



LABOUR SHORTAGE in the healthcare industry

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BEHIND THE SCENES OF THE HEALTHCARE LABOUR SHORTAGE CRISIS

Introduction

LABOR SHORTAGE IN HEALTHCARE

The healthcare industry is facing a crisis as the COVID-19 pandemic worsened the growing labor shortage.

By 2030, experts predict a global shortfall of 15 million healthcare professionals.



Are we on the brink of a **healthcare worker shortage crisis**?

Are we witnessing the **Great Resignation** in the healthcare industry?

These are some of the questions that are keeping healthcare experts awake at night.

The shortage of healthcare professionals has become a pressing topic as the demand for workers continues to exceed the actual supply.

This is not a new phenomenon though, as a **shortage of 7 million healthcare professionals** was reported less than a decade ago (WHO, 2013).

However, the labour shortage was exacerbated by the COVID-19 pandemic and is becoming even more worrisome.

- ▶ Currently, **2.6 million medical doctors** and over **7 million nurses** are demanded globally (WHO, 2021). By 2030, the market is projected to face a staggering **demand for 80 million workers**, yet only 65 million are available to meet it (World Bank, 2016). The result is a shortage not limited to one region or continent but one that will impact nearly every country in the world.
- ▶ The good news is that successful ways to **address the healthcare shortage** already exist and can be applied globally. In this article, we will explore **potential solutions** that can be implemented to mitigate staff shortage in healthcare.
- ▶ As the world's population continues to age, the demand for healthcare services is skyrocketing. It is no secret that the **healthcare sector** is one of the biggest industries globally, with an estimated **value of \$5.8 trillion per year** (WHO, 2016). Over the last two decades, employment in the healthcare industry has nearly doubled, making it one of **the most dynamic fields to work in**.



BUT HOW DID WE END UP IN THIS SITUATION?

Major trends

GLOBAL CHANGES

- Demographic: higher demand for HC services due to *ageing population*
- Economic: usage of *digitalisation & automation* to augment workforce
- Workload: higher rates of *burnout & attrition* since pandemic



The major challenge of staffing shortages is **driven by multiple trends**. Demographic, economic, and workload shifts all trigger the labour market.

- ▶ First, an **aging population** causes and **increases demand** for healthcare services.
- ▶ Second, while constant **technological innovations, digitalisation, and automation** have the potential to alleviate pressure on healthcare workers, they can also paradoxically contribute to **increased work pressure**. Often, professionals are pressed to continually upgrade their skillsets to keep pace with new technologies.
- ▶ Third, especially since the outbreak of the pandemic, workers are facing long hours and **stressful working conditions**, leading to increased **rates of job changes** and health problems. As seen in the US, one in five professionals left their employer since 2020 (Definitive Healthcare, 2022).

To resolve the healthcare labour crisis, we conducted in-depth research to investigate the **status quo of OECD countries**. There are **three key dimensions** that have proven to be crucial, which we used as we studied the impacts on different regions.

A CLOSER LOOK AT THE THREE KEY DIMENSIONS

Three principal gaps

Labour shortages and patient dissatisfaction in the healthcare sector can be attributed to three significant gaps: the **quality**, **wage**, and **demand gap**. Exploring how these factors intertwine and shape healthcare market trends provides valuable insights into their impact on patient satisfaction levels across different countries.



OUR ASSESSMENT CRITERIA



QUALITY GAP

Revealing the differences in quality of healthcare services, demonstrated by patient satisfaction, healthcare professionals per 1.000 habitants, and their correlation.



WAGE GAP

Analysing the ratio of the average general wage compared to the average doctor and nurse wages to identify country-specific monetary gaps.



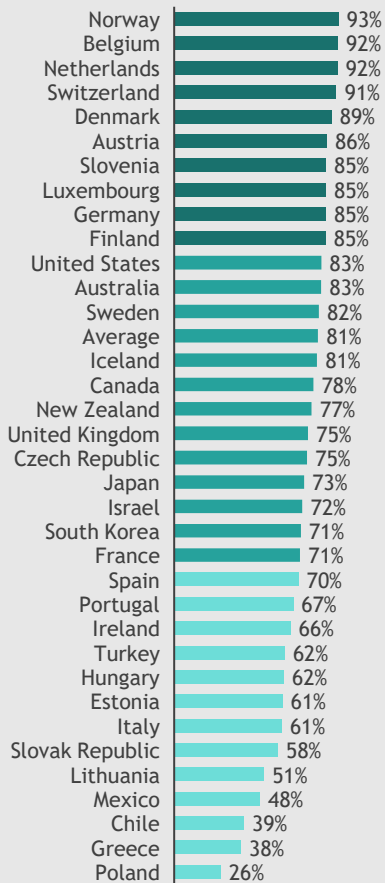
DEMAND GAP

Outlining the status-quo and current labour market challenges and analysing market projections by examining demand- and need-based shortages.

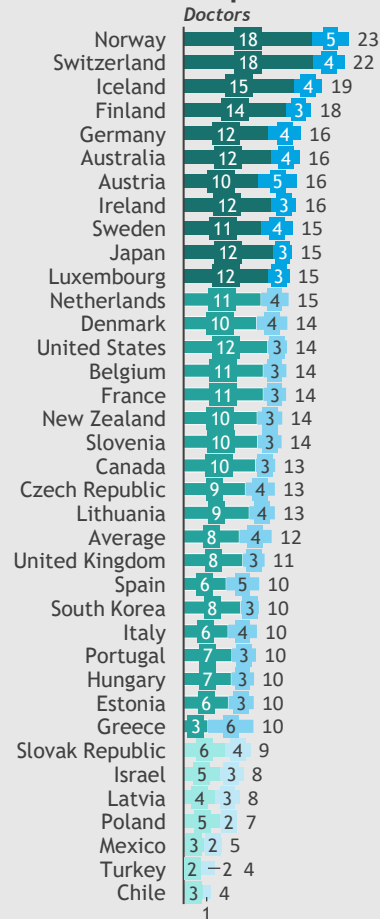
1. QUALITY GAP

Quality index

Patient satisfaction



HC workers per 1000



Most European countries in Western and Northern regions have high patient satisfaction and healthcare professional ratios.

The quality gap highlights the importance of the number of healthcare professionals (doctors and nurses) per capita and its direct correlation to patient satisfaction.

Patient satisfaction is a quantitative assessment (scale 0-100) of the extent to which patients are content with their healthcare experience, encompassing factors such as perceived quality of care, communication, and overall fulfillment of expectations.

As Figure 1 displays, there is a high positive correlation (0.7537) between the number of doctors and nurses per 1.000 citizens and patient satisfaction in the OECD countries. Countries with a higher number of healthcare professionals per capita tend to have higher patient satisfaction rates.

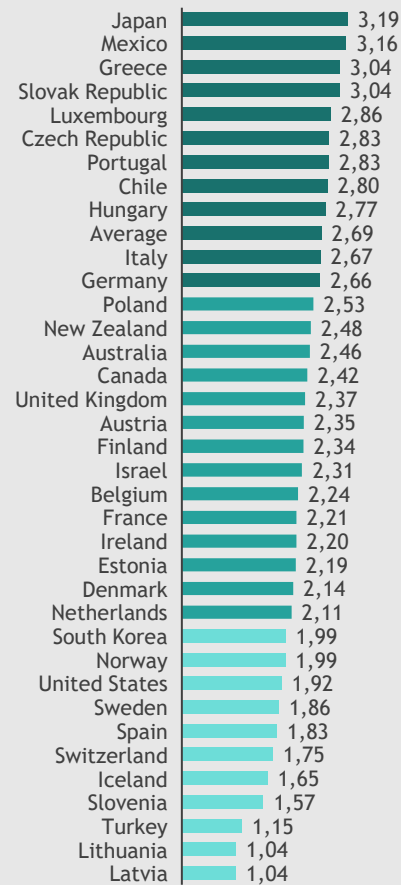


Figure 1: Quality Gap (OECD, 2023; Statista, 2019)

2. WAGE GAP

Wage index

HC wage to average wage



Healthcare workers' average salaries are two to three times higher than the country-specific average.

The wage gap focuses on **country-specific remuneration** and its effect on patient satisfaction. It involves identifying the **average general wage to average doctor and nurse wage ratio** in a country and analysing it in comparison to patient satisfaction rates.

Assessing the situation in OECD countries indicated in Figure 2, there is a **minor negative correlation (-0.2758)** between the size of the wage gap and patient satisfaction. In other words, a **lower wage of healthcare professionals** in relation to the average wage in a country leads to a **slightly lower patient satisfaction**.

Interesting additional insight: doctors' salaries in OECD countries vary greatly but are generally **above average**, while **nurses** are paid either **below or slightly above average** depending on the country.

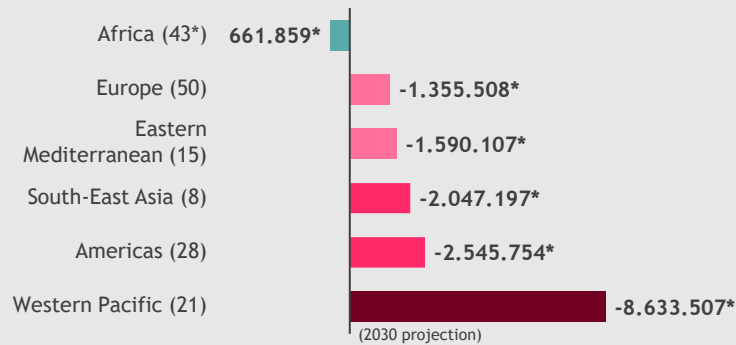


Figure 2: Wage Gap (World Bank, 2016) in OECD countries

3. DEMAND GAP

Demand index

Regions in surplus/shortage



*Number of countries per region

**Number of health care workers in excess/need

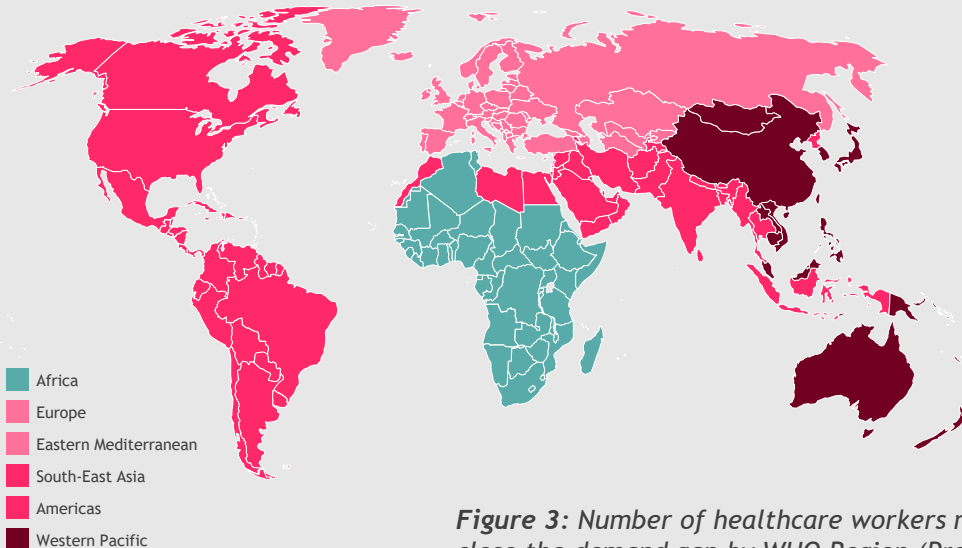


Figure 3: Number of healthcare workers needed per WHO region to close the demand gap by WHO Region (Projection, 2030)

Finally, the demand gap analyses the current challenges and projections for the labour market, emphasising the **gap between patients' willingness to pay for healthcare services (demand) and healthcare workforce (labour supply)**.



Shortage in Western Pacific:

Figure 3 illustrates that the Western Pacific region will experience the **largest shortage** of healthcare workers by 2030, as the demand for nearly nine million workers exceeds supply.



Shortage in Europe:

Europe will likely have the **highest number of countries (32)** experiencing a shortage of healthcare professionals by 2030 among all WHO regions (World Bank, 2016).



Influence of income:

Most countries experiencing a shortage of healthcare professionals by 2030 will likely be **high and upper-middle income countries**.

These findings are of highest importance for both current and future **policymakers and practitioners** affected by shortages in health care sector.

CLOSING THE GAPS



Understanding and addressing these gaps is crucial in ensuring the availability of **quality healthcare services** to meet the demand of a growing population.

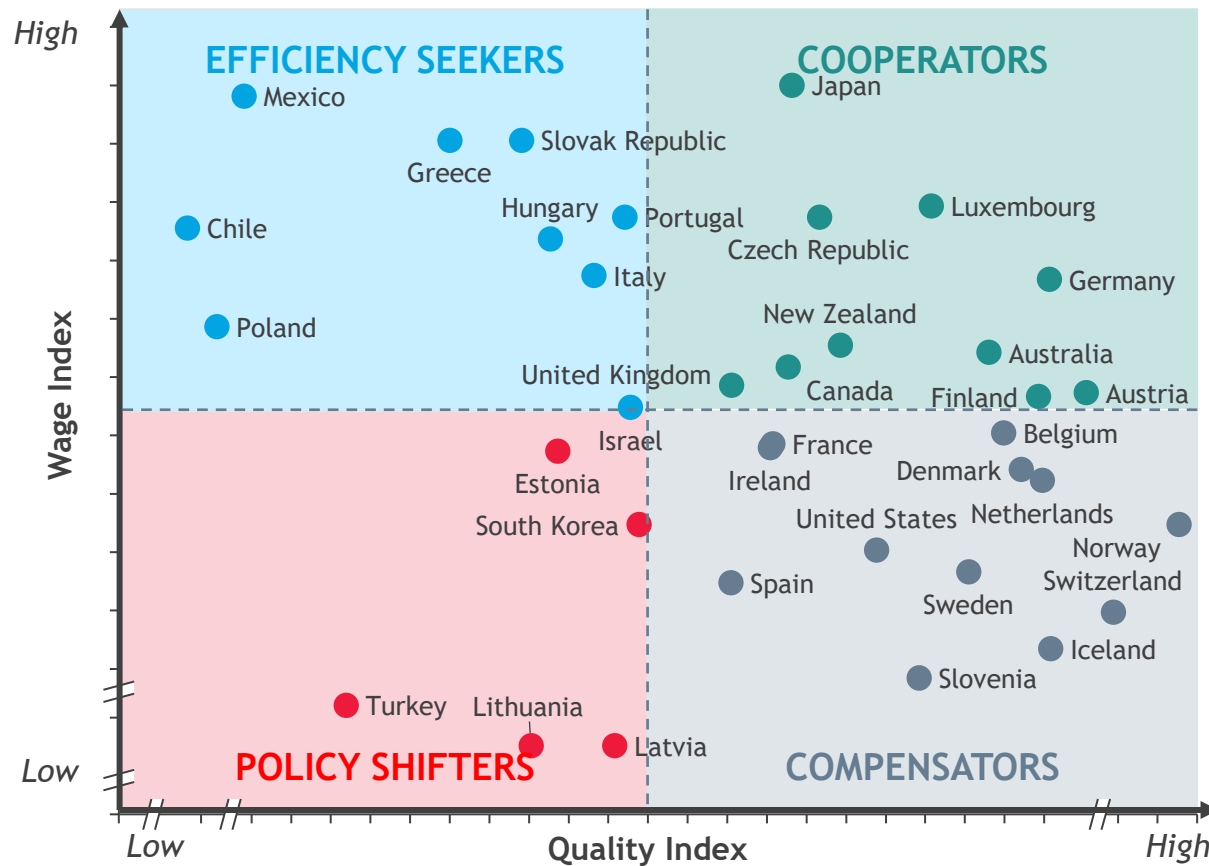
It is essential to take steps to close the quality gap by **increasing the number of healthcare professionals per capita** and prioritising patient satisfaction.

Carefully analysing the wage gap can also play a vital role in **increasing patient satisfaction rates**.

Furthermore, addressing the demand gap by **investing in healthcare education and improving working conditions** may help to attract more healthcare professionals and reduce the shortage of healthcare professionals.

BUT HOW DID WE END UP IN THIS SITUATION?

Major trends



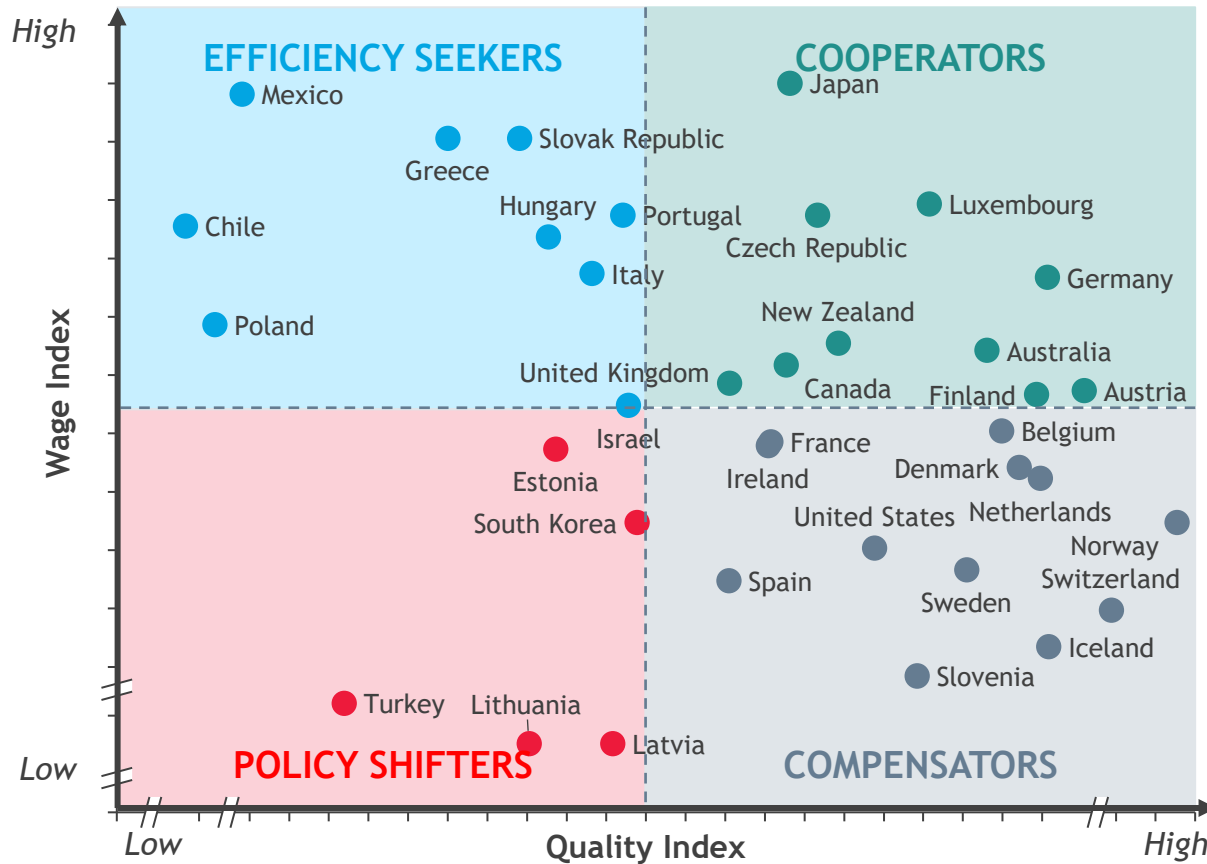
Putting all the findings into perspective, this proposed framework helps to derive bespoke **recommendations for country archetypes**.

- ▶ The **quality** index on the x-axis describes the quality gap: Countries with a low score experience a high quality gap (low level of medical personnel per capita & a low patient satisfaction level).
- ▶ The **wage** index on the y-axis describes the wage gap. Countries with a low score on wage index experience a high wage gap.
- ▶ The **demand** perspective needs special attention in most OECD countries especially medium to high-income countries which will be specifically affected. Therefore, this dimension is addressed in the recommendations for the four archetypes.

The four country archetypes are defined by the individual scores on the quality and wage index.

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Major trends



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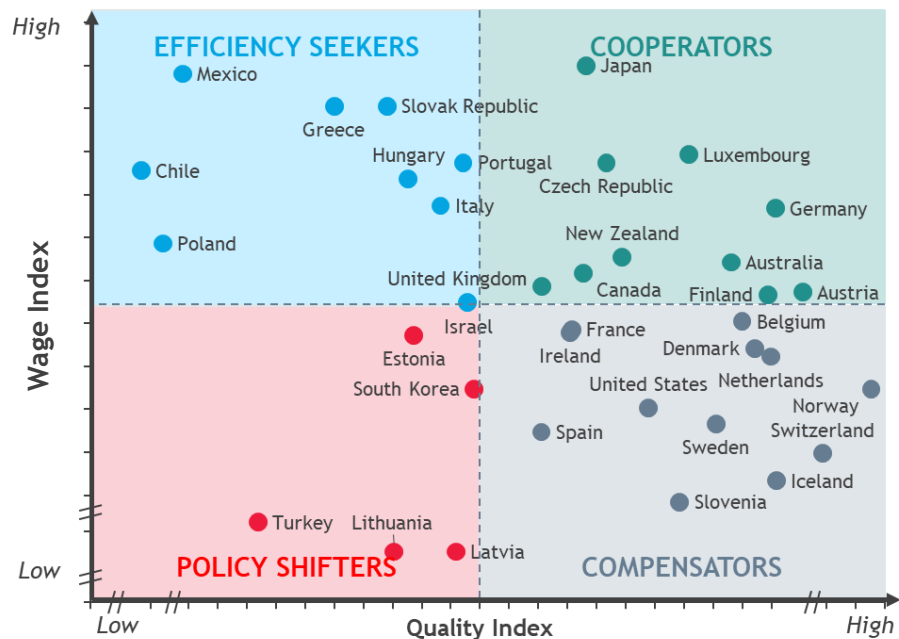
POLICY SHIFTERS

QUALITY INDEX:

WAGE INDEX:

DEMAND INDEX:

Countries in this bucket will experience a **medium to high unmet demand** for healthcare workers, as most of their healthcare workers can find better working conditions in other neighboring OECD countries.



Recommendations



Define measures to keep talent in their home country, such as working conditions, career perspective

- ▶ Improve working conditions and healthcare facilities
- ▶ Offer competitive salaries and benefits
- ▶ Provide professional development opportunities and career growth prospects



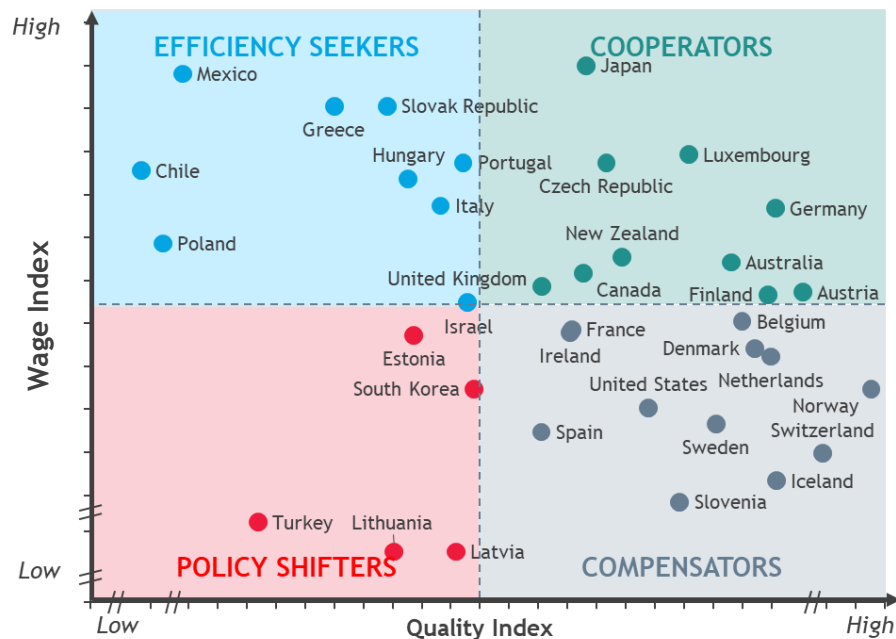
Invest in healthcare infrastructure to initiate the turnaround

- ▶ Upgrade and modernize existing healthcare facilities
- ▶ Expand healthcare infrastructure, especially in underserved areas
- ▶ Enhance technology, medical equipment, and supply chain management

COMPENSATORS

QUALITY INDEX: ■ ■ ■
WAGE INDEX: ■ ■ ■
DEMAND INDEX: ■ ■ ■

These countries are characterised by a relatively **high-quality healthcare system** and moderate wages, but they are at risk of facing future deficits in healthcare staff, highlighting the need to address potential shortages in their workforces.



Recommendations



Keep investing in healthcare education and training

- ▶ Expand capacity in medical schools and nursing programs
- ▶ Offer financial incentives and scholarships
- ▶ Develop targeted recruitment strategies



Foster a positive work environment and work-life balance

- ▶ Prioritise healthcare worker well-being
- ▶ Provide adequate staffing levels and support systems
- ▶ Encourage flexibility and career development



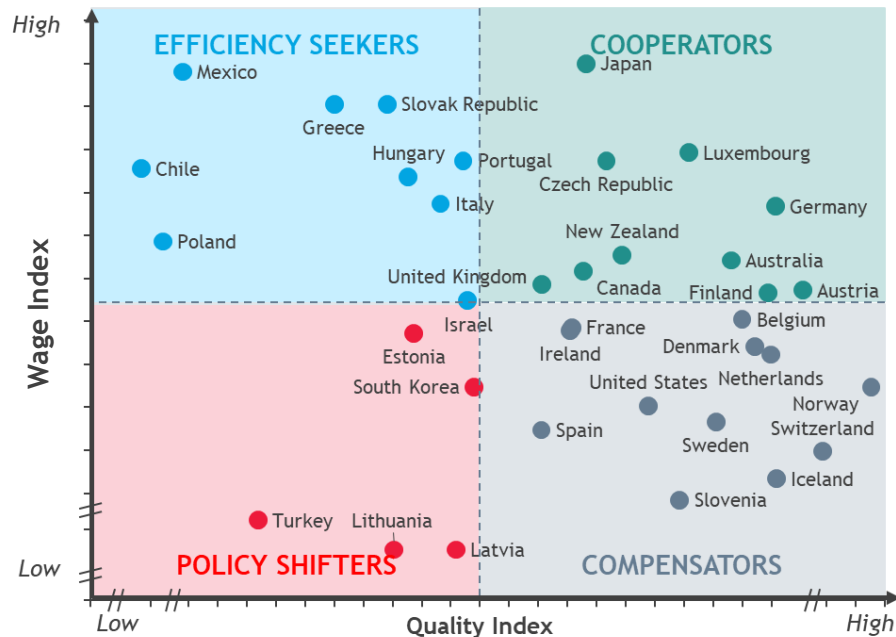
Strengthen international recruitment and immigration policies

- ▶ Streamline recognition of credentials from other countries
- ▶ Establish targeted immigration policies and visa programs
- ▶ Foster international collaborations and partnerships

EFFICIENCY SEEKERS

QUALITY INDEX: ■■■■
 WAGE INDEX: ■■■■
 DEMAND INDEX: ■■■■

Efficiency seekers face **challenges in attracting and retaining healthcare workers** due to their medium to low quality index score and medium to high wage gap score. Improving the efficiency of labour and infrastructure development can enhance the lower quality of service provided by these countries.



Recommendations



Enhance healthcare infrastructure and resources

- ▶ Increase investment in facilities, equipment, and technology
- ▶ Upgrade existing healthcare facilities
- ▶ Ensure availability of medical supplies and advanced tools



Improve workforce capacity and competency

- ▶ Invest in training and professional development
- ▶ Encourage international collaborations and knowledge exchange
- ▶ Strengthen recruitment processes



Implement quality improvement measures

- ▶ Establish robust quality control mechanisms
- ▶ Develop evidence-based guidelines and protocols
- ▶ Conduct regular performance assessments and evaluations



Strengthen governance and regulation

- ▶ Enhance regulatory oversight and accountability
- ▶ Improve transparency in healthcare management
- ▶ Promote patient-centred care and safety



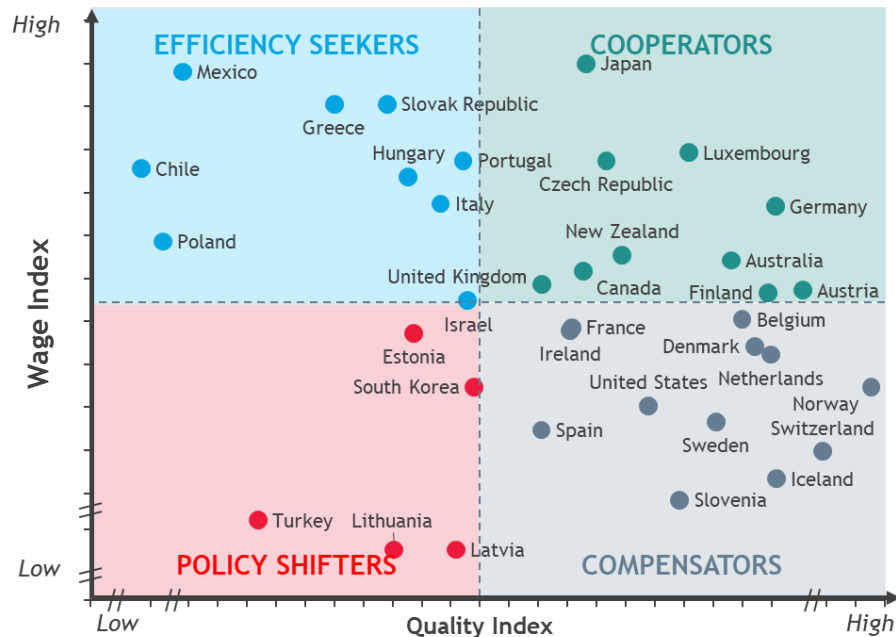
Promote innovation and research

- ▶ Encourage research and collaboration
- ▶ Allocate resources for healthcare innovation
- ▶ Foster partnerships between academia and healthcare providers

COOPERATORS

QUALITY INDEX: ■ ■ ■
 WAGE INDEX: ■ ■ ■
 DEMAND INDEX: ■ ■ ■

Cooperators are ahead of the other countries with high quality and wage index, and thus should focus on establishing partnership with high-achieving OECD countries to ensure technological development and an adequate supply of healthcare workers.



Recommendations



Keep investing in research and high-tech innovation

- ▶ Allocate resources and funding to support research and development in healthcare
- ▶ Foster partnerships between academia, research institutions, and healthcare providers to drive innovation
- ▶ Encourage the adoption of high-tech solutions and technologies in healthcare delivery



Implement policies that grant healthcare workers the opportunity for professional development, especially for those from “third-party” countries with a non-permanent working permission

- ▶ Establish programs and initiatives to support professional development for healthcare workers
- ▶ Specifically address the needs of healthcare workers from third-party countries with non-permanent working permissions
- ▶ Provide training opportunities, workshops, and conferences to enhance skills and knowledge of healthcare professionals

CONCLUSION

- ▶ In conclusion, the healthcare industry is facing significant challenges due to the shortage of healthcare professionals.
- ▶ The quality gap, wage gap, and demand gap are the leading contributors to this issue and addressing them is crucial in ensuring the availability of quality healthcare services.
- ▶ By understanding and addressing these gaps, healthcare systems can provide quality healthcare services to meet the demands of a growing population.

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