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Normative Analysis of Foreign Medical and Health Worker Policies in Indonesia and Their Impact on the National Health System

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Abstract:

This study examines the coherence and policy rationale of Indonesia's utilization of foreign medical and health personnel (FMHP) under Government Regulation No. 28 of 2024 within the framework of the National Health System (NHS). The analysis focuses on the role of this policy as a transitional instrument to address priority referral service gaps while strengthening national health workforce capacity. Key concepts include health system governance, credentialing and clinical privileging, patient safety, informed consent, and the WHO health system building blocks. Employing a normative juridical (doctrinal legal research) method, this study applies statutory, conceptual, and systemic approaches. The scope of analysis covers health legislation, cross-sectoral labor and immigration regulations, and strategic NHS policy documents. Legal norms are examined through grammatical, systematic, and teleological reasoning and mapped against NHS output and outcome indicators. The findings demonstrate that, at the normative level, the FMHP policy is coherently designed in line with global health governance principles and oriented toward patient protection and capacity building. Nonetheless, implementation challenges persist, particularly regarding regional disparities in institutional capacity, inconsistent credentialing practices, cross-cultural communication barriers, and the absence of measurable indicators for technology transfer. The study recommends strengthening operational governance through the Deficit–Impact–Duration framework and a Technology Transfer Scorecard to ensure evidence-based evaluation. This research advances health law scholarship by integrating normative legal analysis with health system performance frameworks and proposing practical evaluative tools for assessing foreign health workforce policies as instruments of sustainable national capacity building.

Keywords: credentialing; foreign medical personnel; health governance; national health system; patient safety; technology transfer; WHO building blocks.

INTRODUCTION

The gap between the need for and availability of medical and health personnel—especially at the specialist and subspecialist levels—has long been a structural barrier hindering equitable quality of care within the National Health System (SKN). The expansion of National Health Insurance (JKN) coverage, increasing life expectancy, and a shift in the burden of disease toward chronic and degenerative conditions have increased

the demand for high-tech referral services requiring advanced clinical competencies. However, the distribution of these qualified health personnel remains highly unequal geographically, with concentrations in urban areas and centers of medical education, while underdeveloped, border, and island regions experience systemic gaps in priority services (Bappenas, 2023b). This imbalance impacts not only access but also quality, patient safety, and public trust in the national health system as a whole. In this context, the shortage of specialist personnel cannot be understood solely as a matter of human resource quantity. It is a systemic governance issue intersecting with regional financing capacity, the readiness of health care facilities, referral mechanisms, and the effectiveness of regulations in managing high-risk clinical practices. Recent health policy literature shows that health system failures in many developing countries often stem from a misalignment between health workforce provision policies and the health system's governance architecture (Ham, 2020). In other words, ad hoc and partial solutions—for example, simply increasing the number of personnel without strengthening governance—have the potential to pose ethical, legal, and patient safety risks.

Responding to this complexity, the Indonesian government, through Law Number 17 of 2023 concerning Health and Government Regulation Number 28 of 2024, formulated a policy for the limited, selective, and needs-based utilization of foreign medical and health workers (TM/TK-WNA). This policy is normatively designed as a transitional instrument to fill gaps in certain priority services, while ensuring the transfer of knowledge and technology to domestic health workers within a measurable time horizon (RI, 2024). The affirmation of the prohibition on independent practice, mandatory credentialing, limitation of the validity period of Registration Certificates and Practice Permits to a two-plus-two-year scheme, and the establishment of clinical authority based on health care facilities demonstrate the state's efforts to build relatively strict ethical and legal safeguards. However, the existence of this normative framework does not automatically guarantee effective implementation in the field. Several recent policy studies emphasize that the main challenge for health policy in Indonesia lies in the translation of norms into practice, particularly in a decentralized system (Irawan et al., 2025). Variations in local government capacity, differences in the quality of hospital governance, and disparities in fiscal capacity have the potential to result in uneven and even counterproductive implementation. In the context of the utilization of TM/TK-WNA, these risks become even more significant given that specialized clinical practice involves high-stakes medical decisions and a relationship of trust between doctors and patients.

This is where the main research gap that this paper aims to fill lies. Existing studies tend to focus on normative analyses of regulatory changes or ethical discussions regarding the presence of foreign healthcare workers in general (Budiman, 2024). Conversely, there are still limited studies that systematically evaluate the coherence of Government Regulation No. 28 of 2024 with the National Health Insurance (SKN) architecture as a complete system, particularly within the framework of the six interdependent building blocks of the health system (Hoiruddin, 2024). Furthermore, national literature remains limited in mapping concrete implementation challenges—such as language and clinical culture barriers, variations in international credentialing standards, and the absence of auditable technology transfer indicators—that could potentially determine the success or failure of this policy in strengthening national capacity (Nababan & Sewu, 2024).

The WHO's health system framework, developed through six building blocks—health services, health workers, health information systems, access to essential medicines and technology, health financing, and leadership and governance—emphasizes that interventions in one block will impact the performance of the others (Organization, 2021). In Indonesia's National Health System (SKN), this framework is translated into output targets for access, quality, and safety of services, and outcome targets for health equity, system responsiveness, financial protection, and efficiency (Bappenas, 2023b). Therefore, the utilization of TM/TK-WNA should not be positioned solely as a solution to staffing shortages, but rather as a systemic intervention that must be aligned with clinical governance, health human resource information systems, and medium-term financing planning. From a legal governance perspective, this policy must also be interpreted within the framework of decentralization stipulated in Law Number 23 of 2014 concerning Regional Government, Government Regulation Number 2 of 2018 concerning Minimum Service Standards, and Law Number 1 of 2022 concerning Financial Relations between the Central and Regional Governments. This design positions regional governments as key actors in the provision of health services, but with national standards as the minimum that must be met. This tension between regional autonomy and national standards often creates gaps in the implementation of health policies, including regarding the utilization of foreign health workers (Irawan et al., 2025). Without measurable and auditable operational mechanisms, regulations risk becoming mere legal texts that lack systemic impact.

From an ethical and patient rights perspective, the presence of TM/TK-WNA also raises crucial issues related to patient autonomy, informed consent, and language and cultural sensitivity in clinical practice. Recent literature confirms that meaningful consent for medical procedures depends not only on the technical competence of medical personnel, but also on effective communication skills and an understanding of the patient's socio-cultural context (Al Sabah & Al Haddad, 2026). In referral systems involving vulnerable patients, failure to manage these aspects has the potential to violate the principles of patient safety and human dignity. The global principles outlined in the WHO Global Code of Practice emphasize that cross-border recruitment must be conducted ethically, without harming the source country, and while ensuring the protection of patient rights in the receiving country (Kovács et al., 2017).

Based on this background, the purpose of this study is to critically evaluate the coherence of the norms on the utilization of TM/TK-WNA in Government Regulation Number 28 of 2024 with the architecture of the Indonesian National Health System. Specifically, this study aims to, first, analyze the extent to which the regulatory design aligns with the principles of health system building blocks and decentralized governance; second, map the main implementation challenges in the field that have the potential to hinder the achievement of knowledge and technology transfer goals; and third, formulate measurable and auditable operational tools to bridge the gap between the regulatory text and systemic achievements. With this approach, the utilization of foreign medical and health workers is positioned not as a permanent substitute for limited national human resources, but rather as a well-managed transitional bridge. The success of this policy will ultimately be measured not by the number of foreign workers brought in, but by the extent to which it accelerates the provision of priority services, strengthens the capacity of domestic health workers, and sustainably improves the performance of the National Health Service (SKN) within a framework of justice, patient safety, and public accountability.

METHOD

This study uses a juridical-normative design (doctrinal legal research) to assess the coherence, rationality, and applicability of regulations regarding the utilization of medical personnel and foreign national health workers (TM/TK-WNA) within the National Health System (SKN). The juridical-normative approach was chosen because the research focuses on analyzing legal norms as prescriptions that govern the behavior, authority, and responsibilities of actors in the health system, while also assessing their alignment with broader systemic goals (Soekanto & Mamudji, 2021). The analysis is conducted through three complementary lenses that form a comprehensive evaluative framework. First, a statutory approach is used to interpret and test the vertical and horizontal alignment of norms, ranging from the 1945 Constitution of the Republic of Indonesia, Law Number 17 of 2023 concerning Health, Government Regulation Number 28 of 2024, Regulation of the Minister of Health Number 6 of 2023, to cross-sectoral instruments in the fields of employment and immigration. Through this approach, the study assesses hierarchical consistency, the absence of normative conflicts, and the clarity of delegation of authority within the framework of the rule of law and decentralized governance (Asshiddiqie, 2020). This approach also allows for an assessment of whether the regulation of TM/TK-WNA has been designed as a limited, needs-based, and transitional-oriented instrument as intended by the legislators.

Second, a conceptual approach is used to link legal norms to clinical practice and the realities of healthcare. At this stage, key concepts such as credentialing and clinical privileging, patient safety, cross-cultural communication, and informed consent are analyzed as a bridge between regulatory texts and everyday medical practice (Beauchamp & Childress, 2019; Brody, 2013). This conceptual approach is crucial for assessing whether the norms governing TM/TK-WNA are not only legally valid but also ethically and functionally adequate in ensuring patient protection and professional accountability of healthcare workers, particularly in the context of high-risk specialty practice. Third, the analysis of these norms and concepts is systematically mapped into the National Health System framework and the six WHO building blocks: health services, health workers, health information systems, access to essential medicines and technology, health financing, and leadership and governance. This mapping aims to trace the contribution of each legal provision to the SKN output and outcome targets, including access, quality and safety of services, equity of health status, system responsiveness, financial protection, and efficiency (Bappenas, 2023a). Thus, the regulation of the utilization of TM/TK-WNA is evaluated not as an isolated sectoral policy, but as an integral part of the national health system design.

The legal materials analyzed included primary legal materials, such as the constitution, laws, implementing regulations, and official SKN policy documents, as well as secondary legal materials, including scientific literature, policy reports, and publications from relevant international organizations. All materials were compiled, purposively selected, and then coded into analytical themes that reflect the policy's objectives and scope, licensing mechanisms and time horizons, qualifications and adaptation of foreign health workers, credentials and determination of clinical authority, patient protection and ethical aspects, and their alignment with the SKN architecture (Nababan & Sewu, 2024). Conclusions are drawn through grammatical, systematic, and teleological legal reasoning to understand the textual meaning of norms, their interrelationships within the overall legal system, and the policy objectives pursued by the regulators (Asshiddiqie, 2020). This analysis is complemented by an assessment of normative conformity to the principles of patient safety and public accountability, as well as the development of a framework of knowledge and technology transfer indicators as an evaluative tool to assess the success of TM/TK-WNA policies in sustainably strengthening national capacity.

The validity of the research results was supported by triangulation of sources between laws and regulations, academic literature, and policy documents, as well as the systematic compilation of a documented reasoning trail to ensure transparency and replication of the analysis. Throughout the research process, ethical considerations—including the patient's right to adequate information, the precautionary principle in clinical practice, and state accountability to the public—were integrated as inherent evaluative parameters, in line with the principles of biomedical ethics and global standards of health governance (Beauchamp & Childress, 2019).

RESULTS AND DISCUSSION

Needs mapping indicates a gap between the demands for priority referral services, which require specialist and subspecialist competencies, and the available and evenly distributed domestic workforce. The doctor ratio, which remains below the WHO reference, reinforces the signal of a service gap, especially outside growth centers; this condition explains why some hospitals are taking steps to fill critical positions while gradually preparing to strengthen local capacity (Ferretti et al., 2023). In this situation, Government Regulation Number 28 of 2024 is designed as a precise normative bridge. The assignment of foreign personnel can only be carried out upon request by health care facilities, is limited by a measurable practice permit period, preceded by evaluation, equivalency, competency testing, and adaptation, is prohibited in the form of independent practice, and is required to go through a credentialing mechanism as a gateway to clinical authority. This architecture is compatible with the WHO building blocks and the SKN target hierarchy because it allows for expansion of access at deficit points, while maintaining quality and safety through credential gateways, and at the same time contributes to efficiency and financial protection when synergized with SPM and regional SDMK planning (Coulson et al., 2014).

Policy implementation is inseparable from decentralized governance. The placement of foreign workers in response to competency gaps must comply with the division of health affairs as mandatory basic service matters, adhere to minimum service standards, and align with regional performance-based funding governance (Barbazza et al., 2015). At the technical implementation level, government administrative processes including the Foreign Worker Utilization Plan, Foreign Worker Employment Permit, employment licensing system, visas, and residence permits must be aligned with clinical pathways and health service quality control mechanisms. These clinical pathways include qualification equivalency stages, professional competency tests, issuance of Registration Certificates and Practice Permits with limited validity, and implementation of adaptation programs that include Indonesian language training and an introduction to the national legal system and medical ethics.

Following this process, foreign medical personnel are required to undergo credentialing conducted by a medical committee at a healthcare facility, culminating in the determination of clinical authority based on the evaluation results. The integration of the state administrative system and the clinical system creates a dual compliance mechanism that serves as a legal and ethical safety barrier. Through this mechanism, every foreign medical personnel practicing in Indonesia is expected to not only meet administrative requirements but also possess competency, communication skills, and understanding aligned with service needs at the facility level. This approach ensures patient safety, provides legal certainty for hospitals and healthcare institutions, and ensures uniform service standards across the region. Thus, cross-sector synchronization is a crucial foundation for the safe, transparent, and accountable governance of foreign medical personnel within the national legal framework (Kim et al., 2022).

The ethical dimension and respect for patient rights are fundamental aspects of international medical practice. The principles of autonomy and informed consent, as formulated by Beauchamp and Childress, emphasize that every medical intervention must be based on informed consent, informed consent that is clear, honest, and understandable to the patient (Szalados, 2021). This principle requires effective two-way communication between medical personnel and patients, with transparency being a key element in building public trust. Consistent with Brody's view, honesty and accountability in clinical processes not only strengthen the legitimacy of the profession but also form the moral foundation for the sustainability of the healthcare system (Doernberg & Truog, 2023).

In the Indonesian context, implementing these ethical principles faces unique challenges. Language barriers, differences in cultural values, and varying social norms can lead to misunderstandings in medical communication and diminish the quality of the therapeutic relationship between doctors and patients (Taylan & Weber, 2023). This situation is most evident in healthcare facilities operating in multinational areas such as Special Economic Zones, where patients and medical personnel often come from diverse linguistic and cultural backgrounds. Therefore, the obligation to use Indonesian, as stipulated in Minister of Health Regulation Number 6 of 2023, cannot be viewed merely as an administrative requirement, but rather as an ethical and legal protection instrument that serves to prevent the risk of clinical communication errors (Nogaroli, 2025).

The implementation of these regulations should ideally be strengthened through medical language training for foreign healthcare workers, cultural orientation regarding local values and service ethics, and the provision of clinical interpreters during the adaptation period. These steps are crucial to ensure that the informed consent process is meaningful and that patients understand the consequences of each medical procedure (Villiger, 2024). More broadly, the ethical principles of international recruitment, as stipulated in the WHO Global Code of Practice on the International Recruitment of Health Personnel, emphasize that cross-border collaboration must uphold the dignity of patients and healthcare workers while encouraging sustainable capacity transfer to national health systems (Palaniappan et al., 2024). Thus, ethical aspects and patient rights are not merely complementary aspects to regulations regarding the utilization of foreign healthcare workers, but rather key pillars determining the acceptability and sustainability of policies within the context of equitable health governance (Sedeeq & Arman, 2025).

The issues of protecting local workers, licensing legitimacy, and credentialing require equal attention. From a health administrative law perspective, licensing is not simply a legalization of practice, but a quality and safety control tool to ensure that only competent and verified personnel can provide services. The limited STR/SIP scheme provides a clear time horizon and accountability, while clinical privileging ties administrative permits to clinical authority based on evidence of competency (Cory, 2021). Without robust credentialing, there is a risk of disproportionate role substitution of local workers, disparities in remuneration, and a decline in safety standards. The scientific literature emphasizes the importance of strong regulatory safeguards, including strengthening oversight mechanisms and involving professional organizations in the technical details of assignments, to ensure that foreign workers effectively fill the gap and transfer expertise to local teams (Craiut et al., 2022).

A strong and consistent operational framework is essential to ensure that policies on the utilization of foreign medical and health workers do not remain normative but instead produce measurable outcomes that can be objectively evaluated. Without clear measurement tools, policies risk becoming symbolic and difficult to publicly account for. In this context, the 3D Framework concept—which encompasses three main parameters: Deficit, Impact, and Duration—can be used as an analytical tool to assess the feasibility and effectiveness of deploying foreign workers in health facilities (Kovács et al., 2017).

The first parameter, Deficit, requires objective evidence of a shortage of competency or number of medical personnel in a specific field, verified by the relevant authorities. Assignments should not be made solely on administrative request, but should be based on an analysis of the actual gap between local workforce needs and capacity (Nove et al., 2021). The second parameter, Impact, focuses on projecting the assignment's outcomes against regional health system performance indicators, such as improving access, quality, and safety of services (Willmington et al., 2022). The third parameter, Duration, emphasizes the importance of a clear time limit so that each foreign staff assignment has a measurable exit plan, including a strategy for transferring roles to domestic medical personnel after a specified period (Bhawani et al., 2025). With this principle, the 3D mechanism helps ensure that policies on the utilization of foreign staff are temporary and oriented towards capacity building, not dependency. Furthermore, the Technology Transfer Scorecard serves

as a quantitative instrument to assess the extent to which knowledge transfer objectives are actually achieved (Fernández-Esquinas et al., 2021).

The indicators measured include the number of hours of clinical mentoring, the number of priority cases successfully transferred, the number of local medical personnel acquiring new clinical privileges, the time to independence, and patient safety markers such as adverse events or thirty-day readmission rates. The implementation of this instrument allows for objective monitoring and auditing of the technology transfer process based on measurable data (Davidson et al., 2023). Over the two-plus-two-year timeframe stipulated in the licensing of foreign medical personnel, this scorecard allows for ongoing evaluation of the local team's capacity building while strengthening public accountability. Thus, the combination of the 3D Framework and the Technology Transfer Scorecard forms an evidence-based governance system that not only assesses administrative compliance but also measures the substantive impact of policies on improving the capacity of national health human resources (Lloret et al., 2025). This approach aligns with the principles of good health governance emphasized by Bappenas and the World Health Organization, namely that the success of a health system is measured not only by the number of policies made, but by the system's ability to transform resources into meaningful outcomes for the community (Debie et al., 2022).

Standardizing the credentialing process at the national level is a strategic step to reduce disparities in the quality of medical services between facilities and regions. In practice, the implementation of credentialing in various hospitals often shows significant variation, both in competency assessments, oversight mechanisms, and documentation standards used. This disparity not only has the potential to reduce the consistency of service quality but also weakens legal protections for patients and medical personnel (A. Joshi et al., 2022). Therefore, a uniform and measurable national credentialing system is needed, ensuring that all medical personnel, including foreign workers, undergo an evaluation process based on transparent and evidence-based criteria. The One-Stop Credentialing Model can be an integrative solution that bridges two main pathways in foreign healthcare worker governance: the state administrative pathway and the clinical pathway. The administrative pathway encompasses employment permits, immigration, and other legal documents such as the Foreign Worker Utilization Plan and the Foreign Worker Employment Permit (Liang, 2025).

Meanwhile, the clinical pathway includes qualification equivalency, competency testing, issuance of limited practice permits, language and cultural adaptation, credentialing by a medical committee, and determination of clinical authority by facility management (Gershuni et al., 2023). Integrating these two pathways creates a clearer audit trail and facilitates cross-institutional alignment, from the Ministry of Manpower and the Ministry of Health to the Ministry of Law and Human Rights. With this integrated system, the status of each foreign medical worker can be tracked administratively and clinically, thereby increasing public accountability and preventing overlapping authority between agencies (Ziegler & Bozorgmehr, 2024). More than just an administrative instrument, single-door credentialing also holds important ethical significance. Transparency regarding the identity, qualifications, and licensing status of foreign medical personnel should be part of the patient's right to obtain complete information before receiving services (Mazhar et al., 2024). This principle of openness is not only regulated normatively in health regulations but also embodies the principle of informed consent, universally recognized in medical ethics (Orzechowski et al., 2021). Thus, information transparency serves as a foundation for building public trust, while strengthening the legal and moral legitimacy of policies utilizing foreign medical personnel.

Institutional experience shows that collaboration with foreign hospitals has the potential to accelerate technological modernization and raise service standards, but also introduces new dynamics into wage structures, recruitment patterns, and the distribution of service access. In recent health law proceedings, the presence of foreign institutions was considered positive as long as their social function, integration with local hospitals, and knowledge transfer were managed in a balanced manner (Manggala & others, 2024). Recent policy analysis adds that the ethical and measured use of foreign personnel can reduce the practice of medical travel abroad by improving the readiness of domestic referral services, as long as integration with SPM and regional performance contracts is consistently implemented.

Ethical and human rights law perspectives affirm that patient-centered care demands practices that uphold patient dignity and respect the autonomy of informed clinical decisions. WHO documents on human rights and patient care emphasize the need for arrangements that position patients as subjects entitled to information, privacy, and security, while literature discussing legal accountability and patient autonomy in cross-border care provides a critical lens for assessing the changing role of expatriates in sensitive clinical settings (Kwame & Petrucka, 2022). Studies of cross-cultural communication also indicate that differences in value systems and

pain expressions can influence doctor-patient interactions, so cultural orientation programs for expatriates should be an integral part of the adaptation phase before clinical authority is granted (Kramer, 2015).

In comparison, the experience of health policy reform in various countries shows that successful health workforce management is highly dependent on strong leadership, consistent governance, and a culture of ongoing accountability. Countries such as the United Kingdom, through its National Health Service (NHS), and Australia, through its Health Workforce Strategic Framework, demonstrate that changes to the health workforce system can only be effective when a balance between efficiency, equity, and quality of service is continuously maintained (Crisp, 2010). Health policy literature emphasizes that the principle of stewardship—namely, state leadership in directing, overseeing, and ensuring the sustainability of the system—is the foundation of good clinical governance, which requires the integration of transparency, data-based evaluation, and strengthening the ethical responsibility of all actors in the health care system (Lee & Cosgrove, 2014). In the Indonesian context, similar policy directions are beginning to emerge in various strategic documents, including the Review and Reformulation of the National Health System published by the National Development Planning Agency (2023), as well as in academic analyses of Government Regulation No. 28 of 2024 *(Lee & Cosgrove, 2014)*. These documents emphasize that the utilization of foreign health workers should not be limited to meeting short-term needs, but rather should be a means of building sustainable national capacity. Therefore, success should be measured not only by increasing the number of services but also by the quality of knowledge transfer, increasing the independence of local workers, and providing data transparency that allows public oversight of implementation (Kochenkova et al., 2016).

If all these policy instruments are implemented diligently, the policy direction in Government Regulation Number 28 of 2024 will shift from a mere administrative mechanism to a capacity-building model that can be openly audited and evaluated. The utilization of foreign medical personnel is therefore not a permanent substitution effort, but rather a transitional strategy to close gaps in priority services while strengthening the foundation of the national health system. The keys to success lie in three main elements: transparent and measurable implementation, a commitment to making foreign personnel a catalyst for increasing local capacity, and consistency in maintaining patient dignity and the professionalism of healthcare workers in an increasingly complex and differentiated service landscape (Dal Poz et al., 2006).

Mapping of healthcare needs reveals a structural gap between the demand for priority referral services—which require specialist and subspecialist competencies—and the available and evenly distributed capacity of domestic healthcare workers. Indonesia's doctor ratio, which remains below the WHO reference, reinforces the signal of a service gap, particularly outside centers of economic growth and health education (Rahman, 2024). This situation explains why some hospitals are taking steps to fill critical positions as a short-term response, while gradually preparing to strengthen local capacity. In this context, Government Regulation Number 28 of 2024 is designed as a precise normative bridge: the assignment of foreign medical and health personnel can only be done upon request from health service facilities, is limited by a measurable practice permit period, begins with evaluation, equivalency, competency testing, and adaptation, is prohibited in the form of independent practice, and is required through a credentialing mechanism as a gateway to clinical authority (Chen et al., 2025). This architecture is compatible with the WHO building blocks and the SKN target hierarchy because it provides room for expanding access at points of deficit, maintains quality and safety through credentialing gateways, and has the potential to contribute to efficiency and financial protection if synergized with Minimum Service Standards and regional health human resource planning (Krishnan et al., 2023).

From an international perspective, the strategy of utilizing foreign healthcare workers as a response to competency shortages is not unique to Indonesia. Many countries with established healthcare systems face similar challenges due to population aging, the complexity of medical technology, and the unequal distribution of healthcare workers. The United Kingdom, for example, through its National Health Service (NHS), has historically relied on international healthcare workers to fill gaps in specific specialties, but has placed these workers within a strict clinical governance framework, with limited authority, multiple layers of supervision, and obligations to develop local capacity (Herrick & Armstrong, 2025). Australia has implemented the Health Workforce Strategic Framework, which emphasizes that foreign recruitment is only justified as a temporary solution, accompanied by a clear exit strategy and indicators of competency transfer to domestic workers (R. Joshi et al., 2023). This experience demonstrates that the success of similar policies is not determined by openness to foreign healthcare workers alone, but rather by strong governance, national leadership, and consistent data-driven evaluation.

Policy implementation in Indonesia is inextricably linked to decentralized governance. The placement of foreign workers in response to competency gaps must adhere to the division of health affairs as mandatory basic service matters, adhere to minimum service standards, and align with regional performance-based funding governance as stipulated in Law Number 23 of 2014, Government Regulation Number 2 of 2018, and Law Number 1 of 2022. At the technical level, government administrative processes—including the Foreign Worker Utilization Plan, Foreign Worker Employment Permits, employment licensing systems, visas, and residence permits—must be aligned with clinical pathways and health service quality control mechanisms. These clinical pathways include qualification equivalency, professional competency tests, the issuance of Registration Certificates and Limited Practice Permits, and adaptation programs that include Indonesian language training and an introduction to the national legal system and medical ethics.

After the initial administrative and adaptation stages, foreign medical personnel are required to undergo credentialing by a medical committee at a healthcare facility, culminating in the determination of clinical authority based on the evaluation results. This integration of the state administrative system and the clinical system creates a dual compliance mechanism that serves as a legal and ethical safety barrier. Through this mechanism, every foreign medical personnel practicing in Indonesia is expected to not only meet administrative requirements but also possess the competency, communication skills, and understanding that align with service needs at the facility level. This approach strengthens patient safety, provides legal certainty for hospitals, and ensures consistent service standards across regions (Nababan & Sewu, 2024).

The ethical dimension and respect for patient rights are fundamental aspects of transnational medical practice. The principles of autonomy and informed consent, as formulated in biomedical ethics, emphasize that every medical intervention must be based on informed consent that is clearly and clearly understood by the patient (Bifarin & Stonehouse, 2022). This principle demands effective two-way communication, with transparency being a key element in building public trust. In line with Brody's view, honesty and accountability in the clinical process not only strengthen the legitimacy of the profession but also form the moral foundation for the sustainability of the healthcare system (Brody, 2013). In the Indonesian context, language barriers and differences in cultural values pose real challenges, particularly in multinational regions such as Special Economic Zones. Therefore, the mandatory use of Indonesian in Minister of Health Regulation No. 6 of 2023 must be understood as an instrument of ethical and legal protection, not merely an administrative provision.

This strengthening of ethical aspects should ideally be complemented by medical language training, local cultural orientation, and the provision of clinical interpreters during the adaptation period. These steps ensure that the informed consent process is meaningful and that patients understand the risks and consequences of medical procedures. Globally, the WHO Global Code of Practice emphasizes that cross-border recruitment of health workers must uphold the dignity of patients and health workers while encouraging sustainable capacity transfer to national health systems (Walton-Roberts, 2023). Therefore, ethics and patient rights are not complementary policies, but rather key pillars of the acceptability and sustainability of the use of expatriate workers.

From an operational governance perspective, the policy of utilizing foreign medical personnel requires clear measurement tools to ensure it remains normative. Without measurable indicators, the policy risks becoming symbolic and difficult to publicly account for. In this context, the use of the 3D Framework—Deficit, Impact, and Duration—provides an analytical framework for assessing the feasibility and effectiveness of foreign personnel deployments. Deficit requires objective evidence of competency deficiencies; Impact focuses on contributions to service performance indicators; and Duration emphasizes the importance of clear timelines and exit plans to prevent structural dependency (Sultana, 2022). Complementarily, the Technology Transfer Scorecard allows for quantitative evaluation of the success of knowledge transfer through indicators of mentoring, increased clinical competence of local personnel, time to service independence, and patient safety parameters (Fekieta et al., 2021).

International and national experience shows that collaboration with foreign personnel and institutions can accelerate technological modernization and improve service standards, but also introduce dynamics into remuneration structures and access distribution (Khan et al., 2023). Therefore, uniform and integrated national credentialing is a crucial prerequisite for maintaining consistent quality and legal protection. A One-Stop Credentialing Model that integrates state administrative and clinical pathways has the potential to strengthen audit trails, increase transparency, and facilitate cross-institutional oversight. Furthermore, transparency regarding the status and qualifications of foreign medical personnel is part of the patient's right to information and the foundation of patient-centered care, as affirmed in the WHO document on human rights and patient care (De Jesus et al., 2025).

In the Indonesian context, this policy direction aligns with the national strategic document, which emphasizes that the utilization of foreign health workers must be a means of long-term capacity building, not merely a means of meeting immediate needs (Bappenas, 2023a). Therefore, the success of this policy is measured not only by increasing the volume of services but also by the quality of knowledge transfer, increasing the independence of local workers, and providing data transparency that enables public accountability. If all these policy instruments are implemented consistently and with discipline, Government Regulation Number 28 of 2024 will move beyond an administrative function to a capacity-building governance model that can be openly audited and evaluated (Smolka & Böschen, 2023). Within this framework, the utilization of foreign medical workers is not a permanent substitute, but rather a measured, transitional strategy to close gaps in priority services while strengthening the foundations of the National Health System in an equitable and sustainable manner.

Before drawing final conclusions, it is important to place Indonesia's policy on the utilization of foreign medical and healthcare personnel within the context of international practices and norms. This comparison serves not to mechanically replicate, but rather to examine whether the national legal architecture—particularly as formulated in Government Regulation No. 28 of 2024—aligns with global principles regarding healthcare workforce governance, patient safety, protection of local workforce, and sustainable capacity building. Relevant international frameworks include WHO guidelines, the experiences of countries with established health systems, and principles of cross-border clinical ethics and governance. The following comparative mapping illustrates Indonesia's policy position within this global landscape (Nacu et al., 2025).

Table 1 Comparison of the International Framework and National Implementation in the Utilization of Foreign Medical Personnel

Governance Dimensions	International Framework	Practices in Comparator Countries	Implementation in PP 28/2024 and Derivative Regulations	Relevance to SKN
Normative Basis	The WHO Global Code of Practice on the International Recruitment of Health Personnel emphasizes ethical recruitment and capacity building.	The UK (NHS) and Australia position the state as the primary steward	Assignment based on health facility requests, limited by permits and evaluations	Maintaining a balance between access and sustainability
Purpose of Assignment	Temporary in nature and capacity building oriented	Focus on filling critical deficits and training local teams	Assignments are not for independent practice and require technology transfer.	Supporting equal distribution of priority services
Permits & Duration	Limited practice permit and periodic evaluation	Time-bound licensing with periodic review	Limited STR/SIP with a measured permit period	Reducing the risk of systemic dependency
Credentialing & Clinical Privileging	International standards link administrative authorization to clinical authority	NHS Clinical Governance, Australian Credentialing Standards	Medical committee credentialization as a gateway to clinical authority	Ensuring quality and patient safety
Ethics & Patient Rights	Informed consent, autonomy, patient-centered care	Transparency of identity and competence of foreign workers	Indonesian language obligations and cultural adaptation	Strengthening public trust
Cross-Cultural Communication	WHO and bioethics literature emphasize cultural competence	Cultural induction program for foreign workers	Language training and orientation of legal-ethical systems	Reducing the risk of clinical miscommunication
Local Power Protection	The principle of non-displacement and fair recruitment	Protection of domestic workers' career paths	Assignment only on competency deficits	Maintaining the social legitimacy of policies

Oversight & Accountability	Evidence-based governance dan auditability	Performance indicators dan public reporting	3D Framework and Scorecard Technology Transfer	Linking policies to outcomes
Technology Transfer & Exit Plan	Knowledge transfer as an indicator of success	Mentoring and time-to-independence	Mentoring indicators, new authority, exit plan	Strengthening service independence
Governance Model	Stewardship dan good clinical governance	Centralized leadership with local implementation	Central-regional synchronization in SKN	Ensuring national consistency

This comparative mapping demonstrates that the policy design for the utilization of foreign medical and healthcare personnel in Government Regulation No. 28 of 2024 is conceptually within the mainstream of global health governance. The principles of time limits, clinical authority-based credentialing, patient rights protection, and technology transfer orientation emphasize that this policy is not intended as a permanent substitution mechanism for local personnel, but rather as a transitional instrument to close gaps in priority services. However, international experience also shows that normative alignment does not automatically lead to successful implementation. The determining factors lie in consistency of implementation, cross-sector integration, standardization of credentialing, and the availability of performance indicators that enable ongoing public evaluation (Wachnik et al., 2025). In the Indonesian context, this confirms that the policy's acceptability and sustainability depend not only on the comprehensiveness of the regulations but also on their ability to translate the deployment of foreign personnel into tangible capacity improvements for the national health system (Hosseini et al., 2024). Based on this international comparison, the next section will draw final conclusions regarding the extent to which Government Regulation No. 28 of 2024 serves as an effective normative bridge between short-term service needs and the long-term development of Indonesia's independent human resources in the health sector.

CONCLUSION

The fundamental problem in Indonesia's healthcare system lies not only in the limited number of medical personnel, but also in their unequal distribution, particularly for specialist and subspecialist dentists in the regions. Government Regulation No. 28 of 2024 presents a strategic step to bridge this gap by opening opportunities for the selective and temporary involvement of foreign medical personnel, accompanied by strict oversight mechanisms through credentialing, evaluation, and knowledge transfer. This research demonstrates the idea that foreign personnel policy should not be viewed as an administrative solution but should be designed as a measurable and auditable national capacity-building instrument. Approaches such as the Deficit–Impact–Duration rule, technology transfer scores, and the single-door credentialing model are key to ensuring that the presence of foreign personnel truly strengthens the local system, not replaces it. With an emphasis on language training, cross-cultural understanding, and the involvement of professional organizations, this policy not only closes service gaps but also encourages the transformation of health governance toward a more adaptive, independent, and equitable system. From a theoretical perspective, this study enriches the study of health law by demonstrating that the effectiveness of norms cannot be assessed solely on the basis of hierarchical consistency or procedural compliance, but rather on their ability to operate systemically within the WHO building blocks framework and the SKN output-outcome targets. By integrating legal analysis, clinical ethics, and health system governance, this study emphasizes the importance of an interdisciplinary approach in interpreting complex health regulations. The Deficit-Impact-Duration framework and technology transfer indicators developed in this study offer new conceptual contributions as a bridge between legal norms and health system performance. The practical implications of this research emphasize that the primary policy challenge lies not in normative design, but rather in the implementation phase. Without national credentialing standardization, integration of administrative and clinical pathways, and measurable and auditable technology transfer indicators, the policy of empowering TM/TK-WNA risks becoming symbolic and losing public legitimacy. Therefore, strengthening operational mechanisms—including a single-door credentialing model, language and cultural adaptation training, and data-driven evaluation—is an absolute prerequisite for ensuring patient safety, protecting local workers, and ensuring state accountability. This study's

limitations lie in its juridical-normative approach, which means it fails to empirically capture variations in policy implementation at the regional and healthcare facility levels. Differences in institutional capacity, hospital organizational dynamics, and the perceptions of field actors have not been directly mapped, so the findings remain evaluative-conceptual in nature. Going forward, further research should combine a normative approach with comparative empirical studies across regions and facilities, including analysis of the experiences of patients, local health workers, and professional organizations. This approach is crucial for assessing the extent to which this policy truly accelerates the independence of referral services and builds national capacity sustainably. Thus, the utilization of migrant workers (TM/TK-WNA) can be ensured to function as a valid, equitable, and long-term transitional strategy in national health system development.

REFERENCES

Al Sabah, S., & Al Haddad, E. (2026). Liability in Telesurgery: Navigating Legal, Ethical, and Cross-Border Challenges in the Era of Global Surgical Care. *Medical Principles and Practice*, *21*(2), 1–11. https://doi.org/10.1159/000551387

Asshiddiqie, J. (2020). *Konstitusi dan Hukum dalam Perspektif Ketatanegaraan [Constitution and Law from a Constitutional Perspective]*. Rajawali Pers.

Bappenas. (2023a). *Rencana Pembangunan Nasional Perlindungan Anak 2020–2024 [National Development Plan for Child Protection 2020–2024]* (p. 44).

Bappenas. (2023b). *Review dan Reformulasi Sistem Kesehatan Nasional Indonesia [Review and Reformulation of the Indonesian National Health System]*.

Barbazza, E., Langins, M., Kluge, H., & Tello, J. (2015). Health workforce governance: Processes, tools and actors towards a competent workforce for integrated health services delivery. *Health Policy*, *119*(12), 1645–1654. https://doi.org/10.1016/j.healthpol.2015.09.009

Beauchamp, T., & Childress, J. (2019). Principles of Biomedical Ethics : Marking Its Fortieth Anniversary. *The American Journal of Bioethics*, *19*(11), 9–12. https://doi.org/10.1080/15265161.2019.1665402

Bhawani, S., Raj, A., Kumar, R. R., & Sharma, S. (2025). Benchmarking best practices for enhancing gender diversity: insights from the Indian liquor manufacturing industry. *Benchmarking: An International Journal*, 1–30. https://doi.org/10.1108/BIJ-10-2024-0910

Bifarin, O., & Stonehouse, D. (2022). Beneficence and non-maleficence: collaborative practice and harm mitigation. *British Journal of Healthcare Assistants*, *16*(2), 70–74. https://doi.org/10.12968/bjha.2022.16.2.70

Brody, H. (2013). Transparency in Clinical Practice: A Matter of Trust. *Journal of General Internal Medicine*, *28*(7), 888–890. https://doi.org/10.1007/s11606-012-2305-4

Budiman, N. T. (2024). Isu Etika dalam Pemanfaatan Tenaga Kesehatan Warga Negara Asing di Indonesia: Perspektif Keberlanjutan Pelayanan Kesehatan [Ethical Issues in the Utilization of Foreign Healthcare Workers in Indonesia: A Healthcare Service Sustainability Perspective]. *Referendum : Jurnal Hukum Perdata Dan Pidana*, *1*(2), 51–59. https://doi.org/10.62383/referendum.v1i2.39 [In Indonesian]

Chen, Y., Zhou, C., & Richardson-Barlow, C. (2025). Towards Stringent Ecological Protection and Sustainable Spatial Planning: Institutional Grammar Analysis of China's Urban–Rural Land Use Policy Regulations. *Land*, *14*(9), 1896. https://doi.org/10.3390/land14091896

Cory, J. M. (2021). White privilege in neuropsychology: An 'invisible knapsack' in need of unpacking? *The Clinical Neuropsychologist*, *35*(2), 206–218. https://doi.org/10.1080/13854046.2020.1801845

Coulson, J., Roberts, P., & Taylor, I. (2014). *University Trends*. Routledge. https://doi.org/10.4324/9781315757209

Craiut, L., Bungau, C., Bungau, T., Grava, C., Otrisal, P., & Radu, A.-F. (2022). Technology Transfer, Sustainability, and Development, Worldwide and in Romania. *Sustainability*, *14*(23), 15728. https://doi.org/10.3390/su142315728

Crisp, N. (2010). *Turning the world upside down: the search for global health in the 21st century*. CRC Press.

Dal Poz, M. R., Quain, E. E., O'Neil, M., McCaffery, J., Elzinga, G., & Martineau, T. (2006). Addressing the health workforce crisis: towards a common approach. *Human Resources for Health*, *4*(1), 21. https://doi.org/10.1186/1478-4491-4-21

Davidson, J. T., Clanahan, J. M., Vachharajani, N., Yu, J., Rice, T. C., Cullinan, D. R., Martens, G. R., Olumba, F., Lee, A., Matson, S. C., Scherer, M. D., Majella Doyle, M. B., Wellen, J. R., & Khan, A. (2023). A novel assessment model for teaching robot-assisted living donor nephrectomy in abdominal transplant surgery fellowship. *The American Journal of Surgery*, *225*(2), 420–424. https://doi.org/10.1016/j.amjsurg.2022.09.058

De Jesus, M., Rabbani, G., Ferrer, B., Assaf, A. R., Bader, M., South, B. R., Leventhal, D. P., Boyles, P., Watt, S. J., & Habtezion, A. (2025). Empowering patients through pharmacovigilance, transparency, and health literacy: a narrative review. *Current Medical Research and Opinion*, *41*(7), 1249–1259. https://doi.org/10.1080/03007995.2025.2534468

Debie, A., Khatri, R. B., & Assefa, Y. (2022). Successes and challenges of health systems governance towards universal health coverage and global health security: a narrative review and synthesis of the literature. *Health Research Policy and Systems*, *20*(1), 50. https://doi.org/10.1186/s12961-022-00858-7

Doernberg, S., & Truog, R. (2023). Spheres of Morality: The Ethical Codes of the Medical Profession. *The American Journal of Bioethics*, *23*(12), 8–22. https://doi.org/10.1080/15265161.2022.2160514

Fekieta, R., Rosenberg, A., Hodshon, B., Feder, S., Chaudhry, S. I., & Emerson, B. L. (2021). Organisational factors underpinning intra-hospital transfers: a guide for evaluating context in quality improvement. *Health Systems*, *10*(4), 239–248. https://doi.org/10.1080/20476965.2020.1768807

Fernández-Esquinas, M., Sánchez-Rodríguez, M. I., Pedraza-Rodríguez, J. A., & Muñoz-Benito, R. (2021). The use of QCA in science, technology and innovation studies: a review of the literature and an empirical application to knowledge transfer. *Scientometrics*, *126*(8), 6349–6382. https://doi.org/10.1007/s11192-021-04012-y

Ferretti, F., Mariani, M., & Sarti, E. (2023). Physician density: will we ever close the gap? *BMC Research Notes*, *16*(1), 84. https://doi.org/10.1186/s13104-023-06353-8

Gershuni, O., Orr, J. M., Vogel, A., Park, K., Leider, J. P., Resnick, B. A., & Czabanowska, K. (2023). A Systematic Review on Professional Regulation and Credentialing of Public Health Workforce. *International Journal of Environmental Research and Public Health*, *20*(5), 4101. https://doi.org/10.3390/ijerph20054101

Ham, C. (2020). *Health Policy in Britain*. Palgrave Macmillan.

Herrick, C., & Armstrong, D. (2025). How many doctors does a health system need? Histories of workforce planning in the NHS. *Social Science & Medicine*, *371*, 117882. https://doi.org/10.1016/j.socscimed.2025.117882

Hoiruddin, M. (2024). Pendayagunaan Tenaga Medis Asing: Implikasi Etis dan Hukum [Utilization of Foreign Medical Personnel: Ethical and Legal Implications]. *Jurnal Hukum Kesehatan Indonesia*, *3*(2), 350–366. https://doi.org/10.36418/syntax-imperatif.v5i1.350 [In Indonesian]

Hosseini, S. M., Boushehri, S. A., & Alimohammadzadeh, K. (2024). Challenges and solutions for implementing telemedicine in Iran from health policymakers' perspective. *BMC Health Services Research*, *24*(1), 50. https://doi.org/10.1186/s12913-023-10488-6

Irawan, T. P. I., Miarsa, F. R. B., Yahya, D., & Romadhon, A. H. (2025). Legal Analysis of Government Regulation Number 28 of 2024 Concerning Foreign Doctors' Workforce in Indonesia. *Journal of Law, Politic and Humanities*, *5*(5), 3606–3614. https://doi.org/10.38035/jlph.v5i5.1906

Joshi, A., Schaaf, M., & Zayed, D. (2022). The use of legal empowerment to improve access to quality health services: a scoping review. *International Journal for Equity in Health*, *21*(1), 136. https://doi.org/10.1186/s12939-022-01731-3

Joshi, R., Yakubu, K., Keshri, V. R., & Jha, V. (2023). Skilled Health Workforce Emigration. *Mayo Clinic Proceedings*, *98*(7), 960–965. https://doi.org/10.1016/j.mayocp.2023.02.035

Khan, A. U., Rafi, M., Zhang, Z., & Khan, A. (2023). Determining the impact of technological modernization and management capabilities on user satisfaction and trust in library services. *Global Knowledge, Memory and*

Communication, *72*(6/7), 593–611. https://doi.org/10.1108/GKMC-06-2021-0095

Kim, S., Goh, Y., & Kang, J. H. B. (2022). Moving toward a common goal via cross-sector collaboration: lessons learned from SARS to COVID-19 in Singapore. *Globalization and Health*, *18*(1), 82. https://doi.org/10.1186/s12992-022-00873-x

Kochenkova, A., Grimaldi, R., & Munari, F. (2016). Public policy measures in support of knowledge transfer activities: a review of academic literature. *The Journal of Technology Transfer*, *41*(3), 407–429. https://doi.org/10.1007/s10961-015-9416-9

Kovács, R., Girasek, E., Kovács, E., Aszalós, Z., Eke, E., Ragány, K., Cserháti, Z., & Szócska, M. (2017). Managing intra-EU mobility—do WHO principles of ethical recruitment have relevance? *Human Resources for Health*, *15*(1), 78. https://doi.org/10.1186/s12960-017-0247-7

Kramer, E. A. (2015). *Intercultural Communication in the Health Context*. Routledge.

Krishnan, P., Jain, K., Aldweesh, A., Prabu, P., & Buyya, R. (2023). OpenStackDP: a scalable network security framework for SDN-based OpenStack cloud infrastructure. *Journal of Cloud Computing*, *12*(1), 26. https://doi.org/10.1186/s13677-023-00406-w

Kwame, A., & Petrucka, P. M. (2022). Universal healthcare coverage, patients' rights, and nurse-patient communication: a critical review of the evidence. *BMC Nursing*, *21*(1), 54. https://doi.org/10.1186/s12912-022-00833-1

Lee, T. H., & Cosgrove, T. (2014). *The Cleveland Clinic Way: Lessons in Excellence from One of the World's Leading Health Care Organizations*. McGraw-Hill Education.

Liang, X. (2025). Immigration regulations as frame of reference: trade-off between precarious employment and precarious legal status among US student-migrant-workers. *Journal of Ethnic and Migration Studies*, *51*(5), 1207–1227. https://doi.org/10.1080/1369183X.2024.2382373

Lloret, Á., Peral, J., Ferrández, A., Auladell, M., & Muñoz, R. (2025). A Data-Driven Framework for Digital Transformation in Smart Cities: Integrating AI, Dashboards, and IoT Readiness. *Sensors*, *25*(16), 5179. https://doi.org/10.3390/s25165179

Manggala, Y., & others. (2024). Analisis Kehadiran Rumah Sakit Asing dalam Konteks Layanan Kesehatan Nasional [Analysis of Foreign Hospital Presence in the National Health Service Context]. *Prosiding Kongres VI MHKI*.

Mazhar, T., Shah, S. F. A., Inam, S. A., Awotunde, J. B., Saeed, M. M., & Hamam, H. (2024). Analysis of integration of IoMT with blockchain: issues, challenges and solutions. *Discover Internet of Things*, *4*(1), 21. https://doi.org/10.1007/s43926-024-00078-1

Nababan, W. M. S., & Sewu, P. L. S. (2024). Tinjauan Hukum Tenaga Kerja Kesehatan Asing dihubungkan dengan Perlindungan Hukum bagi Pasien dalam Sistem Kesehatan Nasional [Legal Review of Foreign Health Workers in Relation to Patient Protection in the National Health System]. *Jurnal Sistem Informasi Manajemen*, *5*(1), 33–47. https://doi.org/10.36418/syntax-imperatif.v5i1.350 [In Indonesian]

Nacu, A.-G., Constantin, D.-A., & Rogozea, L. M. (2025). Ethical Dilemmas and Legal Responsibilities in Patient Care: An Analysis of Hospital Safety. *Healthcare*, *13*(21), 2800. https://doi.org/10.3390/healthcare13212800

Nogaroli, R. (2025). Ethical and Legal Aspects of the Physician-Patient Relationship. In *Medical Liability and Artificial Intelligence* (pp. 19–80). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-94306-5_2

Nove, A., ten Hoope-Bender, P., Boyce, M., Bar-Zeev, S., de Bernis, L., Lal, G., Matthews, Z., Mekuria, M., & Homer, C. S. E. (2021). The State of the World's Midwifery 2021 report: findings to drive global policy and practice. *Human Resources for Health*, *19*(1), 146. https://doi.org/10.1186/s12960-021-00694-w

Organization, W. H. (2021). *Everybody's Business: Strengthening Health Systems to Improve Health Outcomes—WHO Framework for Action*. WHO.

Orzechowski, M., Woniak, K., Timmermann, C., & Steger, F. (2021). Normative framework of informed consent in clinical research in Germany, Poland, and Russia. *BMC Medical Ethics*, *22*(1), 53. https://doi.org/10.1186/s12910-021-00622-6

Palaniappan, K., Lin, E. Y. T., & Vogel, S. (2024). Global Regulatory Frameworks for the Use of Artificial Intelligence (AI) in the Healthcare Services Sector. *Healthcare*, *12*(5), 562. https://doi.org/10.3390/healthcare12050562

Rahman, F. F. (2024). Indonesia's healthcare landscape: embracing innovation in the new health regime. *Current Medical Research and Opinion*, *40*(6), 929–933. https://doi.org/10.1080/03007995.2024.2349732

RI, K. K. (2024). *Pedoman Adaptasi Tenaga Medis Asing di Indonesia [Guidelines for Adaptation of Foreign Medical Personnel in Indonesia]*.

Sedeeq, F. S., & Arman, P. (2025). Human-Centric AI Governance: An Adaptive Public International Law Framework for Ethical and Inclusive AI Regulation in Public Health. *Journal of Law, Medicine & Ethics*, 1–12. https://doi.org/10.1017/jme.2025.10175

Smolka, M., & Böschen, S. (2023). Responsible innovation ecosystem governance: socio-technical integration research for systems-level capacity building. *Journal of Responsible Innovation*, *10*(1). https://doi.org/10.1080/23299460.2023.2207937

Soekanto, S., & Mamudji, S. (2021). *Penelitian Hukum Normatif: Suatu Tinjauan Singkat Normative Legal Research: A Brief Overview]*. PT RajaGrafindo Persada.

Sultana, R. (2022). A review of data-driven communication in economic recovery: implications of ICT-enabled strategies for human resource engagement. *International Journal of Business and Economics Insights*, *2*(1), 01–34. https://doi.org/10.63125/7tkv8v34

Szalados, J. E. (2021). The Ethics and Laws Governing Informed Decision-Making in Healthcare: Informed Consent, Refusal, and Discussions Regarding Resuscitation and Life-Sustaining Treatment. In *The Medical-Legal Aspects of Acute Care Medicine* (pp. 43–73). Springer International Publishing. https://doi.org/10.1007/978-3-030-68570-6_3

Taylan, C., & Weber, L. T. (2023). "Don't let me be misunderstood": communication with patients from a different cultural background. *Pediatric Nephrology*, *38*(3), 643–649. https://doi.org/10.1007/s00467-022-05573-7

Villiger, D. (2024). Giving Consent to the Ineffable. *Neuroethics*, *17*(1), 11. https://doi.org/10.1007/s12152-024-09545-6

Wachnik, R., Chruzik, K., & Pochopień, B. (2025). Sensor-Based Cyber Risk Management in Railway Infrastructure Under the NIS2 Directive. *Sensors*, *25*(23), 7384. https://doi.org/10.3390/s25237384

Walton-Roberts, M. (2023). *Global Health Worker Migration*. Cambridge University Press. https://doi.org/10.1017/9781009217781

Willmington, C., Belardi, P., Murante, A. M., & Vainieri, M. (2022). The contribution of benchmarking to quality improvement in healthcare. A systematic literature review. *BMC Health Services Research*, *22*(1), 139. https://doi.org/10.1186/s12913-022-07467-8

Ziegler, S., & Bozorgmehr, K. (2024). Translating restrictive law into practice: An ethnographic exploration of the systemic processing of legally restricted health care access for asylum seekers in Germany. *International Journal for Equity in Health*, *23*(1), 208. https://doi.org/10.1186/s12939-024-02251-y