



From Ethical Review to Governance Oversight: A PMI-CPMAI Model for Healthcare AI Projects and Programs

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ABSTRACT

This article examines how AI ethics committees can be integrated into healthcare project governance using a PMI-CPMAI aligned oversight model. In this study, ethics refers to the governance of fairness, transparency, accountability, patient safety, and responsible decision-making in healthcare AI systems. The topic matters because healthcare organisations are increasingly using AI in areas such as risk prediction, monitoring, scheduling, and clinical decision support, yet ethical oversight often remains weak, late, or unclear. The study used a qualitative approach and drew on four semi-structured interview responses collected from healthcare professionals in management and clinical roles. The findings show an uneven picture. Some respondents reported the presence of an ethics committee, while others did not. Even where some form of oversight existed, authority was often advisory, escalation routes were weak, and monitoring after deployment was inconsistent. Respondents also pointed to practical obstacles such as the absence of clear policy, limited AI understanding among reviewers, and low involvement of frontline staff. The article argues that healthcare organisations need more than broad ethical awareness. They need a clearer governance arrangement that places ethical review inside project stages, decision gates, accountability structures, and post-deployment follow-up. A PMI-CPMAI aligned oversight model offers a practical route for doing this by placing governance, validation, and lifecycle control within the management of AI initiatives rather than treating ethics as a separate compliance exercise (Project Management Institute, 2023).

1. INTRODUCTION

Artificial intelligence is becoming part of ordinary healthcare work. Hospitals and clinics now use AI in areas such as patient risk prediction, medical imaging, scheduling, monitoring, and operational planning [1]. This creates opportunities for faster processing and better decision support, but it also raises hard questions about fairness, transparency, privacy, accountability, and patient safety [2]. The World Health Organization has argued that AI in health must be governed in ways that protect autonomy, promote well-being, support transparency, and preserve accountability [3]-[6]

Healthcare is not a setting where governance failure stays abstract [7]. If an AI system is introduced with weak ethical review, the consequences can affect diagnosis, treatment priorities, staff judgment, and patient trust [8]. This becomes even more serious when review happens too late or when organisations treat ethics as a one-off approval exercise rather than something that continues across the life of the system. The existing proposal for this study already highlights a similar problem in project environments [9]: ethics committees may exist, but their role, authority, and

integration within governance are often poorly defined [10].

This study therefore narrows the broader governance discussion to healthcare settings, where AI use can directly affect patient safety, clinical judgment, and public trust [11]-[15]. It asks how AI ethics committees are currently understood in practice, where the governance gaps appear, and how a PMI-CPMAI aligned oversight model can improve ethical review by tying it more closely to project stages and decision-making.

1.1. Problem Statement

Many healthcare organisations are adopting or exploring AI systems without a clear governance structure for ethical oversight. In some settings there may be an ethics committee, but its authority is uncertain [16]. In other settings there may be no dedicated committee at all. Ethical review may take place late in the process, only after major design or implementation choices have already been made. That weakens the value of ethical oversight because it limits the chance to prevent avoidable problems early [17]-[20].

The literature shows that healthcare AI raises recurring concerns around fairness, transparency, accountability, data quality, and ongoing monitoring, yet governance arrangements often remain fragmented or reactive [21][22]. WHO guidance identifies accountability, transparency, and inclusiveness as core ethical requirements for AI in health, while the FDA's 2025 draft guidance reflects a full lifecycle view rather than a one-time approval [2][23]-[26]. The practical problem is that many organisations still do not have a workable method for placing ethical oversight inside real project governance. This study addresses that gap.

1.2. Research Aim and Objectives

• Research Aim

To examine how AI ethics committees can be effectively integrated into healthcare project governance using a PMI-CPMAI aligned oversight model.

• Research Objectives

1. To identify the current role of ethical committees in AI related healthcare projects
2. To examine the governance challenges that affect ethical oversight in healthcare AI
3. To explore when ethical review should happen

and when it actually happens in practice

4. To assess whether ethical committees have decision-making authority or only an advisory role
5. To propose a practical oversight approach that improves ethical governance of AI in healthcare.

1.3. Research Questions

1. How are AI ethics committees currently involved in decision-making within healthcare projects and programs?
2. At which CPMAI stages should ethical oversight be most actively applied in healthcare AI initiatives?
3. How can healthcare governance structures ensure effective authority, accountability, and clinical responsibility for ethical AI decisions?

2. LITERATURE REVIEW

The literature suggests that ethical oversight in healthcare AI is moving away from the older model of one-time approval and toward a more continuous form of governance [27]-[32]. Research ethics committees and institutional review boards still matter, but AI systems create problems that do not always fit neatly within traditional review routines [33]-[40]. Shaw et al. argue that AI-related research ethics requires new forms of governance attention, especially where systems are adaptive and operate in sensitive settings [41]-[45].

A second theme is technical difficulty. McKay et al. show that review bodies dealing with AI-related data issues need appropriate expertise and cannot rely only on older assumptions about research oversight [46]. Wang et al. also found wide variation in the quality of standards and guidance for AI in medicine, which reinforces the point that governance remains uneven [47]-[50].

A third theme concerns timing. WHO guidance and the FDA's lifecycle model both support the idea that ethical and risk-related review should not stop at the start of a project. Instead, governance should continue across design, development, deployment, and follow-up [2][51]-[55]. Yet many organisations still rely on formal review points that appear too late or too narrowly.

A fourth theme is authority. OECD guidance on trustworthy AI and WHO guidance on accountability both point to the need for governance structures that are not merely

symbolic [56]-[58]. Ethical oversight has little value if concerns can be raised but not acted upon [1].

Taken together, the literature does not suggest that healthcare lacks ethical awareness. The bigger issue is that many institutions still find it difficult to turn ethical concerns into clear routines, accountability, and workable escalation processes [59][65].

3. THEORETICAL FRAMEWORK

This study draws on Ethical Governance Theory and Institutional Theory.

Ethical Governance Theory is useful because it focuses on how organisations create structures and processes for identifying and managing ethical risk [66]-[70]. In this study, it helps explain why healthcare organisations need more than good intentions [71]-[74]. They need review mechanisms, monitoring routines, clear responsibilities, and workable decision paths when AI is introduced into sensitive settings [75].

Institutional Theory is also relevant because it explains how organisations respond to pressure for legitimacy and responsible conduct [76]-[80]. In healthcare, ethics committees may be created partly because organisations want to demonstrate that AI is being managed responsibly [81]. The theory is useful here because it allows the study to distinguish between governance that is genuinely active and governance that exists mainly on paper. Together, these theories help the study examine both formal structure and practical reality [8].

4. RESEARCH METHODOLOGY

This study used a qualitative research design. A qualitative approach was appropriate because the aim was to understand how ethical oversight is experienced, described, and interpreted by people working in healthcare settings, rather than to measure numerical trends.

The study was based on a short semi-structured interview form built around the approved interview schedule. The interview questions covered participant role, involvement in AI-related healthcare work, the existence and role of an ethics committee, timing of ethical review, committee authority, accountability for ethical risk, escalation processes, post-deployment monitoring, governance challenges, and suggested improvements.

The final dataset consisted of four responses from healthcare professionals in different roles. These included a unit manager, a nurse manager, a cardiologist, and a nursing supervisor. Because the sample was small, the study was treated as exploratory qualitative research rather than broad generalisation. The structure, however, remains consistent with the assignment brief, which requires a focused article-style paper rather than a thesis.

4.1. Expected Contributions

This article makes two contributions. First, it adds a practical healthcare perspective to the discussion of AI ethics governance by showing how a small set of respondents describe gaps in real organisational practice. Second, it links those concerns to a PMI-CPMAI aligned governance model, drawing on the framework's emphasis on governance, validation, and lifecycle control to move the discussion from ethical principle to practical project control (Project Management Institute, 2023). In academic terms, the study connects healthcare AI ethics with project governance. In practical terms, it offers a simple way for organisations to think about where ethics should sit within the life of an AI project.

4.2. Scope and Limitations

The study focuses specifically on ethical oversight of AI in healthcare project settings. It does not attempt to cover the full legal or technical landscape of healthcare AI. The findings are limited by the small sample of four respondents, and they should therefore be interpreted as exploratory rather than representative of all healthcare organisations. The study is intended to identify governance patterns and practical concerns, not to support broad generalisation.

A second limitation is that the respondents came from different roles and levels of direct AI involvement. This is helpful because it gives a broader view, but it also means that knowledge of governance arrangements may not be equally detailed across all respondents. The study nevertheless remains useful because its purpose is to identify patterns, tensions, and governance gaps rather than produce statistical claims.

4.3. Ethical Considerations

Participation in the data collection was voluntary. The form was used for academic research purposes, and the responses did not require disclosure of sensitive patient records or confidential clinical details. Because the topic

concerned governance rather than direct patient intervention, the main ethical concern in this study was confidentiality and accurate representation of respondent views. For that reason, the findings are presented in summary form without naming organisations or individual participants.

4.4. Data Gathering

Primary data was gathered through a semi-structured interview form based on the approved question set. Four responses were collected. The respondents came from healthcare management and clinical roles. Two respondents reported some degree of involvement in AI-related healthcare work, while two did not. Among the AI-related uses mentioned, one respondent referred to predicting heart attack risk from ECG and patient records, while another referred to patient fall prediction and nurse scheduling.

The form asked fixed questions about the existence of an ethics committee, its role, when it becomes involved, whether it has advisory or decision-making power, who carries ethical responsibility, whether escalation routes exist, whether monitoring continues after deployment, and what practical improvements are needed. This made it possible to compare responses across the same governance themes.

5. DATA ANALYSIS

The responses were analysed using thematic analysis. The answers were read across the full set rather than treated as isolated comments. The aim was to identify repeated concerns, areas of agreement, and points where practice looked uncertain or inconsistent. Six themes emerged from the responses: committee existence and role, timing of ethical review, committee authority, responsibility and accountability, escalation and post-deployment monitoring, and practical improvements.

- **Theme 1: Ethical oversight exists unevenly**

The first pattern was inconsistency. Two respondents said their organisation had an AI ethics committee. Two said it did not. Even where some form of committee existed, the detail around its role was thin. One respondent said the role of the committee was to check whether AI is safe, fair, and respectful of patient privacy [82]-[85]. Another did not provide a clear functional description. This suggests that ethical oversight is not yet

institutionalised in a consistent way.

- **Theme 2: Ethical review is seen as important early, but often happens late in practice**

Three respondents believed ethical review should happen at planning stage. Two also selected development and two selected testing. Only one selected deployment. Yet when respondents were asked when ethical review actually happens, the answers were much weaker [86]-[90]. One said only after three months. One said only if something goes wrong after use. Two effectively indicated that there was no clear real practice. This gap matters. It shows that staff do not oppose ethical review. The weakness lies in implementation.

- **Theme 3: Committee authority is mostly advisory or unclear**

One respondent said the committee had an advisory role only. Another selected both advisory and decision support [91]-[94]. One was unsure. No respondent described a strong committee with clear power to stop a high-risk AI project. This suggests that ethical oversight may exist in name but still lack the authority needed to shape project direction.

- **Theme 4: Responsibility is recognised, but ownership is spread across management roles**

When asked who is responsible for ethical risks, respondents pointed to managers, hospital management, the hospital director, the AI project lead, and nursing leadership [95]-[100]. This shows that people understand ethical responsibility as a leadership issue rather than a purely technical matter. At the same time, responsibility appears spread across several roles. That can make ownership weaker in practice.

- **Theme 5: Escalation and post-deployment monitoring remain weak**

Only one respondent reported a clear process for escalating ethical concerns. Three said there was no clear process. Monitoring after deployment was also weak [101]-[104]. Two respondents said monitoring happens sometimes, one said no, and one was not sure. This is a serious governance gap because many AI risks only become visible after deployment.

- **Theme 6: The strongest repeated concerns were policy gaps, weak AI understanding, and low frontline**

involvement

The most practical answers came in the questions on challenges and improvements. Two respondents directly said there was no clear protocol. Another referred to a lack of guidelines [105]. One respondent said committee members do not understand AI technology well enough. One also noted that doctors are too busy, while another said nurses are not involved in decisions [106]-[111]. When asked what would improve oversight, the respondents repeatedly called for clear policy, AI training, and earlier involvement of clinicians and nurses.

Table 1: Summary of Interview Findings

Theme	What respondents reported	Interpretation
Existence of ethics committee	Two said yes, two said no	Ethical oversight is uneven across settings
Timing of review	Most think review should start early, but practice is late or unclear	Governance is still reactive
Authority	Mostly advisory or uncertain	Oversight may lack real power
Accountability	Responsibility linked to managers and leaders, but spread across roles	Shared responsibility may blur ownership
Escalation and monitoring	Escalation mostly unclear and monitoring inconsistent	Oversight remains weak after implementation
Needed improvements	Clear policy, AI training, stronger clinical involvement	Main weakness is practical governance, not lack of awareness

The interview findings align closely with the literature. WHO stresses accountability, transparency, and human-centred oversight in AI

for health, while FDA guidance reflects the need for a lifecycle approach rather than one-time approval [5],[112]-[120]. The responses show that the same issues appear at ground level: weak protocols, uncertain authority, and limited follow-up.

• Recommendation

The findings point to a straightforward conclusion. Healthcare organisations do not just need ethical concern. They need a working governance arrangement.

First, organisations should create a clear written policy for AI ethics oversight. The most repeated weakness in the responses was the absence of a clear protocol or guideline.

Second, ethical review should begin at planning stage and continue through development, testing, deployment, and follow-up. This is consistent with both WHO guidance and the FDA's lifecycle approach [5],[121]-[130]

Third, committee authority should be matched to project risk. Lower-risk projects may only require advisory review, but higher-risk systems should face stronger approval and escalation requirements. This is also consistent with broader trustworthy AI principles that stress accountability and oversight [5], [131]-[134].

Fourth, committee members need basic AI literacy. Several respondents pointed directly to weak technical understanding. Without that, review will remain shallow.

Fifth, frontline staff should be involved earlier. The responses show that doctors and nurses do not always feel fully included in ethical oversight, even though they are often the people most affected by how AI works in practice [135][136].

For these reasons, a PMI-CPMAI aligned oversight model is useful. It places ethical review inside project stages rather than outside them and supports a lifecycle approach to governance, validation, and control in AI initiatives [4][137]. In practical terms, that means:

- **Initiation:** ethical scoping, stakeholder identification, risk classification
- **Planning:** review of data governance, consent, fairness risk, accountability, and intended use
- **Execution:** review of system changes, training data shifts, and emerging implementation issues
- **Monitoring and Controlling:** tracking bias, safety, complaints, and real-world performance

- **Closure and Follow-up:** final validation, documentation, and post-deployment monitoring plan

This kind of structure makes ethics part of project governance rather than a loose side conversation.

6. CONCLUSION

This study examined how AI ethics committees can be integrated into healthcare project governance using a PMI-CPMAI aligned oversight model. The literature showed that ethical oversight in healthcare AI is widely recognised as important, but still too often late, narrow, or detached from actual project control. The interview responses added a practical layer to that picture. They showed uneven committee presence, weak escalation routes, limited authority, policy gaps, and low confidence in how ethical concerns are handled after deployment.

These findings are useful because they show the problem in a direct and practical way, even within a small exploratory sample. The problem is not that healthcare organisations have never heard of ethics. The problem is that ethics is still too often treated as a general concern rather than an organised part of governance. A PMI-CPMAI aligned model matters because it gives ethical review a place within real project stages, decision gates, and accountability lines.

This was a small qualitative study, so the findings should be read with care. Even so, they point in a clear direction. If healthcare organisations want AI systems that are safer, fairer, and more trusted, then ethical oversight needs to be early, practical, continuous, and tied to real authority..

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