



Many governing bodies are advancing GenAI adoption without pre-deployment evidence on user-level outcomes.¹⁻⁴ Governance must shift to a model that empirically validates user health, cognitive, and performance effects prior to public-sector rollout, treating GenAI as an intervention subject to clinical-style trials.⁵⁻⁶ Core policy solutions require research-based deployment criteria that prioritize constituent safety over speed of infrastructure buildout.

Multiple adverse phenomena have been documented alongside GenAI deployments. These include clinical safety failures from hallucinated or biased medical guidance in care pathways; algorithmic amplification of content related to self-harm, disordered eating, and substance use; and similar amplification in domains that reinforce delusional beliefs.⁷⁻¹⁰ Taken together, these findings indicate a broader cognitive public-health risk rooted in insufficient safeguards on GenAI-user interactions. Adolescents are especially vulnerable given their developmental stage and high exposure,¹¹⁻¹² yet education systems are integrating these technologies into curricula without pre-testing for learning impacts.¹³⁻¹⁶

Preliminary research has begun to characterize GenAI's cognitive effects. Exploratory neuroimaging and education studies suggest that GenAI tools may reduce momentary cognitive load and increase germane processing for better short-term comprehension while potentially impairing longer-term episodic memory.¹⁷⁻²³ Academics also raise concerns about these technologies resulting in poorer information retention, elevated expertise reversal effects, and increased automation bias and skill degradation.²⁴⁻²⁹ Current research insufficiently addresses these concerns for adolescents, with studies largely fragmented and confined to adult-only samples.

National GenAI agendas cluster into four strategic categories: (I) using GenAI as a socioeconomic, scientific, geopolitical, and cybersecurity tool;³⁰⁻³⁴ (II) coordinating deployment, applications, training, and ownership;^{1-4,35} (III) expanding access for underserved populations;³⁶⁻³⁷ and (IV) mitigating long-horizon risks.³⁸⁻⁴¹ While each of these priorities is legitimate, resulting policy frameworks largely omit requirements for evaluating user-level outcomes prior to infrastructure buildout. Public narratives reinforce this posture. Media coverage emphasizes projected economic growth, productivity gains, and educational access,⁴²⁻⁴⁷ while critiques often focus on risks from unchecked development or malicious actors.⁴⁸⁻⁵⁰ These forward-looking storylines draw disproportionate attention, crowding out scrutiny of more immediate, measurable risks emerging from GenAI adoption.

While public institutions cannot dictate private sector product design, legislatures and agencies can require pre-deployment validation via statute, procurement standards, or administrative rule.^{2,51} Governance bodies focused on responsible rollout should reexamine the interests motivating current GenAI plans, identifying the systemic assumptions behind infrastructural incentives and how these biases may be shaping success criteria within their jurisdictions. Clarifying these assumptions is critical to distinguishing governance intent from evaluation standards. Failing to do so risks embedding deployment justifications into success metrics, overfitting to institutional priors that may not align with constituent needs.⁵²⁻⁵³

A research-first approach is essential for drafting responsible GenAI policy. Governance should be grounded in rollout decisions contingent on pre-tested user impacts. While this slower, clinical-style approach to adoption is unfashionable, its lower risk tolerance is more likely to yield safer long-term trajectories. AI Initiatives is advancing this model in Maine,⁵⁴⁻⁵⁵ but the ideas presented here are intended to inform GenAI governance frameworks across jurisdictions, establishing stronger safety thresholds for public-sector deployments.



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