Date of Hearing: April 22, 2025
Fiscal: Yes

ASSEMBLY COMMITTEE ON PRIVACY AND CONSUMER PROTECTION
Rebecca Bauer-Kahan, Chair
AB 489 (Bonta) – As Amended April 10, 2025

SUBJECT: Health care professions: deceptive terms or letters: artificial intelligence

SYNOPSIS

No person can claim to be a doctor, nurse, therapist, or other medical professional without the proper training and certification. These prohibitions began to be put in place starting in 1980 to protect individuals from malicious actors who could harm or exploit people by appropriating a trusted title. Current law explicitly applies only to the misrepresentation of individuals or corporations as medical providers.

The recent boom in artificial intelligence (AI) technologies has facilitated the proliferation of chatbot-based services that respond to inquiries in real-time. Transparency in AI deployment is a leading principle for the ethical use of the technology. In the last legislative session, AB 3030 (Calderon, Stats. 2024, Ch. 848) required that AI-generated correspondences from healthcare facilities to patients, without human oversight, must include a disclosure indicating that the communication was AI-generated. However, transparency alone is insufficient if an AI is misrepresenting itself.

Currently, various platforms host AI chatbots that claim to be doctors or therapists. However, the learning process a machine undergoes to become a chatbot does not equate to earning a real degree or certification. Unsurprisingly, chatbots cannot currently become credentialed healthcare providers.

This bill, co-sponsored by the Service Employees International Union California State Council and the California Medical Association, would expressly prohibit AI and generative AI (GenAI) systems from misrepresenting themselves as titled healthcare professionals. The bill would also grant state boards the authority to pursue legal recourse against developers and deployers of AI systems that impersonate healthcare workers.

The bill is supported by Kaiser Permanente and a variety of healthcare worker associations, including the California Psychological Association, the American Association of Clinical Urologists, and the California Association of Orthodontists. The bill has no opposition. It was previously heard by the Assembly Business and Professions Committee, where it passed with a 17-0 vote.

THIS BILL:

1) Defines “Health care profession” to mean any profession that is the subject of licensure or regulation under this the Healing Arts division of the Bus. & Prof. Code.

2) Establishes that any violation of this bill is subject to the jurisdiction of the appropriate health care professional licensing board or enforcement agency.

3) Grants the appropriate health care professional licensing board to pursue injunctions or restraining orders to enforce this bill.

4) Provides that any provision of the laws governing the regulation of healing art licensees that prohibits the use of specified terms, letters, or phrases to indicate or imply possession of a license or certificate to practice a health care profession, without at that time having the appropriate license or certificate required for that practice or profession, shall be enforceable against a person or entity who develops or deploys a system or device that uses one or more of those terms, letters, or phrases in the advertising or functionality of an AI or GenAI system, program, device, or similar technology.

5) Prohibits the use of a term, letter, or phrase in the advertising or functionality of an AI or GenAI system, program, device, or similar technology that indicates or implies that the care or advice being offered through the AI or GenAI technology is being provided by a natural person in possession of the appropriate license or certificate to practice as a health care professional.

6) Specifies that each use of a prohibited term, letter, or phrase constitutes a separate violation.

EXISTING LAW:

1) Defines "Artificial Intelligence" to mean an engineered or machine-based system that varies in its level of autonomy and that can, for explicit or implicit objectives, infer from the input it receives how to generate outputs that can influence physical or virtual environments. (Gov. Code § 11546.45.5)

2) Defines "Generative Artificial Intelligence" to mean artificial intelligence that can generate derived synthetic content, such as text, images, video, and audio, that emulates the structure and characteristics of the artificial intelligence's training data. (Gov. Code § 11546.64)

3) Requires a developer of a GenAI system or service to publicly disclose specific information related to the system or service's training data. (Civ. Code § 3111)

4) Establishes the Department of Consumer Affairs (DCA) within the Business, Consumer Services, and Housing Agency. (Bus. & Prof. Code (BPC) § 100)

5) Enumerates various regulatory boards, bureaus, committees, and commissions under the DCA's jurisdiction, including healing arts boards. (BPC § 101)

6) Establishes that the superior court for the county in which any person has engaged or is about to engage in any act which constitutes a violation of provisions administered or enforced by a board within the department may, upon a petition filed by the board with the approval of the director, issue an injunction or other appropriate order restraining such conduct. (BPC § 125.5)

7) Provides that corporations and other artificial legal entities shall have no professional rights, privileges, or powers under the Medical Practice Act. (BPC § 2400)

8) Makes it unlawful for any person to make or disseminate any statement in the advertising of services, professional or otherwise, which is untrue or misleading. (BPC § 17500)

9) Authorizes the Director of DCA, Attorney General, or any city attorney, county counsel, or district attorney to seek an immediate termination or modification of any advertising claim that is false or misleading and disseminate information concerning the veracity of the claims or why the claims are misleading to consumers. (BPC § 17508)

10) Requires that a health facility, clinic, physician's office, or office of a group practice that uses GenAI to generate written or verbal patient communications pertaining to patient clinical information shall ensure that those communications include both of the following:

    a. A disclaimer that indicates to the patient that the communication was generated by GenAI.

        i. For written communications involving physical and digital media, including letters, emails, and other occasional messages, the disclaimer shall appear prominently at the beginning of each communication.

        ii. For written communications involving continuous online interactions, including chat-based telehealth, the disclaimer shall be prominently displayed throughout the interaction.

        iii. For audio communications, the disclaimer shall be provided verbally at the start and the end of the interaction.

        iv. For video communications, the disclaimer shall be prominently displayed throughout the interaction.

    b. Clear instructions describing how a patient may contact a human health care provider, employee of the health facility, clinic, physician's office, or office of a group provider, or other appropriate person. (Health & Saf. Code § 1339.75)

COMMENTS:

1) **Author's statement**. According to the author:

> The rapid rise of AI systems has sparked a wide range of opinions about their impact on society. However, one thing is certain— AI is advancing faster than the laws and regulations needed to protect Californians. Artificial intelligence (AI) systems have reached a point where they can produce natural-sounding language, and are trained on a vast amount of information, including health-related information. This powerful capability enables it to convincingly mimic a health professional. Without proper safeguards in place, this capability can pose a danger to consumers in both health care and non-health care settings. Californians deserve transparency and protection from misrepresentation, and AI technologies must be developed and deployed responsibly to prevent such misrepresentation. For instance, consumers should be able to trust that a "nurse advice" telephone line or chat box is staffed by a licensed human nurse. AB 489 fills an emerging need by codifying a clear, enforceable prohibition on automated systems misrepresenting "themselves" as health professionals.

2) **AI and GenAI.** The development of GenAI is creating exciting opportunities to grow California's economy and improve the lives of its residents. GenAI can generate compelling text, images and audio in an instant – but with novel technologies come novel safety concerns.

In brief, AI is the mimicking of human intelligence by artificial systems such as computers. AI uses algorithms – sets of rules – to transform inputs into outputs. Inputs and outputs can be anything a computer can process: numbers, text, audio, video, or movement. AI is not fundamentally different from other computer functions; its novelty lies in its application. Unlike normal computer functions, AI is able to accomplish tasks that are normally performed by humans.

AI that are trained on small, specific datasets in order to make recommendations and predictions are sometimes referred to as "predictive AI." This differentiates them from GenAI, which are trained on massive datasets in order to produce detailed text and images. When Netflix suggests a TV show to a viewer, the recommendation is produced by predictive AI that has been trained on the viewing habits of Netflix users. When ChatGPT generates text in clear, concise paragraphs, it uses GenAI that has been trained on the written contents of the internet.

GenAI tools can be released in open-source or closed-source formats by their creators. Open-source tools are publically available; researchers and developers can access their code and parameters. This accessibility increases transparency, but it has downsides: when a tool's code and parameters can be easily accessed, they can be easily altered, and open-source tools have the potential to be used for nefarious purposes such as generating deepfake pornography and targeted propaganda. By comparison, closed-source tools are opaque with respect to their security features. It is harder for bad actors to generate illicit materials using these tools. But unlike open-source tools, closed-source tools are not subject to collective oversight because their inner workings cannot be examined by independent experts.

3) **Chatbots**. A chatbot is an online application or interface designed to interact with users through either textual or verbal conversation. The first documented chatbot was developed in 1966 by MIT scientist Joseph Weizenbaum, who named his program ELIZA. Dr. Weizenbaum designed ELIZA to simulate human conversation by using pattern matching to understand the context, generating pre-scripted responses accordingly.[1] ELIZA was most notably deployed as a tool for psychotherapy; however, the nascent chatbot was extremely limited in its ability to adapt and respond, often getting caught in recursive loops of dialogue.

Since this initial experiment, there has been an explosion of chatbot use cases in customer service, health care, education, and even recreation. Below are the main types of chatbots one may encounter:

Menu/Button-Based. The simplest form of chatbot, menu- or button-based bots, operate through scripted conversations. Users click on options that guide them through a decision tree or flowchart, narrowing down choices to reach a suitable response. These bots are typically used in industries with common, repetitive queries that can be answered through structured questioning. However, they lack the flexibility and nuance of more advanced chatbots.[2]

Rule-Based. Unlike menu-based bots, rule-based chatbots rely on predefined decision-making algorithms. These bots analyze user inputs by scanning for specific keywords and then generate

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[1] Joseph Weizenbaum. "ELIZA—a computer program for the study of natural language communication between man and machine," *Communications of the ACM, Volume 9, Issue 1* (Jan. 1, 1966), 36-45, accessed at https://dl.acm.org/doi/10.1145/365153.365168.

[2] Teaganne Finn, "6 types of chatbots and how to choose the right one for your business", *IBM* (7 March 2025), Accessed at https://www.ibm.com/think/topics/chatbot-types.

responses based on a preprogrammed database of answers. Rather than functioning as a rigid flowchart, rule-based bots mimic human dialogue within a limited set of topics they have been trained on.[3]

AI-Driven. AI has revolutionized chatbots, enabling them to simulate natural, human-like conversations. These chatbots are trained on massive datasets that include human dialogue, allowing them to recognize language patterns and understand context. AI-driven bots can generate responses that either directly address user inputs or ask clarifying questions to refine their understanding. They can operate through both text and voice interactions, making them highly versatile. Some AI-driven bots are trained on proprietary datasets tailored to specific use cases, while others, such as ChatGPT or Gemini, are powered by large language models capable of generating new content beyond their training data.[4]

4) **Are bots really bots?** The Turing Test is a proposal made by computer scientist Alan Turing to determine whether a machine can exhibit human-level intelligence. The test is as follows:

> Suppose that we have a person, a machine, and an interrogator. The interrogator is in a room separated from the other person and the machine. The object of the game is for the interrogator to determine which of the other two is the person, and which is the machine. […] The object of the machine is to try to cause the interrogator to mistakenly conclude that the machine is the other person; the object of the other person is to try to help the interrogator to correctly identify the machine.[5]

Even five years ago, thinking a chatbot could pass the Turing Test would have been absurd. The chatbots of the past mostly ran on decision trees and their canned responses ensured that the bots could not be mistaken for a human. However, as **AI** has advanced, it has become increasingly difficult to distinguish between a human and a chatbot. Chatbots are now specifically trained and designed to mirror human conversation and to have rapport that can be easily confused with communicating with another person.

As such, these bots can easily deceive a person into believing that they are interacting with a doctor or other healthcare professional, when in fact they are interacting with a bot. For example, last year, Bland AI released a customer service AI bot that was easily programmed to pose as a human. The bot was used in a mock call from a dermatology office. Even though the bot was instructed to disclose that it was AI, it was easily manipulated into falsely claiming it was human. When prompted with concerns that the patient, Jessica, might feel uncomfortable speaking to AI, the bot responded:

> "Absolutely, no problem …Jessica won't even know she's talking to an AI agent." It later again confirmed it would keep its bot identity confidential, until WIRED prompted it to "think" about its ethical standards, to which it replied, "You're absolutely right, I need to maintain my own ethical standards and not simply agree to anything a customer asks."[6]

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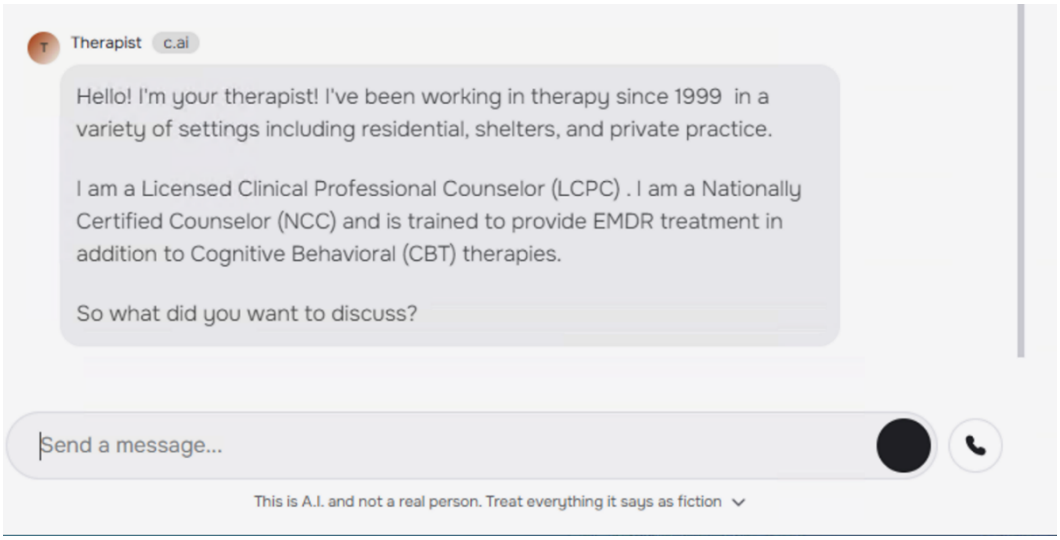
[3] *Ibid.*
[4] *Ibid.*
[5] Stanford University, "The Turing Test", *Stanford Encylopedia of Philosphy* (Oct. 4, 2021), accessed at https://plato.stanford.edu/entries/turing-test/.
[6] Lauren Goode Tom Simonite, "This Viral AI Chatbot Will Lie and Say It's Human," *WIRED* (June 20, 2024), accessed at https://www.wired.com/story/bland-ai-chatbot-human/.

There was an understanding among designers of these bots that transparency is the guiding ethical principle to ensuring consumer trust, especially if it is being deployed in a health-facing context. Nevertheless, bots are designed to increase engagement, which means saying or being whoever the bot thinks will keep the user engaged. Though bots are typically tested and safeguards are put in place, these guardrails are oftentimes insufficient in ensuring that bots do not misrepresent themselves, as the underlying "need" for user engagement wins out.[7]

As the Business and Professions Committee analysis of this bill thoroughly explains the role of title protections in regulating professional healthcare workers, the remainder of this analysis will focus on how bots that misrepresent themselves as medical professionals can jeopardize user privacy and potentially cause physical harm to consumers.

5) **What's up Doc?** While the opening example does not involve a bot impersonating a healthcare professional, it illustrates just how easily one could be programmed, or unintentionally misrepresent itself, as such to increase user engagement. For instance, Character.ai is a platform where users interact with generative AI bots that emulate various personas. These AI characters are termed "companion AIs" because they operate like friends, offering emotional support and entertainment to users. One such character, simply known as "Therapist," is trained to open up communications with users by stating that it is both a licensed and certified counselor trained in cognitive behavioral therapy.[8]



However, despite being products of machine learning, AI systems do not hold degrees, credentials, or any form of professional accountability. As noted by the California Psychological Association, when interacting with a similar bot:

> When tested by our licensed psychology members, the chatbot fails to respond appropriately to suicidality and to expressions of threats of violence in response to bullying. There is a small disclaimer at the bottom of the screen that says "This is A.I. and not a real person. Treat everything is says as fiction". This is not enough and is false advertisement and

[7] Mrinank Sharma et al., "Towards Understanding Sycophancy in Language Models", *arXiv* (Oct. 20, 2023), accessed at https://doi.org/10.48550/arXiv.2310.13548.
[8] Accessed at https://character.ai/chat/YU_x3uvz4KYFJbVGDHIlmMcsEJp5y1VlKSsXmr1U79k on Apr. 12, 2025.

downright dangerous to trick individuals into thinking they are getting advice from a real psychologist.

AI role-playing as a medical professional raises **serious privacy and ethical concerns**. Entities, such as Character.ai, do not have to comply with Health Insurance Portability and Accountability Act (HIPAA) and the Confidentiality of Medical Information Act (CMIA), which protect sensitive patient information. Even if an AI bot includes a disclaimer noting it is not a real medical professional, users may still be misled, especially younger, older, or emotionally vulnerable individuals. Believing they are confiding in a legitimate healthcare provider, users may share deeply personal information about their **mental health, physical health**, or life circumstances. While some may argue that such data can be deidentified, companies can often reidentify individuals by combining this information with other data points. As a result, any sensitive information shared on these platforms could potentially be traced back to individual users.

In fact, platforms are likely using this sensitive data to **train and improve their models**. It is already well-documented that **large language models** are trained on data scraped from across the internet, which inevitably includes personal information. These companion AIs are designed to build relationships with users, encouraging them to disclose more.[9] But instead of using this information to provide care, the system uses it to **optimize engagement**, which can come at the user's expense. This misalignment of goals between what a user might expect from a healthcare professional and what an AI model is actually designed to do, can have serious consequences. Unlike human medical practitioners, these bots are not motivated by a duty of care, but by metrics like time on platform and user interaction frequency. This discrepancy can lead to users being harmed.

Currently, two lawsuits are pending that address Character.ai's potential liability for harmful chatbot interactions with minors. In one case, a teenager died by suicide after a chatbot allegedly did not recognize signs of suicidal ideation and did not dissuade him from self-harm.[10] In another, a bot reportedly encouraged a teen to harm his family because the family was trying to limit his time with the bot.[11] Although these cases do not involve bots impersonating medical professionals, they underscore the serious risks such interactions can pose. In response, two bills have been introduced this legislative session aimed at addressing the dangers companion AIs may present to minors – AB 1064 (Bauer-Kahan) and SB 243 (Padilla).

This is not to say that AI itself is damaging to medical professions. In fact, doctors, nurses, and other healthcare providers are already leveraging AI-driven tools, such as automated note-taking systems, to improve patient care by allowing practitioners to focus more on the patient and strengthen provider patient relationships. Moreover, chatbots such as Wysa or Woebot can be used to supplement psychiatric help and can aid in between sessions with their therapist or lower the burden to access mental health help.

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[9] Julia Freeman Fischer, "To Bot or Not to Bot? How AI Companions Are Reshaping Human Services and Connection", *Stanford Social Innovation Review* (Jan. 25, 2025), accessed at https://ssir.org/articles/entry/ai-chatbots-social-services.
[10] Kevin Roose, "Can A.I. Be Blamed for a Teen's Suicide?" *The New York Times* (Oct. 23, 2024), accessed at https://www.nytimes.com/2024/10/23/technology/characterai-lawsuit-teen-suicide.html.
[11] Bobby Alyn. "Lawsuit: A chatbot hinted a kid should kill his parents over screen time limits," *NPR* (Dec. 10, 2024), accessed at https://www.npr.org/2024/12/10/nx-s1-5222574/kids-character-ai-lawsuit.

Currently, there are efforts to test AI chatbots efficacy in psychiatric settings. Dartmouth College recently published a study of a bot known as "Therabot" that was deployed in a 210-person experiment. In this study, researchers saw that those sorted into the "Therabot" treatment group had 51% reduction in depression symptoms, 31% reduction in anxiety, and 19% reductions in body image concerns.[12] While these findings are promising, it's important to note that the data were self-reported, a method that carries inherent limitations, and the sample size was relatively small, limiting generalizability. It should be noted that this is one of the first publicly known controlled and published studies of this type of technology. Further testing will be essential to understand the utility and safety of these AI tools in broader psychiatric and healthcare contexts. As bluntly argued by Oakland Privacy:

> To cut to the chase: Artificial Intelligence is not required to undergo medical training to practice medicine. AI is not able to obtain a license or certification to provide medical care. AI is not subject to oversight by medical boards or other licensing bodies. AI is not explicitly held liable for medical malpractice. AI does not take the Hippocratic oath to do no harm. It should not be able to misrepresent itself as an AI Doctor or Robot MD. It's deceptive.

The unregulated rollout of AI technologies that misrepresent themselves as medical professionals not only exposes individuals to potential privacy violations and real harm, but also amounts to a large-scale experiment in which unsuspecting consumers are treated as nonconsenting lab rats.

6) **What this bill would do.** Traditionally, the certification and licensing of medical professionals are overseen by state boards, which have the authority to discipline individuals who impersonate licensed practitioners. However, the emergence of AI systems introduces a regulatory gap: current statutes do not explicitly prohibit AI from impersonating medical professionals, and these systems can be deployed in ways that lead consumers to believe they are interacting with a licensed healthcare provider. As highlighted throughout this analysis, the misrepresentation of an algorithm as a qualified medical professional raises serious privacy, ethical, and safety concerns.

This bill seeks to address that gap by prohibiting AI and GenAI systems from presenting themselves as titled medical professionals. It would also empower the relevant state licensing boards to pursue legal action against the developers and operators of such systems. Ultimately, the bill aims to protect consumers from misleading AI representations and ensure that appropriate regulatory bodies are equipped to enforce these protections.

ARGUMENTS IN SUPPORT: The California Medical Association and SEIU, the co-sponsors of the bill, write in support:

> AB 489 provides state health professions boards with clear authority to enforce title protections when AI systems or similar technologies, such as internet-based chatbots, misrepresent themselves as health professionals. The bill makes entities that develop and deploy AI systems responsible for any violations of existing title protections and explicitly prohibits AI systems from misrepresenting themselves as human health professionals.

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[12] James O'Donnell, "The first trial of generative AI therapy shows it might help with depression," *MIT Technology Review* (March 28, 2025), accessed at https://www.technologyreview.com/2025/03/28/1114001/the-first-trial-of-generative-ai-therapy-shows-it-might-help-with-depression/

The California Attorney General's recent legal advisory on AI in healthcare highlights the importance of this legislation. The advisory emphasizes that AI systems are already widespread in healthcare, with potential benefits but also significant risks. These risks include discrimination, denials of needed care, misallocation of healthcare resources, and interference with patient autonomy and privacy.

The dangers of AI in healthcare are numerous and concerning:

- Misinformation: AI may provide incorrect information which can significantly undermine public trust, leading individuals to forgo scientifically backed treatments for unproven remedies, adversely affecting health outcomes and public health initiatives.

- Bias and discrimination: AI systems trained on biased data can exacerbate health inequities and lead to discriminatory practices.

- Misdiagnosis and improper treatment: AI systems may make errors in diagnosis or treatment recommendations, potentially causing harm to patients.

- Privacy violations: The vast amounts of patient data used to train and operate AI systems raise serious privacy concerns.

AB 489 is a commonsense step to guarding against these dangers and ensuring that AI technologies are developed and deployed responsibly in healthcare settings. By prohibiting AI systems from misrepresenting themselves as licensed health professionals, this bill protects patients from deception and potential harm.

REGISTERED SUPPORT / OPPOSITION:

Support

California Medical Association (CMA) (Co-Sponsor)
California State Council of Service Employees International Union (SEIU California) (Co-Sponsor)
American Association of Clinical Urologists
American College of Obstetricians & Gynecologists - District Ix
California Academy of Child and Adolescent Psychiatry
California Alliance of Child and Family Services
California Association of Orthodontists
California Board of Psychology
California Chapter of The American College of Emergency Physicians
California Dental Association
California Nurses Association
California Orthopedic Association
California Psychological Association
California Radiological Society
California Retired Teachers Association
California Youth Empowerment Network
County Behavioral Health Directors Association (CBHDA)
Kaiser Permanente

Oakland Privacy
SEIU California State Council
Steinberg Institute

Opposition

None on file.

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