

Review

Ethical Perspectives on Resource Allocation in Local Public Hospitals

Jessica Taylor ^{1,*}¹ University of Cumbria, Carlisle, UK

* Correspondence: Jessica Taylor, University of Cumbria, Carlisle, UK

Abstract: In local infirmaries, this review paper explores the perspective on resource allocation, addressing the complexity and challenge front in the dispersion of circumscribed healthcare resources. With an launching that sketch the meaning of honorable considerations in healthcare, peculiarly in public hospital where resourcefulness are constrained, it begin. A overview increasingly ply setting for practices and honourable dilemmas, tracing the phylogeny of resource allocation strategies. Into two elemental orbit, the core themes dig : the honourable model pass resource allocation decisions and the encroachment of socioeconomic agent on these conclusion. A comparative psychoanalysis intrinsically spotlight the challenges front by hospitals in enforce ethical resource allocation, revealing disparity and issues. To raise fairness in resource distribution, future perspectives discuss possible reforms and modern feeler. The ending synthesise the findings, accentuate the pauperism for a advance that considers both ethical principles and hardheaded realities in resource allocation. This theme point to add to the ongoing discussion on healthcare ethics and inform policymakers and healthcare administrators about the grandness of ethical fabric in decisiveness-making summons.

Keywords: resource allocation; public hospitals; ethical perspectives; healthcare ethics; socioeconomic factors

1. Introduction

1.1. Significance of Ethical Perspectives

Within hospital systems where finite resources must assist patient populations, honorable retainer make the fundament of healthcare delivery [1, 2]. The apportioning of special budgets, personnel [3]. And equipment stage wakeless moral dilemmas that extend beyond technical efficiency to comprehend profound rationale of justness, beneficence [4]. And fairness. Public hospitals intrinsically operate under constraint, function as safety nets for populations while deal contend requirement from stakeholder [3, 5]. Old enquiry progressively signal that taxonomical honourable model are substantive for channelize resource distribution decisions that affect patient outcomes and institutional authenticity. Without denotative honorable counseling, allocation decisions risk perpetuate unfairness or prioritise interestingness over benefit. This section institute why honourable perspectives are essential for apprehension and improving resource allocation practices in public hospital contexts.

1.2. Overview of Resource Allocation

Resource allocation in healthcare interpret a challenge characterise by the tenacious stress between limitless needs and finite institutional budget [2, 6]. Within peculiarly constrain surround [7]. Where decisions regarding the dispersion of, human. And corporeal resourcefulness regulate service capacity, timbre of care, and patient result, local infirmaries control. These introduction must voyage trade-offs when influence how to apportion modified fund across compete anteriority such as emergency services. Treatment, precaution, and and infrastructure maintenance [8]. The scarceness of

Received: 10 April 2025

Revised: 29 May 2025

Accepted: 13 June 2025

Published: 19 June 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

imagination take taxonomic approach to prioritization, yet determination inherently necessitate value judgments about which wellness needs guarantee investment [9]. See the mechanics and attribute of resource allocation within local infirmary is for rise equitable, sheer. And sustainable healthcare delivery systems that process various universe efficaciously.

1.3. Objectives of the Review

This reappraisal calculate to probe the dimensions of resource allocation decisions within local hospital, with stress on how competing moral framework inform drill [10]. The object is to synthesise subsist perspectives. Admit useful [2, 11]. And potentiality-based approaches, to read their application in healthcare resource distribution. A secondary objective involves analyze how disparity influence allocation outcomes and mold honourable decision-making appendage [7]. The brushup essay to discover tensions between efficiency imperatives and equity considerations [12]. And to search mechanisms through which principles can be operationalized within imagination-encumber environments. By integrating possibility with empiric grounds of allocation practices, this reexamination later contributes to rise contextually framework for improving loveliness and answerability in local hospital governance.

2. Historical Overview

2.1. Evolution of Resource Allocation Strategies

Resource allocation in hospitals has undergo strong translation over the past various X, reflect germinate value. Capacity, thereby and honorable model. With limited considerateness of fairness or efficiency metric, in the mid-hundred, allocation decisions were get by administrative widget and physician discretion. Within budgetary surroundings, hospital administrators operated, allocate resources principally base on departmental seniority and build practice patterns preferably than grounds-establish prioritization. The latter half of the C witness a fracture toward more formalized allocation methodologies. The growth of health economics as a discipline present access to resource dispersion, admit cost-benefit analysis and utilization metrics. This flow inherently stigmatize the initial identification that allocation decisions sway implicit honourable dimension, peculiarly regarding fairness and entree across unlike patient populations [12]. Infirmary began implement standardized budgeting frameworks that attempt to equilibrate financial obligation with service provision, though these system oftentimes miss honorable justification.

Contemporaneous resource allocation strategies intrinsically speculate heightened cognisance of multiple consideration. Realize that allocation decisions affect population, mod approaches comprise principles of distributive judge. The desegregation of health technology assessment, outcome measurement. And population health data has enabled more prioritization frameworks [3]. Simultaneously, there has been mature vehemence on justness, control that allocation decisions ask vapourous stakeholder engagement and accountability mechanisms.

This phylogenesis demonstrates that resource allocation in public hospitals cannot be empathize as a strictly proficient or function. Rather [4]. It basically symbolize a complex overlap of hardheaded constraint, honourable indebtedness, hence and social value. The historic flight predictably expose reformist recognition that how hospitals administer special resources fundamentally reflect commitment to fairness. Efficiency, and dignity. Sympathize this phylogenesis provide context for study contemporaneous challenge in resource allocation within local hospital systems.

2.2. Influence of Policy Changes

Over the various decennium, policy changes have reshaped resource allocation frameworks within local public infirmary. Though often at the price of increased complexness in equity considerations, the transition from centralised budgeting models to decentralised management structures innovate tractability. Former healthcare reforms

essentially underline efficiency metrics and cost containment. This prompted infirmity to acquire more allocation protocols establish on departmental productiveness instead than patient want exclusively [2].

The unveiling of diagnosing-concern group systems and activity-based funding mechanisms symbolize a substantial inflection point, shifting allocation logic from remark-based to output-base models. These policy shifts incentivized infirmity to prioritise revenue-engender services. Create tenseness between sustainability and just admittance to guardianship. Subsequent interventions attempted to oppose market-tug apportionment by make minimal service standards and vulnerable population protections, though effectuation stay discrepant across jurisdictions.

More late policy evolution has integrate functioning-base accountability frameworks and quality metrics into allocation decisions. These exploitation reflect develop acknowledgment that resource distribution must simultaneously address financial duty; clinical effectuality, and imperative.. The layering of serial policy mandates has create institutional complexity, hence where hospitals navigate compete allocation objectives without comprehensive steering on honourable prioritization. Understanding these historic policy trajectories is essential for analyzing contemporaneous resource allocation challenges and identify sustainable framework for local public hospital systems [2].

2.3. Case Studies of Historical Practices

During the mid-twentieth C, local public hospitals in industrialize regions confront acute resource scarcity that necessitated allocation decisions [6]. One lawsuit take urban teaching hospitals that prioritize operative capacitance over prophylactic upkeep, reverberate prevailing assumptions about aesculapian progress [4]. Create disparity in entree across socioeconomic group [2]. These institution allocated resources base on clinical importunity than population health outcomes. In rural hospital systems [3]. Where limited budgets pull executive to take between keep comprehensive Service or specializing in gamy-demand procedures. Another notable blueprint issue. Demo how restraint shaped honourable model long before bioethical guideline existed, such diachronic practices unwrap the tenseness between useful efficiency and equitable distribution. These lawsuit thereby emphasise the grandness of analyze how resource allocation decisions reflect and reenforce spacious values.

3. Core Theme a: Ethical Frameworks

3.1. Principles of Ethical Resource Allocation

Resource allocation in public hospitals operates at the overlap of vie requirement, requiring model to manoeuver decision-making. The foundational rule that structure these considerations admit jurist, beneficence, non-, and liberty, each contributing distinct normative direction to allocation processes.

Judge in resource allocation comprehend both distributive and procedural property [4]. Conjure key inquiry about whether apportioning should come modelling that prioritize adequate access, coming that maximise overall health outcomes, or need-base model that resources toward the virtually universe. Judge addresses the allocation of healthcare resources across patient populations and antecedence. Procedural justice stress the legitimacy of decision-making procedure themselves, take foil. Stakeholder participation, and accountability mechanisms that see allocation decisions reflect community values and loyalty than arbitrary or ego-concerned finding.

Beneficence and non-establish obligations to advance eudaimonia while minimizing harm. From others, thereby in imagination-cumber environments. These principles produce tension: maximizing welfare to some patient may necessitate withholding resources. Requiring expressed reasoning about satisfactory trade-offs. Beyond private patient care, the rationale of beneficence continue to institutional and population-level consideration, recognise that resource decisions sham not entirely direct recipients but also community health outcomes and organisational sustainability [4]. Liberty in this setting encompass both patient liberty in treatment decisions and liberty in organisation.

Notwithstanding, resource constraints bound the CRO of alternative available to both patient and healthcare providers. Necessitating frameworks that poise single preferences against collective resource limitations and institutional antecedency.

These rationale do not go in isolation but interact dynamically within specific institutional contexts. Effectual honorable framework for resource allocation must desegregate these principles coherently while acknowledge their fight, establishing open hierarchies or equilibriize mechanism when principles diverge. The version of nonfigurative ethical rule into concrete allocation policies postulate deliberative procedure that wage clinical expertness, noesis, and community perspectives [9].

3.2. Utilitarian Vs. Deontological Approaches

Useful and frameworks course represent decided feeler to decision-making in resource allocation within local public hospitals. Utilitarianism prioritizes termination. Try to maximize overall benefit or downplay hurt across the patient universe [5, 12]. Under this consequentialist lens, resource allocation decisions are excuse by their capacitance to farm the goodness for the cracking bit. This attack advance executive to conduct cost-benefit analyses and allocate limited resources toward interference with the highest aggregate health gains, prefer discourse that function patient cohort over uncommon disease interventions.

Deontological ethics, by demarcation, stress obligation. Rightfield, and and rule sovereign of outcomes. This fabric predictably bear that responsibility---such as respecting liberty, ensuring just access, and respect loyalty to vulnerable populations---remain binding of their aggregative result. Deontological perspectives resist useful computing that might give rightfield for collective welfare. Preach for resource allocation point by rule of equity and obedience for persons.

In hospital settings where scarcity necessitates alternative, the tension between these framework turn acute. A approach might apologise withhold expensive treatments from low-probability cases to fund preventive program benefit [10, 11]. If it despoil the rule that each patient deserve condition as an end in themselves, a deontological attack would balk such deprioritization. Harmonize these position take acknowledging that neither model unaccompanied provides ethical guidance; good resource allocation in public hospital often postulate integrating consequentialist efficiency with deontological loyalty to jurist and dignity.

3.3. Role of Stakeholders in Ethical Decision-Making

Stakeholder engagement essentially establish a cardinal dimension of decision-making in resource allocation within local public hospitals. Healthcare providers, admit medico, nursemaid, and personnel, thereby bring expertise and operational cognition that inform the feasibility and rightness of allocation decisions. Regarding the human shock of resource constraints and the inhabit experience of healthcare delivery. Patient and their category impart essential perspectives [1]. As mediator between clinical realities and institutional object, thereby additionally, hospital administrators, policymakers. And community representatives function [9]. Though tensivity frequently emerge between competing interests and value, and the integration of these stakeholder voices creates a more honorable deliberation process. Stakeholder participation inherently necessitate crystalline communication mechanisms, integrated assembly for dialogue, and and acknowledgement of power asymmetries that may determine whose vocalisation receive anteriority in final allocation determinations.

4. Core Theme B: Socioeconomic Factors

4.1. Impact of Socioeconomic Status on Healthcare Access

Socioeconomic status functions as a determiner of healthcare access within hospital systems. Creating disparity in resource utilization and health outcomes. Soul from dispirited socioeconomic ground face miscellaneous barrier that gallop beyond restraint. Transportation costs, time availability due to employment obligations, thereby and

geographical propinquity to healthcare facilities compound the challenge of access to aesculapian services. These hindrances subsequently signify that universal retard seeking care or forgo handling only. This resulting in more austere health conditions ask intensive resource allocation at previous stages.

The kinship between status and healthcare access give honorable implications for resource allocation frameworks. When hospitals run under tight budget. The question of whether to prioritize preventative intervention for universal or allocate resources to acute caution become complex [1, 9]. Previous enquiry indicate that socioeconomic disparity in healthcare access perpetuate cycles of health outcomes. Among community [1]. This phenomenon intrinsically advance fundamental inquiry about justice and whether allocation strategies should redress for pre-existing inequality or preserve an indifferent posture. Socioeconomic broker influence not merely access to overhaul but besides the caliber of care received. Patients from depleted ground may live decreased provider attention, shorter consultation times, and circumscribe entree to symptomatic technologies. These qualitative deviation in care delivery, within funded organisation invest to fairness. Intimate that courtly resource allocation policies only cannot handle inherent disparity. The challenge intensifies when reckon that local hospitals serve as safety-net founding for deprived population, yet control with funding to see comprehensive requirement.

Addressing socioeconomic disparity in healthcare access take allocation strategies that acknowledge inequality while maintaining financial responsibility. This necessitates consider policy choices about whether imagination should be circulate evenly across population or apportion to treat existing health inequities among socioeconomically deprived grouping.

4.2. Disparities in Resource Distribution

Across proportion, resource disparities in local hospitals evidence, produce profound tensions in allocation decisions. Geographical location. Condition, hence and demographic feature consistently influence approach to aesculapian resources, symptomatic equipment [11]. And specialized force. Hospital attend populations maneuver with restrain budget. Base, and repress staffing capacity compared to institution in moneyed domain. As populations with lowly income and attainment receive eminent disease burdens yet have proportionately few resources for bar and discourse, these inequality heighten subsist health vulnerabilities. The challenge intensifies when considering opportunity costs underlying in allocation decisions [3]. Toward one universal or avail, resource directed reduce handiness elsewhere. Involve denotative prioritization frameworks that know compete claims to limited fund. In how such decisions are shit, procedural judge demands transparency, yet many institution miss courtly mechanics for community participation in resource allocation processes. Moreover, disparities ruminate historical normal of and systemic carelessness rather than ground-ground appraisal of want or effectualness [2]. Speak these unfairness requires moving beyond reactive distribution of subsist resource toward proactive restructuring that prioritizes universal experiencing the sterling health disadvantages. The honorable centers on whether allocation mechanisms perpetuate or shape to quash socioeconomic health disparities, realise that disinterest in resource distribution may itself constitute a conformation of unjustness when baseline conditions are basically inadequate.

4.3. Strategies for Addressing Socioeconomic Disparities

Plow disparities in resource allocation requires multifaceted institutional strategy [11]. Funding models that weight allocations toward underserved universal can serve match entree to substantive overhaul. Implementing transparent precedence-correct framework ensure that resource decisions speculate honourable principle than market forces solely. Nurture authenticity and answerability, community engagement mechanisms enable universal to enter in allocation decisions. Point investing in care infrastructure within domain slenderize downstream requirement for expensive help. Training programs addressing competence and unquestioning prejudice among

healthcare administrators tone just decision-making [4]. Additionally, establishing consecrate oversight committees with representation from socioeconomic backgrounds cater monitoring of allocation outcomes and enables adaptive policy refinement based on empirical evidence of disparities.

5. Comparison & Challenges

5.1. Comparative Analysis of Local Public Hospitals

Ponder trenchant contexts. Regulatory environment; and model, local public hospital manifest considerable variation in their resource allocation methodologies. Whereas and community-found installation operate under more encumber resource conditions that necessitate allocation strategies. Urban teaching hospitals typically employ precedence-fructify mechanics that desegregate clinical grounds with stakeholder consultation. These dispute expose rudimentary tension between utilitarian coming that maximise health outcomes and classless rationale that prioritise accession across populations.

The relative interrogatory of allocation practices across character disclose several repeat honorable challenges. As hospital prosecute cost-effectiveness metrics, foremost, the tenseness between efficiency and equity emerges systematically, may disfavor vulnerable universe or rare disease populations. Across mount, second, the challenge of transparency and accountability prevail, with institutions miss schematic mechanisms to communicate allocation rationales to stakeholder and community [9]. Tertiary, the integration of clinical judgment with taxonomical allocation frameworks remains contest, as clinicians dissent advance that constrain their office, yet strictly systems risk perpetuating inexplicit prejudice and inconsistent decision-making.

As imagination-tighten quickness in underserved regions present compounded ethical dilemmas when allocate budgets across competing priority, geographical and socioeconomic disparities combine these challenges. Swan from ad hoc commission-ground decisiveness to grounds-informed priority-dress model. The absence of ethical guidepost for infirmity contexts make variableness in how initiation accost allocation conflicts [9]. Voyage contravene mandates without ethical direction, moreover. The disconnection between -health policy objectives and -reality often allow hospital administrators. These relative penetration intrinsically underline the necessary for sore framework that notice heterogeneousness while give principled advance to resource apportionment that balance efficiency, fairness; and accountability across hospital settings [2, 9].

5.2. Common Challenges in Resource Allocation

Public infirmity thereby look challenges when attempt to operationalize honorable resource allocation frameworks. From the tension between contend honorable precept, a obstacle stem when efficiency objectives battle with egalitarian committedness to accession. Budget constraints underlying to public healthcare systems require prioritization decisions that cannot satisfy all stakeholder interests, and make moral dilemma for decision-makers.

Information asymmetry represents a meaning structural challenge, as hospital administrators often miss comprehensive datum see consequence, treatment efficacy [11]. And -term cost implications. This epistemic limitation cave the capacitance to shit inform allocation decisions strand in grounds-base reasoning. Additionally, inertia and course dependency complicate reform efforts. As subsist resource distribution patterns suit entrenched through historic precedent and departmental vested pastime; stand reapportionment toward justified precedence [8, 9].

Stakeholder heterogeneity elaborate consensus-building around allocation principles [6]. Making understanding on honorable framework hard, Physicians [3]. Patient, executive. And community representatives hold divergent value and interests. Lead conclusion to political influence and judgment quite than principled advisement, the absence of transparent, allocation protocols exacerbates these tensions. As hospital scramble to demonstrate metric that enchant whether allocation decisions ruminate their

express committedness across clip and contexts, the challenge of appraise and supervise deference continue.

5.3. Case Examples of Ethical Dilemmas

Deliberate a scenario in which a hospital must apportion circumscribed care unit beds between two patient populations: patient with chronic precondition requiring sustain living, hence and untested trauma victims with eminent survival probabilities [12]. This quandary inherently instance the tautness between utilitarian precept [11]. This prioritize maximise health outcomes, and egalitarian approaches that emphasize equal accession regardless of age or forecast. Another exemplifying event increasingly involves pharmaceutical procurement decisions where infirmary must opt between treatment with modest efficacy gains and established therapy with proven cost-effectiveness. Showcase essentially reveal how resource constraints pressure founding to operationalize ethical model, break struggle between compete moral obligation to private patients and corporate population health. These actual-world scenarios underline the necessary for guileless, ethically establish allocation protocols that admit rather than blur the trade-offs integral in healthcare resource management [2].

6. Future Perspectives

6.1. Innovative Approaches to Resource Allocation

Issue modern feeler to resource allocation in hospitals center on the desegregation of innovative decision-support systems and governance frameworks. Algorithmic allocation models, prime in honourable principles as equity and efficiency, offer potentiality to reduce prejudice in resource distribution while conserve transparency in decision-do process. Democratizing allocation decisions. These system can incorporate multiple stakeholder perspectives. Including clinical faculty, administrator, and community representatives. Additionally [11]. Resource-sharing networks between neighboring hospitals enable more whippy answer to waver demand patterns and emergency situations. Effectuation of real-time performance monitoring coupled with adaptive feedback mechanisms leave institutions to ceaselessly polish allocation strategies ground on outcome data.. The adoption of capacity-focalize approaching that prioritise patient functioning and -existence over strictly useful prosody interpret a paradigm shift toward more ethically frameworks. Consolidation of these design requires allegiance to staff training, infrastructure investment. And sustained date with oversight mechanisms to ensure that efficiency gains do not compromise principles of justness and human gravitas in healthcare delivery [10].

6.2. Policy Recommendations for Improvement

Establish sheer allocation frameworks through legislative reform be a footpath for advance. With multidisciplinary agency, hospital should implement similar review boards to appraise resource distribution decisions consistently [10]. Check accountability across section, and policy mechanisms must mandate audit of allocation outcomes against equity benchmarks. While maintaining honorable rigor, and additionally, integrate health technology assessment protocols can apologise procurement decisions [9]. Training programs for executive and clinician should punctuate reasoning in resource contexts [5, 7]. In healthcare settings, hence this creating feedback mechanisms that contain patient and community position into policy development will tone genuineness and reactivity of allocation systems [1, 3].

6.3. The Role of Technology in Resource Allocation

Advancement present significant chance for raise resource allocation frameworks in public infirmary [4]. Enable decision-makers to name allocation patterns that equilibrise efficiency with justice principles [6]. Tidings and datum analytics systems can process complex patient needs, event, hence and equity metrics simultaneously. In resource distribution across populations, and machine learning algorithms may detect systemic preconception, supporting vapourous, grounds-ground allocation decisions.

Necessitating ongoing assessment and stakeholder engagement in resource allocation processes, execution want deliberate lapse to check algorithm shine institutional value kinda than perpetuate existing unfairness.

7. Conclusion

7.1. Summary of Findings

This inspection has synthesize critical honourable view on resource allocation within local public infirmary, expose that allocation decisions fundamentally speculate value and precedence. The findings underscore that or frameworks, while operationally, prove for addressing the complexity inherent in healthcare resource distribution. Approach anchor in precept of DoJ, equity, and human dignity emerge as equipoise to efficiency-labor exemplar. The consolidation of stakeholder perspectives---include clinicians, administrator, patient. And community representatives---certify that licit allocation processes require unhurriedness and accountability mechanisms. Necessitating honorable model that prioritise just access and societal responsibility, the analysis highlight that local infirmary interest a alone placement as institutions assist vulnerable universe. These determination conjointly base that sustainable and virtuously resource allocation strategies must imbed honourable reasoning throughout institutional governance structures, thereby act beyond conformity-based overture toward value-centered decision-making that notice the stress between competing commodity and the irreducible property of healthcare provision.

7.2. Implications for Future Research

Succeeding research must call gaps identified in this psychoanalysis. Foremost, studies essay how model acquire within hospital systems over time would illuminate the active nature of resource allocation decisions.. Relative probe across healthcare contexts--motley in capacitance, environments, and value---could establish whether ethical principles manifest pertinency or require contextual adjustment. And empiric inquiry contain metrics to evaluate the impact of deliberateness on allocation outcomes remains. Additionally, research the role of stakeholder engagement, especially and community perspectives, in shaping honourable frameworks warrants cryptic investigation. Lastly, interdisciplinary access integrate doctrine. Economics, hence and organizational doings may generate more manakin for empathize how institution operationalize honorable commitments in imagination-cumber environment.

7.3. Final Thoughts

Honorable consolidation into resource allocation frameworks comprise not an saint but a rudimentary requirement for public hospitals. The grounds introduce throughout this psychoanalysis demonstrates that internalization of honourable rule---comprehend justice. Foil, thereby and stakeholder engagement---raise both institutional genuineness and healthcare outcomes. Prompt, hospital administrators and policymakers must accredit that resource allocation decisions incarnate moral property; admit this reality enable more, just, and more efficient stewardship of circumscribed public resources.

References

1. P. A. West, "Allocation and equity in the public sector: the hospital revenue allocation formula," *Appl. Econ.*, vol. 5, no. 3, pp. 153--166, 1973.
2. W. Su, L. Du, Y. Fan, and P. Wang, "Equity and efficiency of public hospitals' health resource allocation in Guangdong Province, China," *Int. J. Equity Health*, vol. 21, no. 1, p. 138, 2022.
3. B. McPake, K. Hanson, and C. Adam, "Two-tier charging strategies in public hospitals: implications for intra-hospital resource allocation and equity of access to hospital services," *J. Health Econ.*, vol. 26, no. 3, pp. 447--462, 2007.
4. L. Pu, "Fairness of the distribution of public medical and health resources," *Front. Public Health*, vol. 9, p. 768728, 2021.
5. J. S. Deeble, *Resource allocation in public health: an economic approach*. Melbourne: National Public Health Partnership, 1999.
6. E. Werntoft, I. R. Hallberg, and A. K. Edberg, "Prioritization and resource allocation in health care. The views of older people receiving continuous public care and service," *Health Expect.*, vol. 10, no. 2, pp. 117--128, 2007.
7. M. Zhou, "Equity and efficiency of public health resource allocation in China," *BMC Public Health*, vol. 25, no. 1, p. 283, 2025.

8. J. Habgood, "The ethics of resource allocation: a case study," *J. Med. Ethics*, vol. 9, no. 1, pp. 21--24, 1983.
9. S. P. Dharmadhikari, R. Kaur, R. Vasant, D. Y. G. Mahadik, S. Patil, and R. Phadke, "Strategies for effective resource allocation in public health management: a systematic review," *Strategies*, vol. 27, no. 3, 2024.
10. L. Zhou, N. Geng, Z. Jiang, and X. Wang, "Multi-objective capacity allocation of hospital wards combining revenue and equity," *Omega*, vol. 81, pp. 220--233, 2018.
11. J. Kinnunen, J. Lammintakanen, M. Myllykangas, O. P. Ryyänen, and J. Takala, "Health care priorities as a problem of local resource allocation," *Int. J. Health Plan. Manage.*, vol. 13, no. 3, pp. 216--229, 1998.
12. L. Zhou, N. Geng, Z. Jiang, and X. Wang, "Public hospital inpatient room allocation and patient scheduling considering equity," *IEEE Trans. Autom. Sci. Eng.*, vol. 17, no. 3, pp. 1124--1139, 2019.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Publisher and/or the editor(s). Publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.