

Implications of current litigation on the design of AI tools for healthcare delivery and related legal frameworks

In the format provided by the
authors and unedited

Case/Harm [Database Identifier]	Task
Description	Reason
<u>IBM's Oncology Expert Advisor fails to deliver on promises [AIAAIC0106]</u> The Oncology Expert Advisor (OEA), an AI system developed by IBM, was supposed to analyse large amounts of cancer data and provide personalised treatment recommendations to doctors.	Clinical Decision Making Engages in clinical decision making because the AI provided personalized <i>treatment recommendations</i>
<u>IBM Watson recommends "unsafe and incorrect" cancer treatments [AIAAIC0159]</u> IBM Watson for Oncology used synthetic data to train its AI system for assisting doctors in cancer treatment decisions. Internal documents revealed doctors reported unstable performance and concerns about reliability.	Clinical Decision Making Engages in clinical decision making because the AI provided personalized <i>treatment recommendations</i>
<u>Study: Epic sepsis model misses two-thirds of cases [AIAAIC0316]</u> An algorithm deployed one of largest electronic health record companies in the US to predict sepsis missed approximately 63% of cases, leading to alert fatigue by medical staff, potentially delaying treatment and contributing to poorer patient outcomes.	Disease Diagnosis Engages in disease diagnosis because the AI <i>identified a condition</i> , sepsis
<u>Google Derm Assist dermatology app accused of racial bias [AIAAIC0633]</u> An AI-based app designed by Google to analyze skin conditions, ask questions, and suggest causes; doctors expressed concerns about the system's accuracy and potential overdiagnosis of skin cancers.	Disease Diagnosis Engages in disease diagnosis because the AI <i>identified a condition</i> , different skin cancers
<u>"Clinical grade" AI stress detector fails to work [AIAAIC1272]</u> Cigna's StressWaves Test is a free online tool that uses voice recognition to evaluate and reveal stress; the tool gives inconsistent results when tested on the same person twice, calling into question its efficacy and marketing claims.	Disease Diagnosis Engages in disease diagnosis because the AI <i>identified a condition</i> , stress level
<u>Stanford hospital COVID-19 vaccine allocation algorithm triggers backlash [AIAAIC0406]</u> A rule-based, algorithmic COVID-19 vaccine distribution system developed and run by Stanford Medicine came under fire for prioritizing certain staff members.	Practice Management Engages in practice management because the AI <i>made an administrative decision in running a practice</i> about distribution of vaccines among staff members
<u>US Veterans Affairs suicide prevention algorithm favors white men [AIAAIC1509]</u> A US Department of Veterans Affairs (VA) AI program to predict suicide risk and flag veterans to provide extra help; found to prioritize white men and overlook survivors of sexual violence.	Preventive Care Engages in preventative care because the AI <i>helps patients navigate health challenges through screening and intervention</i> , flagging veterans for extra help based on suicide risk
<u>NarxCare drug addiction risk assessment system wrongly denies patients opioids [AIAAIC0758]</u> AI-based system used to determine the risk of drug addiction and used to deny users opioids; accused of reinforcing existing racial and gender bias, and worsening patient health because of denials.	Preventive Care Engages in preventative care because the AI <i>helps patients navigate health challenges through screening</i> , flagging patients for risk of drug addiction
<u>ENA Emergency Severity Index accused of racial, economic bias [AIAAIC066]</u> AI-based system to triage patients for rapid assessment; found to underestimate black and hispanic peoples' problems, perpetuating inequitable treatment.	Care Coordination Engages in care coordination because the AI <i>triages patients, coordinating health professionals to care for patients</i>
<u>Study: Whisper AI transcription invents medical treatments [AIAAIC1785]</u> Open AI's transcription tool Whisper is prone to generating "hallucinations", including racial commentary, violent rhetoric, and imagined medical treatments; prompted concerns about its use in hospitals.	Medical Documentation Engages in medical documentation because the AI <i>transcribes audio for documentation</i>

<u>Case/Harm [Database Identifier]</u>	Task
Description	Reason
<u>Privacy concerns raised about Google’s HCA Healthcare patient data deal [AIAAIC0647]</u> Collaboration between a US hospital chain and Google to improve operational efficiency via algorithms for patient monitoring and medical decision making.	Clinical Decision Making Disease Monitoring By description, engages in <i>clinical decision making and disease monitoring</i>
<u>Dinerstein v. Google, LLC [DAIL]</u> Collaboration between Google and University of Chicago to share data and create a predictive health system to prevent patients from having to return to the hospital.	Preventive Care Engages in preventative care because the AI <i>screens patients to prevent them from returning to the hospital</i>
<u>Ark. Dep’t of Human Servs. V. Ledgerwood [DAIL]</u> Low income plaintiffs with physical disabilities sued the Department of Health Services, which replaced their nurse assessment questionnaire to an algorithm that drastically reduced attendant care, overriding physicians’ decisions for necessary care.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i>, overriding physicians’ decisions
<u>K.W. v. Armstrong [DAIL]</u> Class action settlement after the ACLU of Idaho sought injunctive relief against the Department of Health and Welfare for cutting disabilities services to “dangerously low levels” because of a trade secret algorithm.	Clinical Decision Making Engages in clinical decision making because the AI limited their disability benefits, forcing patients to pursue <i>alternate treatment options</i> by depriving them of needed services
<u>Michael T v. Bowling [DAIL]</u> West Virginia residents with intellectual and developmental disabilities brought a case against the West Virginia Department of Health and Human Resources for an AI system used to determine eligibility for benefits.	Clinical Decision Making Engages in clinical decision making because the AI limited their disability benefits, forcing patients to pursue <i>alternate treatment options</i> by depriving them of needed services
<u>C.S. et al V Saiki [DAIL]</u> Oregon residents relying on in-home attendants were granted an injunction against an algorithm that vastly cut their hours, and ordered restoration of their previous algorithm that produced expected hours for disabilities.	Clinical Decision Making Engages in clinical decision making because the AI limited their disability benefits, forcing patients to pursue <i>alternate treatment options</i>
<u>Barrows et al v. Humana, Inc [DAIL]</u> Humana used AI tools to improperly deny medical claims under Medicare Advantage plans while ignoring clinical determinations made by providers, preventing patients from affording critical treatments and harm patient health (Ongoing).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i>, overriding physicians’ decisions
<u>Barrows et al v. Humana, Inc [O’Neil Institute]</u> Humana used AI tools to improperly deny medical claims under Medicare Advantage plans while ignoring clinical determinations made by providers, preventing patients from affording critical treatments and harm patient health (Ongoing).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i>, overriding physicians’ decisions
<u>Humana sued for using AI to unfairly deny health insurance to elderly patients [AIAAIC1251]</u> A class-action lawsuit accused US healthcare insurer Humana of illegally using the nH Predict AI model to override physicians’ recommendations and prematurely terminate rehabilitation coverage for elderly patients.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i>, overriding physicians’ decisions
<u>nH Predict accused of having a 90 percent error rate [AIAAIC1841]</u> AIAA/C: A US lawsuit accuses the UnitedHealth Group of deploying an AI-powered algorithm that unfairly denies post-acute care claims for Medicare Advantage patients 90 percent of the time, even against the advice of families and clinicians.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i>, overriding physicians’ decisions

Case/Harm [Database Identifier]	Task
Description	Reason
<u>EviCore algorithm accused of helping health insurance companies deny care [AIAAIC1900]</u> Cigna subsidiary EviCore has been accused of using an AI-driven algorithm to systematically deny health insurance claims, potentially endangering patients' lives and well-being while boosting insurers' profits; failed to adhere to proper medical guidelines.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , overriding physicians' decisions
<u>Kisting-Leung et al. v. Cigna Corporation et al. [DAIL]</u> Class action lawsuit in California alleging that Cigna used an algorithm to wrongfully deny claims to patients seeking care recommended by medical providers (Ongoing).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , overriding physicians' decisions
<u>Kisting-Leung et al. v. Cigna Corporation et al. [O'Neil Institute]</u> Class action lawsuit in California alleging that Cigna used an algorithm to wrongfully deny claims to patients seeking care recommended by medical providers (Ongoing).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , forcing patients to forgo important procedures or pay substantial out-of-pocket costs
<u>Van Pelt v. Cigna Group [DAIL]</u> Class Action lawsuit in Connecticut alleging that Cigna's automated systems allows its medical directors to automatically deny medically necessary claims without even opening patient medical records.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , overriding the decision of patients' physicians
<u>Cigna Px Dx accused of accelerating health insurance claim denials [AIAAIC1061]</u> Cigna's Px Dx system enables doctors employed by Cigna to reject patients' claims (includes those approved and deemed medically necessary by the patient's doctor) using a bulk electronic signature without opening or reviewing their files, and to save money by turning down claims it had once paid.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> that help the health insurance companies' clinicians to overrule the clinical decision making of patients' physicians
<u>UnitedHealth Group algorithm accused of systematically limiting mental health coverage [AIAAIC1838]</u> Repurposed suite of algorithms used by UnitedHealth to identify patients receiving what it considers excessive mental health therapy; led to denials of coverage for many individuals, despite being banned in three US states (CA, MA, NY).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , preventing access to necessary mental health care
<u>Study: UnitedHealth follow-up care algorithm is racially biased [AIAAIC0248]</u> Designed to predict patient health risks and allocate follow-up care, UnitedHealth's AI system classified white patients as being sicker than Black patients with similar health conditions.	Preventive Care Engages in preventative care because the AI <i>helps patients navigate health challenges</i> , flagging patients for follow up care
<u>Estate of Gene B. Lokken et al. v. UnitedHealth Group, Inc. [DAIL]</u> Health insurer UnitedHealthcare is facing a class action alleging it used an artificial intelligence algorithm to override physician recommendations and wrongfully deny coverage to elderly people for care under their Medicare Advantage policies (Ongoing).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , overriding physicians' decisions
<u>Estate of Gene B. Lokken et al. v. UnitedHealth Group, Inc. [O'Neil Institute]</u> Health insurer UnitedHealthcare is facing a class action alleging it used an artificial intelligence algorithm to override physician recommendations and wrongfully deny coverage to elderly people for care under their Medicare Advantage policies (Ongoing).	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , overriding physicians' decisions
<u>Investigation: nH Predict used to deny elderly peoples' Medicare Advantage benefits [AIAAIC1252]</u> nH Predict and similar tools are being used by insurance companies to determine whether patients enrolled in US Medicare Advantage programmes are worthy of care, and are driving the denial of benefits; NaviHealth clinicians became concerned that UnitedHealth bosses were letting nH Predict override their medical expertise.	Clinical Decision Making Engages in clinical decision making because the AI provided <i>recommendations around necessary care</i> , overriding physicians' decisions
<u>TennCare automated system accused of illegally denying Medicaid [AIAAIC1720]</u> A US District Court judge ruled that TennCare's automated Eligibility Determination System (TEDS) wrongfully terminated Medicaid coverage for thousands of Tennessee residents; the problems left many without access to necessary medical care; caused financial hardship, and emotional and psychological damage.	Clinical Decision Making Engages in clinical decision making because the AI limited their coverage based on what it determined as <i>medically necessary care</i> , depriving them of needed services