

How Much Error Detection Can Healthcare Institutions Fairly Ask of Patients? Unequal Capacity for Vigilance and the Ethical Limits of Participation in Medication Safety

Daniel Kim^{1*}, Emma Wright², Luca Moretti³

¹Department of Antimicrobial Stewardship and Clinical Pharmacy, Yonsei University, Seoul, South Korea.

²Department of Pharmacy Practice and Infectious Diseases, University of Edinburgh, Edinburgh, United Kingdom.

³Department of Clinical Pharmacy and Antimicrobial Optimization, University of Milan, Milan, Italy.

*E-mail ✉ daniel.kim@yonsei.ac.kr

Abstract

Patients can contribute to medication safety by questioning discrepancies, noticing unexpected changes, reporting adverse effects, checking medicines and alerting professionals to possible errors. Yet an invitation to participate can become ethically problematic when healthcare institutions begin to depend on patients to detect failures that professional and organizational safety systems should themselves prevent or identify. This article develops a normative Fair-Participation Test for distinguishing supportive patient participation from unfair transfer of medication-safety responsibility. Drawing on recent evidence concerning patient engagement, health literacy, treatment burden, responsabilisation, vulnerability, safety reporting and organizational participation, the analysis separates patient agency from institutional accountability. Five considerations are central: preservation of an adequate institutional safety baseline; genuine voluntariness; task-specific patient capacity; the incremental burden imposed by vigilance; and reciprocal institutional support and response. These considerations operate configurationally rather than as a numerical score. Unequal capacity means that identical vigilance requests can impose materially different burdens, while high capability does not by itself make institutional duties delegable. Patient participation is ethically defensible when it adds supported redundancy, preserves choice and leaves professional detection, verification and escalation responsibilities intact. It becomes burden shifting when safe care becomes practically dependent on patient vigilance, especially when nonparticipation attracts blame, avoidable risk or reduced access to appropriate response.

Keywords: Patient participation, Medication safety, Patient vigilance, Treatment burden, Patient autonomy, Institutional responsibility

Introduction

Patient participation has become an established component of contemporary patient-safety policy and practice. Interventions invite patients and families to ask questions, verify information, identify discrepancies and report concerns, although trial evidence remains heterogeneous and high-intensity engagement is not

consistently represented [1]. Hospital research likewise shows that most participation strategies operate close to the point of care, while organizational and system-level involvement is less developed [2]. This distribution matters because medication safety is simultaneously a patient-facing and institutional activity: patients may notice signals inaccessible to professionals, yet the systems generating, prescribing, dispensing and monitoring medicines remain professionally governed. Patients and caregivers themselves often describe safety in relational terms involving partnership, communication, accountability and responsiveness [3]. Their participation may therefore strengthen safety without implying that they should bear responsibility for professional or system failures. The ethical difficulty begins when these two ideas are blurred. A patient may

Access this article online

<https://smerpub.com/>

Received: 14 March 2026; Accepted: 04 June 2026

Copyright CC BY-NC-SA 4.0

How to cite this article: Kim D, Wright E, Moretti L. How Much Error Detection Can Healthcare Institutions Fairly Ask of Patients? Unequal Capacity for Vigilance and the Ethical Limits of Participation in Medication Safety. Ann Pharm Educ Saf Public Health Advocacy. 2026;6(1):154-63. <https://doi.org/10.51847/XRlr87V8Oy>

be invited to identify an incorrect medicine, an unexpected dose, an omitted monitoring test or an unexplained change. The same invitation can represent welcome agency in one context and an implicit transfer of error-detection work in another.

The central question is consequently not whether patients should participate. It is how much vigilance healthcare institutions may fairly ask patients to perform, under what conditions such participation remains genuinely voluntary, and which safety functions remain institutional even when patients are willing and capable contributors. The argument developed here addresses that allocation problem through a Fair-Participation Test.

Patient participation in medication safety

Participation in medication safety is broader than error detection. Consumers may contribute to intervention design, communication, medicine reconciliation, treatment decisions, monitoring and escalation. A review of consumer involvement in primary-care medication-safety interventions found substantial variation in when and how patients contributed, including differences in the depth and continuity of involvement [4]. Treating every form of participation as equivalent would obscure the distinctive ethical demands created when patients are expected to identify professional or organizational mistakes.

Medication transitions make this distinction visible. Older adults with chronic disease describe active medication-safety behaviours after discharge, but their ability to perform them depends on understandable information, continuity, professional communication and the practical conditions in which medicines must be managed [5]. Vigilance is therefore not simply a dispositional characteristic possessed by an attentive patient. It is partly produced by the surrounding care system.

That point is reinforced by intervention research. A structured Patient for Medication Safety programme combining medication reconciliation, education and continuing support was feasible in a pilot randomized study of older adults moving from hospital to home [6]. Its importance for the present argument lies less in demonstrating definitive clinical effectiveness than in showing that opportunities for participation can be deliberately supported. Institutions consequently face an ethical distinction between enabling patients to contribute and presuming that patients will compensate for safety gaps without equivalent support.

Participation should thus be understood as a family of possible patient roles whose ethical status depends on the task involved. Asking a patient to voice a concern about an unfamiliar tablet is different from designing care so that the patient becomes the final reliable detector of dispensing, prescribing or monitoring failures. The first may add redundancy to a functioning safety system. The second may convert participation into dependency.

Distinguishing participation from transfer of institutional responsibility

Collaborative safety work does not require a transfer of ultimate accountability. Patients, carers, general practitioners and pharmacists have successfully co-designed practical patient-safety guidance, demonstrating that institutional expertise and patient knowledge can be combined without collapsing their respective roles [7]. Such collaboration allows patients to contribute information that professionals may lack while professional systems retain responsibility for interpreting, verifying and responding to safety concerns. Empirical evidence also shows why that distinction requires explicit protection. Patients and professionals have described negative consequences of participation that include diminished confidence, changes in the therapeutic relationship, increased professional time and, critically, a sense that excessive responsibility has been placed on patients [8]. These findings do not establish that participation is intrinsically harmful. They establish that participation has a distributional structure: work, uncertainty and accountability can move between actors. Some of these harms can be mitigated. Structural, cultural, educational, emotional and practical actions have been proposed to reduce adverse consequences of patient participation [9]. The need for mitigation itself is ethically informative. If a programme requires patients to monitor safety, reciprocity requires more than simply telling them to be alert. It requires understandable information, recognition of concerns, feasible channels for escalation and timely professional response.

The burden of vigilance becomes especially salient under vulnerability. Acute medical patients have been described as undertaking both “risk work” and “relational work” when attempting to contribute to safety while dependent on professionals for care [10]. They may have to decide whether something is sufficiently abnormal to question, whether speaking up could damage a relationship, and whether the professional response will

justify the effort. The requested action can therefore carry costs even when no physical task appears demanding. Responsibility transfer occurs when patient participation ceases to function as supplementary safety capacity and instead becomes necessary for the institution's own safety obligations to be fulfilled. This is a functional distinction. A programme may continue to describe vigilance as optional while simultaneously designing care so that missed patient detection leaves no reliable professional backstop. In that configuration, the language of partnership can conceal a shift in where safety failure is expected to be caught.

Ethical foundations: Autonomy, justice, non-maleficence and reciprocity

Autonomy supports opportunities for patients to participate in medication safety, but autonomy also requires a meaningful possibility of declining. Digital-health scholarship has shown how practices presented as empowerment can become forms of responsabilisation when individuals are increasingly expected to monitor, interpret and manage health risks themselves [11]. Applied to medication safety, the relevant question is whether vigilance expands patient agency or makes safe care conditional on additional unpaid and unchosen monitoring work.

Justice introduces a second requirement. Health-literacy research demonstrates that the ability to access, interpret and use health information has ethical dimensions involving autonomy, fairness and rights [12]. A formally identical request to “check your medicines carefully” may therefore create very different burdens. A patient who can easily identify a discrepancy, access records and contact a clinician occupies a different practical position from someone facing language barriers, cognitive fatigue, financial strain, fragmented records or limited

access to professional advice. Equal wording does not guarantee equal opportunity to act.

Justice must also remain epistemic. Patients may possess knowledge about symptoms, routines, treatment histories and medication effects that professional systems overlook. Work on epistemic justice in healthcare shows why partnership should protect the credibility of such knowledge rather than treating patients merely as recipients of expert instruction [13]. A fairness test must therefore avoid a paternalistic conclusion in which concerns about burden become a reason to silence patients. Protecting patients from unfair responsibility and respecting patient knowledge are compatible commitments.

Non-maleficence directs attention to harms produced by the participation arrangement itself. These may include anxiety, confusion, strained relationships, excessive self-surveillance, delayed escalation or misplaced blame when an error is missed. Avoiding these harms does not require removing participation. It requires examining whether the requested vigilance is proportionate to the patient's circumstances and whether institutional safeguards remain active.

Finally, reciprocity concerns what the institution owes when it asks a patient to contribute. Responsibility theory distinguishes being involved in an action from the conditions under which a person can reasonably be held responsible for it [14]. In medication safety, the institution that asks a patient to notice and report risks incurs corresponding obligations: information must be usable; concerns must be heard; response pathways must be accessible; and professional verification must remain available.

These ethical principles produce different judgments depending on how the participation relationship is configured. The relevant contrast is captured in **Table 1**.

Table 1. Ethical status of patient vigilance under different medication-safety responsibility arrangements

Vigilance arrangement	Patient role	Institutional safety baseline	Voluntariness	Capacity assumption	Distribution of burden	Reciprocity requirement	Ethical reading
Optional safety redundancy	Patient may notice or report an apparent discrepancy	Full professional detection, verification and escalation remain active	Declining has no penalty	No presumption of special expertise	Minimal additional work expected	Clear route for questions and acknowledgement	Generally compatible with fair participation
Supported active vigilance	Patient is invited to check defined aspects of the medication process	Institutional controls remain primary	Participation is actively offered but remains revisable	Capability is supported through understandable information and access	Additional work is explicit and kept proportionate	Prompt professional verification and response	Potentially fair when support matches the requested task

Conditional co-monitoring	Patient and professionals each monitor different information available to them	Professional system retains responsibility for its own controllable processes	Choice is preserved, but patient contribution may be clinically valuable	Capacity is assessed in relation to the specific task and context	Work may be substantial and requires continuing support	Responsibilities, escalation and fallback arrangements are explicit	Fair only while contribution remains genuinely collaborative
Substitutionary vigilance	Patient becomes the practical backstop for detecting professional or system failures	Institutional control is absent, unreliable or functionally dependent on patient detection	Refusal or failure exposes the patient to avoidable risk or blame	Capability is assumed because participation is possible	Safety work is displaced onto the patient	Institutional response occurs only after the patient identifies the failure	Burden shifting; ethically unacceptable where institutional duties are being displaced

Table note: These are proposed ethical configurations derived from the argument. They are not validated categories, numerical thresholds or a hierarchy of patient engagement.

Unequal capacity for vigilance

Capacity for vigilance should not be treated as a fixed individual trait. A controlled evaluation of a patient-safety application found improvement in safety knowledge, self-efficacy, willingness and participation-related measures among intervention participants [15]. This indicates that at least some components of participation capability can respond to design and support. The relevant ethical question is therefore not simply whether a patient “has capacity,” but what the requested task demands and what institutional resources make performance realistically possible.

Context can also change the meaning of participation. An integrative review of psychiatric hospital care highlights distinctive tensions involving autonomy, vulnerability, safety and responsibility [16]. Similar caution applies outside psychiatry whenever illness severity, distress, cognitive impairment, coercive circumstances or dependence on clinicians alters a patient's practical freedom to challenge care. A fairness standard that assumes stable willingness and capability would obscure precisely the circumstances in which participation risks becoming coercive.

Health literacy and willingness also interact with safety behaviour. Cross-sectional inpatient research has found relationships among health literacy, safety perception, willingness to participate and participation behaviour [17]. These associations cannot establish a causal sequence, but they show why participation cannot be interpreted as a simple indicator of motivation. Someone who does not question a medication may lack relevant information, confidence, opportunity or a credible expectation that speaking up will produce a useful response.

Qualitative evidence from multimorbidity care makes the same point at a broader level. Capacity can be constrained by treatment complexity, financial resources, cultural context, access to care and available social support [18]. “Capacity for vigilance” is therefore best understood as task-specific and relational: the patient's current ability to notice, interpret and escalate a potential medication-safety problem within the actual conditions of care.

Justice follows directly from this heterogeneity. A programme that places identical vigilance expectations on all patients may produce unequal burdens because the effort required to satisfy those expectations differs. Fair participation consequently requires adjustment to capacity without making lower capacity a reason to exclude patients from having a voice.

The burden of detecting professional/system errors

Medication vigilance adds work to treatment that may already be demanding. Treatment-burden research describes patient work as extending beyond the physical administration of medicines to include appointments, monitoring, coordination, information management and the social, emotional and financial consequences of care [19]. Error detection can add a further layer: patients may be asked to remember what should have happened, compare that expectation with what actually happened, interpret discrepancies, decide whether they are dangerous and determine how to obtain a response.

Uncertainty increases this burden. Ethnographic work in advanced multimorbidity shows how uncertainty can intensify practical and cognitive treatment work relative to available capacity [20]. Medication-safety vigilance frequently begins in precisely this uncertain state. A changed tablet, dose or instruction may represent an

error, an intentional clinical decision, a substitution, a documentation problem or an appropriate response to new information. Institutions that encourage vigilance without providing rapid clarification effectively transfer part of that interpretive uncertainty to the patient.

The resulting burden is unlikely to be evenly distributed. In primary-care multimorbidity, higher treatment burden has been associated with factors including limited health literacy, financial difficulty and increasing treatment complexity [21]. Population evidence among older adults likewise shows variation in burden according to morbidity and functional circumstances [22]. Neither study permits a moral verdict about an individual patient. Together, however, they undermine the assumption that an additional safety task has the same practical cost for everyone.

The concept proposed here is incremental vigilance burden: the additional cognitive, practical, emotional, relational and resource-consuming work created specifically because the patient is asked to monitor for, interpret or escalate possible medication-safety failures. This burden can be low and acceptable. It can even be welcomed by patients who prefer an active role. It becomes ethically salient when the work is substantial, poorly supported, unequally distributed or necessary because institutional controls are inadequate.

Development of the fair-participation test

A patient who notices a possible medication problem performs several analytically distinct acts. Hospital research on patient safety shows that identifying a risk, deciding whether it lies within one's own capacity to manage, escalating it and pursuing a complaint are separate steps [23]. Medication-safety programmes often compress these acts into a single expectation to "speak up." Ethical evaluation improves when the tasks are separated: noticing an anomaly, interpreting its significance, communicating concern, seeking verification and correcting the underlying failure do not carry the same demands or responsibilities.

The Fair-Participation Test begins with the institutional-duty baseline. Before asking what the patient can contribute, the institution must establish whether professional detection, verification, monitoring and escalation functions that fall within its control remain adequately performed. Patient vigilance can supplement this baseline. It cannot ethically serve as the unacknowledged substitute for a missing baseline.

The second consideration is practical voluntariness. Participation is not meaningfully voluntary when declining creates blame, reduced responsiveness, impaired access or avoidable exposure to a risk the institution could reasonably manage. An invitation must therefore be judged by the consequences of saying no, not merely by whether consent language was used.

Third, the requested vigilance must fit task-specific capacity. Relevant capacity includes comprehension, memory, communication, access to records, digital access, time, emotional resources, confidence, social support and the ability to reach an appropriate professional. These resources vary over time and across tasks. No single demographic characteristic, diagnosis or literacy measure should function as a proxy for the whole assessment.

Fourth, institutions must examine incremental burden. A modest request with a clear answer and effortless escalation differs morally from prolonged monitoring, repeated checking or responsibility for resolving ambiguity. Existing treatment workload matters because the same additional task may be trivial in one context and destabilizing in another.

Fifth, fair participation requires reciprocity. Institutions that invite vigilance must be prepared to receive it. Information should be usable, patient concerns should receive appropriate epistemic weight, escalation routes should be reachable, and professional verification should follow when the patient identifies a possible problem. A system that asks patients to watch but provides no dependable response converts participation into surveillance without reciprocal protection.

These considerations are configurational. They should not be added into a score in which strength on one dimension automatically compensates for failure on another. A highly capable patient may willingly perform extensive monitoring, yet that willingness does not erase a professional duty that should remain institutional. Conversely, a low-burden request can remain fair even when patient capacity is modest if the task is optional, well supported and backed by reliable professional controls.

The resulting distinction is between supported redundancy and substitutionary vigilance. Supported redundancy exists when patient participation adds another opportunity to notice risk while the institution remains capable of safe operation if the patient misses the signal. Substitutionary vigilance exists when patient detection has become the practical condition for

correcting an error that institutional processes should themselves identify or manage.

Figure 1 represents this normative field by showing how institutional baseline duties, voluntariness, capacity,

burden and reciprocity jointly alter the ethical status of a vigilance request.

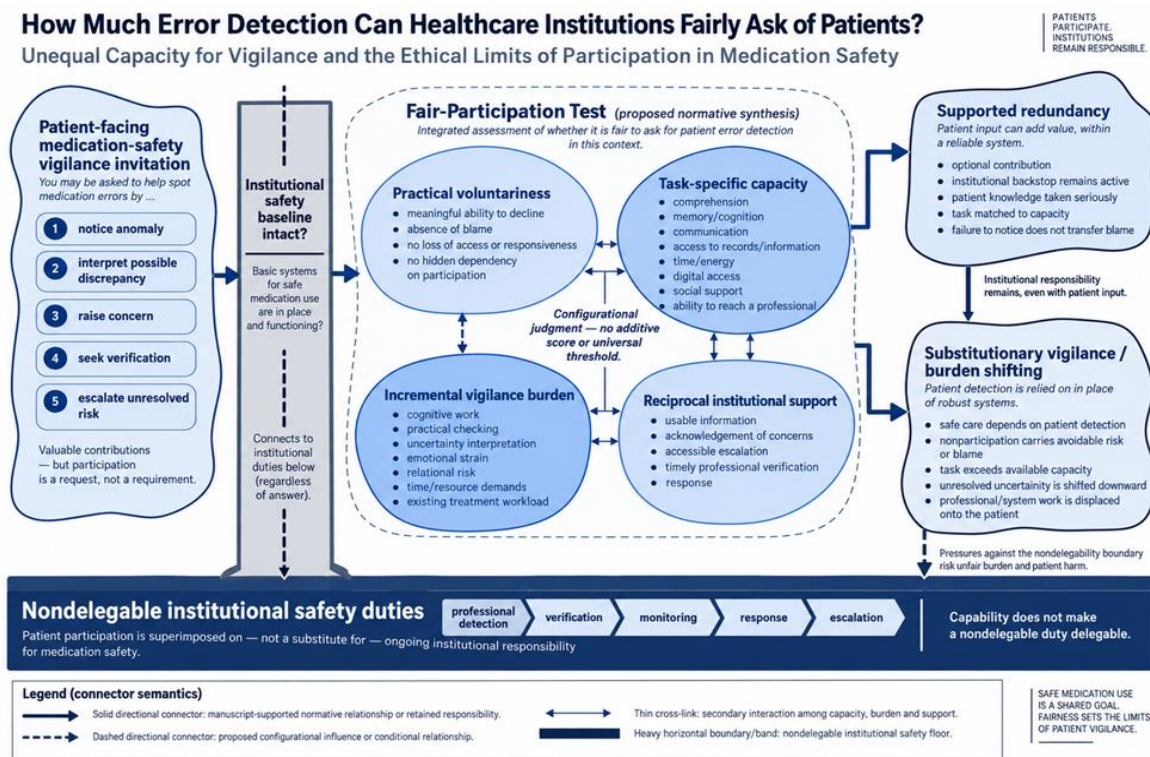


Figure 1. Fair-participation field for allocating medication-safety vigilance without transferring institutional safety duties

Conditions under which patient vigilance may reasonably be invited

Patient vigilance is most defensible when the invitation preserves genuine choice and the requested task is proportionate to what the patient can reasonably do. Evaluation of a co-designed primary-care safety guide found that patients and carers differed in willingness and perceived ability to undertake safety activities, with some regarding particular actions as additional work or as responsibilities belonging primarily to professionals [24]. Reluctance should therefore not be interpreted automatically as deficient engagement. Under the Fair-Participation Test, declining an invited safety role must remain compatible with receiving appropriately safe care.

The conditions surrounding an invitation are equally important. Hospital patients and companions have described communication, interpersonal relationships

and the clinical environment as shaping opportunities to participate in safety [25]. A reasonable vigilance request consequently requires an intelligible task, an accessible professional response and a credible route for escalating uncertainty. Supported programmes show that institutions can modify at least some of these conditions [6]. Co-design can also make patient-facing safety practices more responsive to actual needs [7], while institutional mitigation can address foreseeable emotional, practical and relational costs [9]. The ethically relevant configuration is therefore one of supported redundancy. The patient contributes information or detection capacity that may improve safety, while professional systems remain capable of detecting, verifying and responding to the underlying problem if the patient does not.

Conditions under which it becomes burden shifting

Participation moves toward burden shifting when institutional reliance on patients exceeds institutional investment in making participation safe. Organizational evaluations of patient participation have found that programmes may operate without clearly articulated objectives, strategies or feedback structures [26]. When such weaknesses occur in patient-safety programmes, asking individuals to become more vigilant can shift implementation work downward without correcting the organizational conditions that generated the need for vigilance.

Burden shifting is especially concerning when the request interacts with limited capacity or already high treatment workload. Financial constraints, multimorbidity, limited health literacy, functional difficulty and uncertainty can change the effort required to perform seemingly simple monitoring tasks [18].

Treatment-burden evidence likewise shows that patients' available resources are distributed unevenly [19]. The same request can therefore remain modest for one person yet consume scarce cognitive, emotional or practical capacity for another.

The strongest ethical warning sign is functional dependence on patient detection. If failure to notice an error predictably leaves no adequate professional backstop, or if the patient is blamed for missing a failure generated within professional or organizational processes, an invitation has ceased to be merely participatory. Practical voluntariness has been lost even if formal language continues to describe the activity as optional.

Table 2 distinguishes configurations in which patient vigilance remains additive from those in which responsibility is effectively transferred.

Table 2. Configurations that separate fair medication-safety participation from burden shifting

Patient-facing configuration	What the patient is effectively being asked to do	Institutional position	Capacity and burden condition	Consequence of nonparticipation	Fair-Participation interpretation
Optional checking	Notice and report an obvious discrepancy if one is encountered	Independent professional controls remain active	Low additional workload; no special expertise presumed	No blame or loss of safety entitlement	Fair invitation
Supported monitoring	Observe a defined medication issue and communicate changes	Institution supplies information, access and response	Task matched to current ability and support	Professional fallback remains available	Fair when continuously supported
High-workload participation	Repeatedly reconcile, track or interpret complex medication information	Some professional support remains, but substantial work falls to patient	Existing treatment work or uncertainty makes added vigilance costly	Missed participation may increase unresolved risk	Requires redesign or additional support
Dependency on patient detection	Detect a prescribing, dispensing, monitoring or communication failure that professional systems do not reliably catch	Institutional backstop is inadequate	Capability may be present, but patient becomes safety-critical	Failure to detect exposes patient to avoidable harm or blame	Burden shifting
Displaced correction responsibility	Identify, interpret, pursue and secure correction of a system-generated problem	Responsibility for resolution is diffuse or practically withdrawn	Patient must supply both vigilance and coordination work	Nonparticipation leaves failure unresolved	Incompatible with fair participation where institutional duties are displaced

Table note: The configurations are proposed normative distinctions. They are not validated clinical categories, patient classifications or quantitative thresholds.

Institutional duties that cannot be delegated

Organizational patient engagement itself requires infrastructure. A Delphi assessment of patient and family advisory councils identified needs involving role clarity, preparation, communication and structural support for meaningful safety engagement [27]. Institutions therefore remain responsible for constructing the

conditions in which patient participation can occur safely.

For medication safety, the nondelegable baseline includes maintaining competent prescribing and dispensing processes, appropriate verification and monitoring, usable communication systems, professional response to identified risks and escalation when uncertainty cannot be resolved at the current level.

Patients may create valuable additional opportunities to detect failure. Their participation does not extinguish the institutional responsibility to operate those safeguards.

The underlying principle is simple: capability does not make a nondelegable duty delegable. A knowledgeable patient may detect an incorrect dose more quickly than a professional. That fact can justify welcoming the patient's observation; it does not justify designing a system that depends upon the patient to prevent the error from reaching them.

Objections and boundary conditions

One objection is that restrictions on institutional reliance could weaken patient empowerment. That conclusion does not follow. Participation can increase knowledge, confidence and safety involvement [15], and patients possess forms of knowledge that deserve genuine epistemic authority [13]. The Fair-Participation Test protects these contributions by separating the right and opportunity to participate from an obligation to compensate for professional failure.

A second objection concerns highly capable patients who explicitly prefer extensive involvement. Such preferences matter. Greater capability and willingness can justify offering a broader role, provided that the role remains revisable and professionally supported. Responsibility nevertheless cannot be inferred from competence alone [14].

Application must also remain context-sensitive. Psychiatric hospitalization, acute illness, multimorbidity, language or literacy barriers, changing cognition, uncertain diagnoses and constrained access to professional support can alter both voluntariness and practical capacity [16]. The test therefore produces contextual judgments rather than categorical classifications of patients.

Implications for safety programmes

Patient-safety programmes should evaluate more than participation uptake. A programme can obtain high rates of patient checking while simultaneously relying too heavily on that checking. Evaluation should first establish whether professional and organizational safety controls remain adequate, then examine what additional work the programme asks patients to perform.

Programme assessment should also capture whether participation is genuinely optional, whether required information is understandable, whether patients can reach an appropriate responder, whether concerns trigger

timely verification, how burden is distributed, and what happens when a patient cannot or chooses not to participate. These are candidate evaluation dimensions rather than validated measures.

Designers should be especially cautious with interventions that make vigilance easier through apps, portals or automated reminders. Technology can expand capability while simultaneously normalizing additional surveillance work. The ethical standard should therefore remain tied to allocation of responsibility rather than technological feasibility.

Conclusion

Healthcare institutions may reasonably invite patients to contribute to medication-safety vigilance, sometimes extensively, when participation remains voluntary, proportionate to task-specific capacity, reciprocally supported and additional to a functioning professional safety system. Patient knowledge and vigilance can create valuable redundancy and should be taken seriously.

The ethical limit is crossed when safe care becomes practically dependent on patients detecting professional or system failures, when the burden of vigilance is shifted toward those least able to carry it, or when failure to participate attracts blame or avoidable risk. Unequal capacity matters because identical requests do not impose identical work, but fairness cannot be reduced to assessing patient capability alone.

The Fair-Participation Test therefore places the institutional safety baseline first. Patients may strengthen medication safety; healthcare institutions remain responsible for ensuring that patients are not required to rescue it.

Acknowledgments: None

Conflict of Interest: None

Financial Support: None

Ethics Statement: None

References

1. Pang Y, Szücs A, Ricci-Cabello I, Gangannagaripalli J, Goh LH, Leong FL, et al. Patient and family engagement interventions in primary care patient safety: Systematic review and

- meta-analysis of randomised controlled trials. *Br J Gen Pract.* 2025;75(756):e491-9. doi:10.3399/BJGP.2024.0369
2. Cai Y, Liu Y, Wang C, Liu S, Zhang M, Jiang Y. Patient and family engagement interventions for hospitalized patient safety: A scoping review. *J Clin Nurs.* 2024;33(6):2099-111. doi:10.1111/jocn.17022
3. Kuluski K, Asselbergs M, Baker R, Kovacs Burns KK, Bruno F, Saragosa M, et al. 'Safety is about partnership': Safety through the lens of patients and caregivers. *Health Expect.* 2024;27(1):e13939. doi:10.1111/hex.13939
4. DelDot M, Lau E, Rayner N, Spinks J, Kelly F, Nissen L. Consumer involvement in the design and development of medication safety interventions or services in primary care: A scoping review. *Health Expect.* 2024;27(6):e70092. doi:10.1111/hex.70092
5. Lin X, Xu W, Lin T. Participation in medication safety of older-adult patients with chronic disease during the transition from hospital to home: A descriptive qualitative study. *BMC Geriatr.* 2024;24(1):877. doi:10.1186/s12877-024-05468-2
6. Xu W, Lin X, Lai H, Ren Y, Peng S, Lin T. Development and evaluation of a comprehensive Patient for Medication Safety (PFMS) intervention programme to improve participation in medication safety behaviours among older adults with chronic disease during hospital-to-home transition: A pilot randomized controlled trial. *BMC Geriatr.* 2025;25(1):861. doi:10.1186/s12877-025-06563-8
7. Morris RL, Ruddock A, Gallacher K, Rolfe C, Giles S, Campbell S. Developing a patient safety guide for primary care: A co-design approach involving patients, carers and clinicians. *Health Expect.* 2021;24(1):42-52. doi:10.1111/hex.13143
8. Van der Voorden M, Ahaus K, Franx A. Explaining the negative effects of patient participation in patient safety: An exploratory qualitative study in an academic tertiary healthcare centre in the Netherlands. *BMJ Open.* 2023;13(1):e063175. doi:10.1136/bmjopen-2022-063175
9. Van der Voorden M, Franx A, Ahaus K. Actions for mitigating the negative effects of patient participation in patient safety: A qualitative study. *BMC Health Serv Res.* 2024;24(1):700. doi:10.1186/s12913-024-11154-1
10. Sutton E, Martin G, Eborall H, Tarrant C. Undertaking risk and relational work to manage vulnerability: Acute medical patients' involvement in patient safety in the NHS. *Soc Sci Med.* 2023;320:115729. doi:10.1016/j.socscimed.2023.115729
11. Davies B. 'Personal health surveillance': The use of mHealth in healthcare responsabilisation. *Public Health Ethics.* 2021;14(3):268-80. doi:10.1093/phe/phab013
12. Evripidou M, Efthymiou A, Velonaki V, Kalokairinou A, Papastavrou E. Ethics in patients' health literacy: A scoping review and a critical discussion. *Health Promot Int.* 2024;39(4):daae100. doi:10.1093/heapro/daae100
13. Côté CI. A critical and systematic literature review of epistemic justice applied to healthcare: Recommendations for a patient partnership approach. *Med Health Care Philos.* 2024;27(3):455-77. doi:10.1007/s11019-024-10210-1
14. Børøe K, Albertsen A, Cappelen C. On the anatomy of health-related actions for which people could reasonably be held responsible: A framework. *J Med Philos.* 2023;48(4):384-99. doi:10.1093/jmp/jhad025
15. Lee NJ, Ahn S, Lee M. The effects of a mobile application for patient participation to improve patient safety. *Health Expect.* 2022;25(4):1601-18. doi:10.1111/hex.13503
16. Antikainen R, Turunen H, Kuosmanen A, Haatainen K. Issues related to patient participation in psychiatric hospital care—an integrative literature review of patient safety research. *J Clin Nurs.* 2025;34(4):1225-39. doi:10.1111/jocn.17667
17. Won MH, Shin SH. Mediating effects of patient safety perception and willingness to participate in patient safety on the relationship between health literacy and patient participation behavior among inpatients. *Front Public Health.* 2024;12:1349891. doi:10.3389/fpubh.2024.1349891
18. Kripa SVS, Neelamana SK, Krishnan A, Babu P, Mini BJ, Lekha TR, et al. Patient capacity and constraints in managing multimorbidity: A qualitative study in primary care settings in Kerala, India. *BMC Prim Care.* 2026;27(1):316. doi:10.1186/s12875-026-03402-6
19. Lee JE, Lee J, Shin R, Oh O, Lee KS. Treatment burden in multimorbidity: An integrative review. *BMC Prim Care.* 2024;25(1):352. doi:10.1186/s12875-024-02586-z

20. McParland C, Johnston B, Cooper M. Treatment burden and uncertainty in the context of advanced multimorbidity: A focussed ethnography. *Qual Health Res.* 2026;36(1):107-23. doi:10.1177/10497323251320836
21. Morris JE, Roderick PJ, Harris S, Yao G, Crowe S, Phillips D, et al. Treatment burden for patients with multimorbidity: Cross-sectional study with exploration of a single-item measure. *Br J Gen Pract.* 2021;71(706):e381-90. doi:10.3399/BJGP.2020.0883
22. Zhang AD, Wolfson EA, Mukamal KJ, Schonberg MA, Landon BE. Treatment burden among older adults in the United States, 2022. *J Am Geriatr Soc.* 2025;73(9):2757-67. doi:10.1111/jgs.19603
23. Gyberg A, Brezicka T, Wijk H, Ulin K. From identifying patient safety risks to reporting patient complaints: A grounded theory study on patients' hospital experiences. *J Clin Nurs.* 2024;33(11):4421-33. doi:10.1111/jocn.17355
24. Morris RL, Giles S, Campbell S. Involving patients and carers in patient safety in primary care: A qualitative study of a co-designed patient safety guide. *Health Expect.* 2023;26(2):630-9. doi:10.1111/hex.13673
25. Abiétar DG, Domingo L, Medina-Perucha L, Saavedra N, Berenguera A, Lacueva L, et al. A qualitative exploration of patient safety in a hospital setting in Spain: Policy and practice recommendations on patients' and companions' participation. *Health Expect.* 2023;26(4):1536-50. doi:10.1111/hex.13758
26. Westerink HJ, Garvelink MM, van Uden-Kraan CF, Zouitni O, Bart HAJ, van der Wees PJ, et al. Evaluating patient participation in value-based healthcare: Current state and lessons learned. *Health Expect.* 2024;27(1):e13945. doi:10.1111/hex.13945
27. Brust L, Blum Y, Weigl M. Promoting patient safety through patient engagement at the organisational level: A Delphi-based needs assessment among patient and family advisory councils. *Health Expect.* 2025;28(3):e70319. doi:10.1111/hex.70319