share of the migrant health workforce is heterogeneous across EU countries: the share of foreign-born doctors and nurses is insignificant in some countries, while it is significant in others.⁹

Table 2 shows the numbers of doctors and nurses trained abroad by country of origin in 2019*/2020 from selected countries. It is important to note that there is significant mobility in the medical and nursing health workforce within the EU. The data on healthcare workforce mobility is multifaceted, and the flow patterns for doctors and nurses are somewhat difficult to distinguish. The migration flow of physicians and nurses in Belgium shows that the country recruits most of its workforce from the EU. The same is true for France, except that it has recruited a high number of nurses from non-EU nations. In Italy, a significant number of migrant physicians come from within the EU, while a high number of nurses come from both within and outside the EU. Germany and the UK have recruited significant numbers of health professionals from the EU while also importing substantial numbers of professionals from outside the EU. Most immigrant physicians come from South Asia (India and Pakistan) in the UK, while countries in sub-Saharan Africa, North Africa, and the Middle East also make significant contributions. On the other hand, the UK has recruited a high percentage of immigrant nurses from the Philippines, India, and sub-Saharan African countries.

3.1. Recruiting Healthcare Professionals from abroad in Times of COVID-19

The COVID-19 pandemic critically affected EU and OECD countries' labour recruitment from abroad, particularly for temporary workers who held jobs in key sectors such as food, health, and IT. Most OECD countries have developed special arrangements to bring in essential workers, particularly seasonal workers and health professionals (OECD 2020). Foreign health workers are a key resource for EU countries, whose services have been relied on to keep these countries' health systems running even before COVID-19. The pandemic underscored the essential role of migrant health workers in health service delivery and health work mobility within the EU, with many countries implementing emergency policy measures to fill health workforce shortages in health systems.¹⁰ These include the measures described in the following paragraphs.

3.1.1. Facilitating Recognition of Foreign Qualifications

Several governments, such as those in the United Kingdom and Germany, waived local accreditation requirements to allow migrant and refugee physicians to practice medicine with their current foreign certifications. Additionally, some EU countries have expedited existing applications to recognize the foreign qualifications of health professionals (e.g., Belgium, Germany, Ireland, and Luxembourg) or eased procedures (e.g., reduced language testing in Germany, no in-person meetings in Lithuania, and fee waivers in Ireland). Italy has adopted a decree permitting the temporary recruitment of foreign-trained health professionals, although this decree's practical application is limited by bureaucratic obstacles. In some regions of Germany, foreign physicians were offered permission to work as assistants for one year, as is the case in Bavaria.

		For	eign-Trained Phys	icians—Stock (of Which Native	s)				Foreign-Train	ed Nurses—Stoc	k (of Which Nati	ves)	
Year	Belgium	Spain	France	Germany	Italy	UK	The Netherlands	Belgium	Spain	France	Germany	Italy	UK	The Netherlands
2000	1934	-	7795	9971(D)	1350 (945)	-	-	679	-	6937	-	1701 (268)	-	-
2001	2048	-	8767	10,806 (D)	1442 (994)	-	706	768	-	7682	-	2206 (281)	-	1495
2002	2126	-	9849	11,848 (D)	1540 (1027)	-	773	841	-	8598	-	3369 (300)	39,912	1722
2003	2200	-	10,739	12,804 (D)	1665 (1068)	-	832	921	-	9666	-	5627 (322)	53,134	1862
2004	2290	-	11,520	13,430 (D)	2148 (1103)	-	828	1021	-	10,561	-	8390 (351)	64,459	1974
2005	2441	-	11,824	13,746 (D)	2357 (1157)	-	908	1142	-	11,211	-	11,708 (375)	73,280	2075
2006	2636	-	12,261	14,703 (D)	2488 (1193)	-	941	1290	-	11,658	-	15,304 (403)	77,012	2149
2007	3042	-	13,450	15,456 (D)	2587 (1218)	-	993	1505	-	11,411	-	18,227 (443)	75,199	2156
2008	3490	-	14,364	16,741 (D)	2692 (1236)	44,050	1077	1767	-	11,921	-	20,143 (463)	71,204	2256
2009	3885	-	14,781	18,339 (D)	2848 (1282)	46,343	1186	2064	-	12,627	-	21,684 (467)	69,884	2301
2010	4380	-	15,903	20,029 (D)	2985 (1321)	46,276	1287	2419	-	13,395	-	22,774 (483)	70,750	2223
2011	5033	19,462	17,625 (535)	22,829 (D)	3088 (1339)	46,399	1352	2843	5247	14,495	-	23,621 (488)	72,586	1358
2012	5708	-	18,842 (553)	26,034 (D)	3175 (1357)	46,518	1134 (408)	3725	-	15,797	50,000	23,915 (479)	74,334	(B) 63(22)
2013	6184	-	20,082 (584)	28,901 (D)	3226 (1353)	48,980	1142 (409)	4629	-	16,754	54,000	24,074 (481)	77,090	68 (22)
2014	6732	-	21,569 (609)	31,857 (D)	3227 (1360)	49,160	1229 (443)	5411	-	17,682	59,000	23,953 (468)	82,060	153(47)
2015	6889	-	22,920 (624)	34,850 (D)	3250 (1354)	45,732	1288 (522)	6128	-	18,647	63,000	24,246 (509)	90,157	962 (261)
2016	7370	-	24,096 (648)	38,247 (D)	3262 (1369)	47,905	1336 (483)	6752	-	19,405	61,000	23,308 (493)	96,687	978 (249)
2017	7801	-	25,039 (686)	41,934 (D)	3250 (1387)	49,164	1694 (585)	7215	-	20,053	70,000	22,121 (449)	95,194	2439 (492)
2018	8062	-	25,675 (698)	44,931 (D)	3378 (1443)	51,115	2031 (686)	7889	-	20,757	83,000	21,561 (458)	97,222	2467 (524)
2019	8533	-	26,355 (739)	48,125 (D)	3594 (1562)	58,053 (789)	2333 (974)	8420	-	21,269	87,000	21,432 (455)	101, 510	2596 (785)
2020	8946	-	26,989 (796)	51,395 (D)	3810 (1734)	61,341	2380 (1021)	8990	-	21,849	93,000	22,610	111, 138	2681 (906)
2021	9608	-	-	-	4039 (1875)	66,211 (816)	-	9526	-	-	-	23,712	124, 036	-

Table 1. Health workforce: physicians and nurses with foreign training from 2000–2021 (stock) in some European countries.

Source: OECD¹¹. Note: (B) 'break' | (D) 'difference in methodology'.

ome Selected Countries	Doc	tors Trained Abro	oad—Stock	Foreign-Trained Nurses—Stock				
Countries	From the EU	Numbers	Third Countries/Non-EU Countries	Numbers	From the EU	Numbers	Third Countries/Non-EU Countries	Numbers
	France	1495	South Africa	70	France	2235	Tunisia	165
	The Netherlands	1435	Cuba	40	Romania	1791	India	143
Belgium	Romania	1411	Algeria	43	The Netherlands	880	Lebanon	121
	Italy	1050	Turkey	29	Portugal	767	Philippines	79
	Germany	468	Colombia	27	Italy	530	Democratic Republic of Congo	13
	Romania	5060	Algeria	3963	Belgium	12,005	Switzerland	182
	Belgium	1768	Syria	1004	Spain	1848	Andorra	23
France	Italy	1712	Morocco	916	Portugal	1380	Algeria	9
	Germany	737	Tunisia	960	Germany	634	Norway	7
	Spain	770	Madagascar	390	UK	582*	Iceland	1
	Austria	1391	Argentina	92	Romania	11,253	India	1475
	Romania	379	Egypt	90	Poland	2296	Peru	1183
Italy	Germany	307	Albania	46	Spain	379	Albania	1108
	Spain	197	Brazil	42	Germany	329	Serbia	381
	France	104	Republic of Moldova	34	Bulgaria	270	Tunisia	266
	Romania	4116	Russian Federation	2289	Poland	19,000	Russian Federation	8000*
	Greece	2498	Egypt	1514	-	-	-	-
Germany	Austria	2080	Iran	1088	-	-	-	-
	Poland	1776	Libya	808	-	-	-	-
	Bulgaria	1592	India	783	-	-	-	-
	Ireland	1838	India	17,737	Romania	7407	Philippines	30,653
	Greece	1449	Pakistan	6833	Portugal	4534	India	21,029
UK*	Romania	1274	Nigeria	3580	Spain	4473	Nigeria	3190
	Italy	1203	Egypt	3022	Italy	3575	South Africa	3007
	Germany	1196	Iraq	1341	Poland	2554	Zimbabwe	2383

 Table 2. Foreign-trained doctors and nurses by country of origin in 2019 */2020—Stock.

Source: OECD¹². Note: * refers to 2019 figures.

3.1.2. Flexible Visa Issuance, Accelerated Access to Employment Contracts, and the Reduction of Stringent Bureaucratic Requirements

A fast-track work permit has been introduced for foreign health workers already in a host country who are awaiting their registration certificate, such as in Germany. In France, unlicensed foreign health workers could work as support staff in non-medical occupations. A visa extension for some health workers has also been introduced: in some countries, such as the UK, doctors, nurses, and paramedics with visas that expire before 1 October 2020, are given an automatic one-year extension.

3.1.3. Facilitation of International Mobility and Recruitment of Healthcare Professionals

In April 2020, the European Commission called on member states to (among other things) promote smooth border crossings for healthcare workers and grant them unimpeded access to work in a healthcare facility in another member state.¹³

4. Italy's Health Sector Labour Shortage and Migrant Workforce Recruitment: An Overview

Like other EU member states, Italy is experiencing an ageing demographic. The Italian National Institute of Statistics (ISTAT) data shows that approximately 14 million people in Italy are aged 65 or older (ISTAT 2020). This is expected to put pressure on public health and long-term care spending in the coming years and decades. The country has faced labourforce shortages in some segments of the health sector and challenges in service provision due to underinvestment in public health services over the last decades, with the COVID-19 pandemic making the situation worse (see Ricci et al. 2020). Italy was the first European country to experience the COVID-19 pandemic onset and one of the hardest-hit countries in Europe during the first wave. The outbreak has exacerbated the already-existing social issues and inequalities in the public healthcare system. Hospitals were ill-equipped throughout the country and have suffered from a severe personnel shortage due to years of underinvestment and an ageing labour force. The second wave that hit the country in late November 2020 was harsher than the first, putting an additional strain on the already overstretched health system.¹⁴ Recent data shows that Italy had the third-highest death toll in Europe. Between 3 January 2020 and 7 March 2023, there were 25,603,510 confirmed cases of COVID-19, resulting in 188,322 fatalities.¹⁵ The extraordinary recruitment measures taken during the pandemic to meet people's needs led to the recruitment of highly skilled labour amid existing skilled health personnel who were ultimately underutilised. The problem is that highly skilled labourers have access to the country, but the mechanisms by which they are incorporated into the Italian workforce are problematic and restrict the ability of individuals to work within their sector. Consequently, the country suffers a shortage of health professionals and underemployment in the skilled sector, in addition to the underutilization of highly skilled workers. This comes because of inherent hostilities towards foreign labourers built into the bureaucracy, which we briefly explore below.

Italy has a high number of physicians compared to the EU average (4.0 compared to 3.6 per 1000 people in 2017). However, it is noteworthy that the number of physicians working in public hospitals and as general practitioners is declining. More than half of the physicians were over 55 years old in 2017, raising serious concerns about future shortages as most physicians are expected to retire in the next decade (OECD 2019). In 2011, the doctors' trade union, ANAAO-ASSOMED, forecast that Italy would have a shortage of 30,000 doctors by 2021. Unsurprisingly, these shortages were already apparent at the beginning of the pandemic: Anaesthetists and other essential experts have been in short supply due to a lack of funding allotted since as early as 2013 to train new generations of doctors to replace the ageing workforce (see Note 14). While the number of medical graduates from Italy's medical schools has increased over the years—for example, from 6700 to more than 8000 between 2010–2016—many new graduates have been unable to find internship and residency positions to complete their training programmes, as available positions for this purpose are often fewer than the number of graduating physicians. Additionally, early-

career physicians often receive low salaries with precarious employment contracts. These situations have prompted many graduates to emigrate for their specialty training and take advantage of better job opportunities offering competitive salaries, thereby putting a strain on the Italian healthcare system. Consequently, between 2010 and 2018, more than 8800 recent medical graduates or fully trained physicians left the country to find internships or regular positions elsewhere in Europe. However, this phenomenon was offset only to a limited extent by an inflow of 1100 foreign-trained physicians during the same period (OECD 2019, p. 17).

Except for Spain, Italy employs the lowest number of nurses of all Western European countries; the number is significantly lower than the EU average: 5.8 nurses per 1000 inhabitants versus 8.5 in the EU (OECD 2019). Healthcare facilities, both public and private, have been in a state of high demand for nurses for years. Given the significant shortage of professional nurses since the late 1990s, the recruitment of non-EU labour has been adopted as part of the response to labour shortages in this area of the healthcare sector. Thus, preferential entry channels for professional nurses were introduced in the early 2000s to facilitate their international recruitment, as evident in the Immigration Act of 1998 and the Immigration Reform Act of 2002. The admission of professional nurses remains contingent on a specific employer's application for a work permit. Temporary employment agencies have played a key (and often controversial) role in managing the recruitment process from abroad and the employment of foreign nurses. As expected, given the ban on public employment of non-EU workers that was in place until 2013, direct recruitment from public health facilities was not a viable option. Italy has recently adopted an explicit and active recruitment strategy for foreign professional nurses only. Meanwhile, there does not appear to be any active direct recruitment strategy for other categories of health workers; foreign doctors and other health professionals usually enter Italy for study or other reasons (family reunification or humanitarian) but not for work (Castagnone and Salis 2015).

Thus, there has been an increasingly visible presence of migrants in the health sector in recent decades. They are highly concentrated, particularly among nursing and lower-level health auxiliary professions such as Operatore Socio-Sanitario (Social-Healthcare Operator), although the number of employed foreign physicians remains low (Castagnone and Salis 2015). There were 444,814 registered nurses in Italy in 2018, 94 per cent of whom were Italian, while foreign-trained nurses accounted for 6 per cent: 3.7 per cent were trained in EU countries, whereas 2.3 per cent were trained outside the EU (Caruso et al. 2019). Women represent the majority of registered nurses in Italy. As shown in Table 2, nurses from the EU working in Italy come mainly from Romania, followed by Poland, Germany, Spain, and Bulgaria. On the other hand, non-EU nurses trained abroad come mainly from India, followed by Albania, Peru, Serbia, and the Philippines.

Gaining employment in the healthcare profession in Italy is a long and complex process for foreign medical and nursing professionals, particularly those with a non-EU medical degree, regardless of whether they work in a public or private healthcare facility or are self-employed. One of the main institutional barriers to the full integration of the foreign health workforce in the health sector in Italy has been the prohibition of public employment for non-EU citizens. However, this does not prevent foreign health workers from working in the sector; many enter, for example, through employment in private health facilities, self-employment, or public health facilities through external organisations such as cooperatives or labour agencies subcontracted by public health facilities (Castagnone and Salis 2015, pp. 14–15). This has somewhat changed since 2013, when the law on 6 August 2013, n. 97, for the fulfilment of obligations arising from Italy's participation in the European Union, according to the European Law 2013, in art. 7, provided the modalities of access to employment in public administration. This law established that certain categories of non-EU foreign citizens, particularly long-term residents or holders of refugee or subsidiary protection status, are allowed to participate in public competitions and access public employment. However, this rarely happens in practise, as was evident during the COVID-19 pandemic, as discussed below.

Foreign-trained healthcare workers, particularly those from outside the EU, have faced difficulties in having their professional qualifications and experience recognised. The Tuning Project and the Directives on the Recognition of Professional Qualifications have addressed the challenges of foreign-trained nurses in the EU. The Tuning project aims to offer a concrete approach to achieving the policy goals of the Bologna Process¹⁶ in the field of higher education in the EU, including nursing. Furthermore, EU directives (i.e., Directive 2005/36/EC, as amended in 2013 by Directive 2013/55/EC) were issued to reform the system by which professional qualifications are recognised in the EU and simplify the related administrative procedures. Within this framework, the comparability of EU curricula has been facilitated by common recommendations which directly address different national regulations (Caruso et al. 2019, p. 28). In this context, citizens of the EU, the EEA Area (Norway, Iceland, and Liechtenstein), and the Swiss Confederation who hold a professional title obtained in an EU country, the EEA Area (Norway, Iceland, and Liechtenstein), or the Swiss Confederation and intend to carry out their profession on a permanent basis in Italy can apply for the recognition of their title to exercise the right of establishment. For example, for the professions of certain categories of doctors and nurses, the EU legislation has established rules of harmonisation between the countries of the EU, the EEA area (Norway, Iceland, and Liechtenstein), and the Swiss Confederation, owing to which the recognition procedure consists of a documentary verification of the existence of the minimum training requirements provided by the law as a basis for recognition.¹⁷ However, in reality, bureaucratic procedures are complicated, even for EU citizens living in the EU. For example, it is much easier for an Italian citizen to practise his or her nursing profession in Switzerland than in Germany.

In general, the procedures for recognising qualifications obtained in another EU country are much simpler and less time-consuming than those for non-EU qualifications. EU healthcare professionals trained abroad must have their professional qualifications recognised by the Italian Ministry of Health, pass an exam to test their knowledge of the Italian language and Italian nursing legislation, and then register with the appropriate Order of Nursing Professions (OPI). Non-EU nurses trained abroad have faced several challenges, mainly because of differences in their nursing education. While the registration process is similar for non-EU nurses, the bureaucratic procedures for their training and the recognition of their qualifications can become a more protracted, expensive, and complex process. A commission of the Italian Ministry of Health handles this matter; it may, for instance, require the candidate to complete specific clinical experiences or pass compensatory exams in public health facilities or at an Italian university (Caruso et al. 2019; Castagnone and Salis 2015).

Among the measures to contain the onslaught of the COVID-19 pandemic, the government issued Decree-Law No. 18 of March 17, 2020, 'Cura Italia', which was later converted into Law No. 27/2020. Article 13 of the Cura Italia Decree, for example, introduced some temporary changes to hiring in the healthcare sector to support the reduced and overburdened healthcare workforce. Owing to art. 13 of the Cura Italia Decree, "recruitment to the public administration for the exercise of health professions and the qualification of the socio-healthcare operator are allowed [...] to all citizens of countries not belonging to the EU, holders of a residence permit that allows them to work, without prejudice to any other limitation of law."¹⁸ The decree, in theory, briefly opened public jobs to all foreign-born medical personnel with a work permit. This employment opportunity was temporary and precarious, as the recruited candidates were given no guarantees of permanent placement in the public sector after their service. Here, the bureaucratic process of recognising qualifications has been temporarily suspended for healthcare workers, owing to the Cura Italia Decree. Despite this, hospital administrations, health authorities, and regions (often autonomous in their operations across the country) continue to post jobs which, as far as doctors are concerned, require "Italian or EU citizenship", and all other healthcare personnel (nurses, OSS, ASA, etc.) are to provide for the requirements of Art. 38 of the Testo Unico for public employment, thus excluding non-EU citizens who do not have long-term permits.¹⁹ Thus, migrant health professionals in the initial stage of their settlement in the

country were utterly excluded from participating in these calls. According to data from the Association of Foreign Doctors in Italy (AMSI), approximately 77,500 foreign-born health professionals are working in Italy, including 22,000 doctors and 38,000 nurses and other health workers. Nevertheless, only 10 per cent have managed to get a job in the public health sector. As indicated earlier, most are self-employed or employed in the private or public sectors through external agencies, frequently in precarious conditions.

Notably, the government's approach to recruiting workers during the pandemic has created a paradox of unused and unemployed health professionals, particularly in a time of pandemic and health workforce shortage. The Italian government failed to engage the services of this talent pool of foreign professionals, some of whom had received training in the country or financial support from the *state*, and instead recruited (inexperienced) new graduates, students who had not yet finished their medical training, and retired health personnel to stock up the exhausted and limited workforce that had been stretched thin. In particular, it was somewhat confounding and disheartening when health professionals from other countries, including Russia, China, Cuba, Albania, and Poland, were flown in to help as coronavirus victims flooded hospitals in Italy while a group of foreign doctors already present in the country were overlooked. Due to red tape and implicit or overtly discriminatory hiring procedures, foreign professionals in the host nation were professionally qualified but could not work in the public health sector. This occurred in light of the devastating COVID-19 outbreak and the dearth of the health workforce.

5. Concluding Reflections and Policy Recommendations

Europe has faced a heightened demand for labour in certain areas of the economy, especially for medium- and high-skilled workers. Most traditional European host countries have decades-long histories of recruiting unskilled and manual labourers from abroad without selective labour policies (Facchini and Lodigiani 2014). Therefore, in the EU, the perceived risk of losing the best talents to classic immigration countries (e.g., Australia, Canada, New Zealand, and the US) has opened the door for a significant increase in policies to attract skilled labour at both the national and European levels. Specifically, in 2008, more than half of the 27 member states had some sort of clearly developed policy related to highly skilled migrants (Weinar and von Koppenfels 2020). With the onset and subsequent intensification of global competition for high-skilled migrants, most European states and companies have stayed engaged in the scramble for the best talents (Cerna and Czaika 2016). The skilled labour shortage is more evident in certain parts of the EU economies, including the healthcare sector, than in others. In many European countries, there was a severe lack of skilled healthcare personnel prior to the COVID-19 pandemic. The migration of health workers is linked to the current global shortage of health professionals, which the pandemic has made more apparent.²⁰ The fight against COVID-19 highlights the importance of migrant workers in alleviating labour shortage problems and developing EU economies in many vital sectors. Most countries that were hit hard tried to mobilise extra staff to cope with the surge in demand for care as the pandemic peaked. We saw migrant health professionals of all levels (e.g., physicians, nurses, family caregivers, health workers, and personal care workers) engaged in various health service sectors on the front lines. The pandemic has reaffirmed the essential role of the skilled migrant health workforce in the EU economies. Although skilled professionals from extra-EU can somewhat easily access the labour market in their new host nations, the report reiterates recent observations showing that some of these migrants face several challenges in their quest to access some sectors of the host's labour market, particularly immediately upon their arrival due to discriminatory and bureaucratic policies, which were evident even during the pandemic, particularly in the Italian case illustrated above. These barriers prevent many of them from fully accessing the labour market, making significant contributions to the economy, and successfully settling in the host society. We thus propose the following policy recommendations to address the governance of health labour force migration, particularly in light of the pandemic crisis.

Structural transformations: The gravity of systemic situations in the health system requires a holistic, step-by-step structural transformation of the entire architecture of the sector. The current rapid approach to addressing skills shortages in some European countries through labour importation during the COVID-19 crisis is commendable. However, we cannot reduce the global health system crisis to the importation of labour, as this cannot be considered a long-term, equitable, effective, and sustainable solution. First, there is a need for investment in the health sector because placing migrant health workers in dysfunctional national health systems that cannot invest in their health systems and attract and retain their internal staff will not solve the health workforce shortage. Second, this phenomenon deprives countries of origin, which are often characterised by weak health systems, of essential, high-quality health workers when faced with a major epidemic or common diseases. Therefore, in this context, it is vital to work within the framework of the global code of conduct for international health recruitment established by the WHO. As such, the principles of global health and equity in health for all must be at the forefront of global health workforce migration policy development.

Facilitating the recognition of qualifications and competencies: Foreign health workers cannot quickly obtain recognition for their foreign educational credentials and previous experience in destination countries. These barriers effectively limit the rights of migrant workers, thus preventing them from gaining full access to the labour market, social rights, and decent work. Many migrants living in Europe are unable to practise their profession in the health sector due to problems with the recognition of their qualifications. For health professionals to contribute effectively to health systems, it is necessary to make operational the rapid approach to recognising qualifications and the bureaucratic flexibility adopted during the pandemic in EU countries. This does not suggest the need to sacrifice quality for quantity—far from it. Nevertheless, efforts must be made to ensure that all foreign health professionals whose qualifications and experience are somewhat on par with the host nations' training process are promptly recognised. A lack of skill recognition and qualifications often leads to significant mismatches and inefficiencies between skill levels and health systems' needs.

Stable job placement and high remuneration: Appropriate authorities must address major problems with insecure, uncertain, and unpredictable work contracts. Additionally, health professionals are poorly remunerated—demanding work deserves adequate pay. Pathways to stable employment in the public healthcare system must be made available, particularly to skilled health professionals who were hired for temporary positions during the pandemic. The health workforce's contracts are temporary and precarious, impairing their capacity to set future goals, contributing significantly to the delivery of quality health services, and reducing their prospects of settling permanently in the host nation. Therefore, it is imperative to go beyond the stopgap approach adopted during the COVID-19 pandemic and provide efficacious long-term solutions to the skilled health personnel shortage problem.

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Conflicts of Interest: The authors declare no conflict of interest.

Notes

- ¹ See https://covid19.who.int, accessed on 15 March 2023.
- ² See, e.g., https://www.epsu.org/article/europe-s-public-health-systems-death-thousand-cuts; https://europeangreens.eu/ news/impact-austerity-our-health, accessed on 15 September 2022.
- ³ See http://gesundheit-soziales.verdi.de/++file++58c1371324ac060320d3390b/download/dpgg_paper_brain-drain_ENG_3.pdf, accessed on 18 September 2022.
- ⁴ See https://www.oecd.org/coronavirus/policy-responses/contribution-of-migrant-doctors-and-nurses-to-tackling-covid-19 -crisis-in-oecd-countries-2f7bace2/#boxsection-d1e1936, accessed on 18 November 2022.
- ⁵ See https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Populationstructure_and_ageing, accessed on 15 August 2022.
- ⁶ See http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr_resbc1, accessed on 16 August 2022.
- ⁷ See https://www.europarl.europa.eu/news/en/press-room/20210518IPR04202/agreement-on-an-improved-eu-admissionsystem-for-highly-qualified-workers, accessed on 12 November 2022.
- ⁸ See https://app.croneri.co.uk/topics/international-recruitment-nhs/indepth, accessed on 19 August 2022.
- ⁹ While there has only been recognition of medical qualifications in all EU/European Free Trade Association (EFTA) countries since 2005, one of the critical obstacles to the mobility of migrant health workers in general and physicians, in particular, is the lack of recognition of qualifications.
- ¹⁰ See https://www.oecd.org/coronavirus/policy-responses/contribution-of-migrant-doctors-and-nurses-to-tackling-covid-19 -crisis-in-oecd-countries-2f7bace2/#boxsection-d1e1936, accessed on 7 September 2022.
- ¹¹ For further details on this dataset, see https://stats.oecd.org/index.aspx?queryid=68339#, accessed on 17 November 2022.
- ¹² For further details on the OECD datasets, see https://stats.oecd.org/Index.aspx?QueryId=68336#, accessed on 16 March 2023.
- ¹³ See https://ec.europa.eu/info/sites/info/files/guidelines_on_eu_emergency_assistance_in_cross-bordercooperationin_heathcare_related_to_the_covid-19_crisis.pdf, accessed on 21 July 2022.
- ¹⁴ See https://www.dw.com/en/coronavirus-short-on-doctors-italy-looks-to-migrants/a-55789791, accessed on 15 January 2023.
- ¹⁵ See https://covid19.who.int/region/euro/country/it, accessed on 16 March 2023.
- ¹⁶ The *Bologna Process* was constructed in 1999 to bring more coherence, comparable and transferable higher education systems across Europe. It led to the creation of the European Higher Education Area to facilitate student and staff mobility, to make higher education more inclusive and accessible, and to make higher education in Europe more attractive and competitive worldwide.
- ¹⁷ See http://www.salute.gov.it/portale/temi/p2_6.jsp?lingua=italiano&id=2602&area=riconoscimento%20titoli&menu=vuoto, accessed on 22 November 2022.
- ¹⁸ See https://www.gazzettaufficiale.it/eli/id/2013/08/20/13G00138/sg, accessed on 22 November 2022.
- ¹⁹ See https://www.asgi.it/cittadinanza-apolidia/esclusi-medici-stranieri-concorso/#easy-footnote-bottom-2-42095, accessed on 12 July 2022.
- 20 See https://www.iom.int/sites/g/files/tmzbdl486/files/documents/covid-19_analytical_snapshot_15_-_migrants_on_the_ frontline_0.pdf, accessed on 12 January 2023.

References

- Bailey, Ajay, and H. Clara Mulder. 2017. Highly skilled migration between the global North and South: Gender, life courses and institutions. *Journal of Ethnic and Migration Studies* 43: 2689–2703. [CrossRef]
- Bielewska, Agnieszka. 2018. Game of labels: Identification of highly skilled migrants. *Identities* 28: 615–33. [CrossRef] Boucher, Anna, and Lucie Cerna. 2014. Current Policy Trends in Skilled Immigration Policy. *International Migration* 52: 21–25. [CrossRef]
- Bonizzoni, Paola, and Senyo Dotsey. 2021. Migration and Legal Precarity in the Time of Pandemic: Qualitative Research on the Italian Case. *Dve domovini/Two Homelands* 54: 117–30. [CrossRef]
- Caruso, Rosario, Gennaro Rocco, Franklin A. Shaffer, and Alessandro Stievano. 2019. Current Data of Foreign-Educated Nurses in Italy and the Recognition of Their Professional Qualifications. *Nursing Administration Quarterly* 43: 26–31. [CrossRef] [PubMed]
- Castagnone, Eleonora, and Ester Salis. 2015. Migrant Workers in the Italian Healthcare Sector. Background Report. Torino: FIERI.
- Cebolla-Boado, Héctor, Gemma Pinyol, Erica Consterdine, Tatiana Eremenko, Mélanie Jolivet-Guetta, and Yoan Molinero Gerbeau. 2016. Inventory of Programs Aimed at Attracting High-Skilled Migration to the EU. Working Paper. TEMPER EU Project. Available online: http://www.temperproject.eu/wp-content/uploads/2016/09/Working-Paper-4.pdf (accessed on 18 November 2022).
- Cerna, Lucie, and Mathias Czaika. 2016. European policies to attract talent: The crisis and highly skilled migration policy changes. In *High-Skill Migration and Recession*. Berlin and Heidelberg: Springer, pp. 22–43.
- Dussault, Gilles, Inês Fronteira, and Jorge Cabral. 2009. *Migration of Health Personnel in the WHO European Region*. Geneva: World Health Organization.
- Dustmann, Christian, and Tommaso Frattini. 2014. The Fiscal Effects of Immigration to the UK. *The Economic Journal* 124: F593–F643. [CrossRef]

- European Migration Network (EMN). 2015. *Determining Labour Shortages and the Need for Labour Migration from Third Countries in the EU*. Synthesis Report for the EMN Focused Study 2015, Directorate General for Migration and Home Affairs, European Commission. Brussels: European Commission.
- European Migration Network (EMN). 2019. Labour Market Integration of Third-Country Nationals in EU Member States. Synthesis Report for the EMN Study, February 2019, Directorate General for Migration and Home Affairs, European Commission. Brussels: European Commission, February 20.
- Facchini, Giovanni, and Elisabetta Lodigiani. 2014. Attracting skilled immigrants: An overview of recent policy developments in advanced countries. *National Institute Economic Review* 229: R3–R21. [CrossRef]
- Fernández-Reino, Mariña, Madeleine Sumption, and Carlos Vargas-Silva. 2020. From low-skilled to key workers: The implications of emergencies for immigration policy. *Oxford Review of Economic Policy* 36: S382–S396. [CrossRef]
- Heath, Anthony, and Lindsay Richards. 2019. How Do Europeans Differ in their Attitudes to Immigration?: Findings from the European Social Survey 2002/03–2016/17. OECD Social, Employment and Migration Working Papers, No. 222. Paris: OECD Publishing. [CrossRef]
- ISTAT. 2020. Italian National Institute of Statistics (ISTAT). Available online: http://dati.istat.it/Index.aspx (accessed on 15 September 2022). Lewis, M. Lavinia, Advait V. Badkar, David Cirelli, Rodney Combs, and Thomas F. Lerch. 2023. The Race to Develop the Pfizer-
- BioNTech COVID-19 Vaccine: From the Pharmaceutical Scientists' Perspective. *Journal of Pharmaceutical Sciences* 112: 640–47. [CrossRef] [PubMed]
- Mavrodi, Georgia. 2015. Common EU Policies on Authorised Immigration: Past, Present and Future. LSE Ideas Strategic Update 15.2. Available online: https://cadmus.eui.eu/bitstream/handle/1814/36115/Common-EU-Policies-on-Authorised-Immigration% 20%281%29.pdf?sequence=2&isAllowed=y (accessed on 15 January 2023).
- Michel, Jean-Pierre, and Fiona Ecarnot. 2020. The shortage of skilled workers in Europe: Its impact on geriatric medicine. *European Geriatric Medicine* 11: 345–47. [CrossRef] [PubMed]
- Nathan, Max. 2014. The Wider Economic Impacts of High-skilled Migrants: A Survey of the Literature for Receiving Countries. *IZA* Journal of Migration 3: 4. [CrossRef]
- Naumann, Elias, Stoetzer F. Lukas, and Giuseppe Pietrantuono. 2018. Attitudes towards highly skilled and low-skilled immigration in Europe: A survey experiment in 15 European countries. *European Journal of Political Research* 57: 1009–30. [CrossRef]
- Navarro, Vicente. 2020. The Consequences of Neoliberalism in the Current Pandemic. *International Journal of Health Services* 50: 271–75. [CrossRef] [PubMed]
- OECD. 2020. International Migration Outlook 2020. Paris: OECD Publishing. [CrossRef]
- OECD/European Observatory on Health Systems and Policies. 2019. *Italy: Country Health Profile 2019, State of Health in the EU*. Paris: OECD Publishing. Brussels: European Observatory on Health Systems and Policies. [CrossRef]
- Platonova, Anna, and Giuliana Urso, eds. 2012. Labour Market Inclusion of the Less Skilled Migrants in the European Union. Brussels: IOM. Poon, Yuan-Sheng Ryan, Yongxing Patrick Lin, Peter Griffiths, Keng Kwang Yong, Betsy Seah, and Sok Ying Liaw. 2022. A global overview of healthcare workers' turnover intention amid COVID-19 pandemic: A systematic review with future directions.
- Human Resources for Health 20: 70. [CrossRef] [PubMed]
- Ricci, Giovanna, Graziano Pallotta, Ascanio Sirignano, Francesco Amenta, and Giulio Nittari. 2020. Consequences of COVID-19 Outbreak in Italy: Medical Responsibilities and Governmental Measures. *Front. Public Health* 8: 588852. [CrossRef] [PubMed]
- Roviello, Valentina, Melinda Gilhen-Baker, Caterina Vicidomini, and Giovanni N. Roviello. 2022. Forest-bathing and physical activity as weapons against COVID-19: A review. *Environmental Chemistry Letters* 20: 131–40. [CrossRef] [PubMed]
- Schittenhelm, Karin, and Oliver Schmidtke. 2011. Integrating Highly Skilled Migrants into the Economy. International Journal 66: 127–43. [CrossRef]
- Weinar, Agnieszka, and Amanda Klekowski von Koppenfels, eds. 2020. *Highly-Skilled Migration: Between Settlement and Mobility*. IMISCOE Research Series; London: Spinger Nature.
- Zorlu, Aslan, and Joop Hartog. 2008. Employment Assimilation of Immigrants in the Netherlands. Tinbergen Discussion Paper TI 2008-057/3. Available online: https://ssrn.com/abstract=1143291 (accessed on 12 February 2023).

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