

Research synopsis: Professional satisfaction and practice sustainability



The American Medical Association is committed to advancing the quadruple aim: pursuing enhanced patient experiences, better population health, reduced healthcare costs, and improved clinician well-being and satisfaction. The AMA's evidence-based education, resources, practice support, and innovation are built on high-quality research that is the foundation for the continued enhancement of the practice of medicine. **Our research efforts, many conducted in partnership with other leading health care and practice science researchers, in part focus on:**

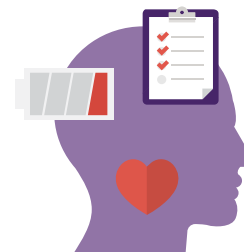
- Studying systems factors associated with physician burnout, stress and professional dissatisfaction
- Evaluating the use of digital health solutions such as telehealth and mobile health tools
- Identifying regulatory and environmental influences on the sustainability of physician practices

These research domains are borne out of the AMA's continued focus on three key fields of work:

- Practice transformation and professional satisfaction
- Digital health
- Practice sustainability

Practice transformation and professional satisfaction

The AMA recognizes that a healthy workforce translates to a safe and productive health care system that provides the best patient care to our population. The AMA has dedicated significant resources to identify, study, and address the drivers of burnout and the systems issues that contribute to workplace stress and demoralization. The AMA's Practice Transformation Initiative marks a significant investment in research to expand the body of practice science through evidence-based interventions that improve the delivery models of care at the practice and system levels. Through this continued research, the AMA looks to move from studying prevalence, causes, and impacts of physician burnout to evaluating comprehensive evidence-based solutions.



Factors affecting professional satisfaction

Creating the impetus for the AMA's commitment to improving professional satisfaction and practice sustainability were the findings of a 2013 AMA-RAND study that [identified high-priority determinants of professional satisfaction](#), as well as factors that detract from physicians' ability to provide the patient care they find most fulfilling. This research presented descriptions of physicians' perceptions of care quality, electronic health records (EHR), leadership, autonomy and other areas of practice.

Burnout and satisfaction with work-life integration

Leading researchers at Mayo Clinic, in 2011, [evaluated rates of burnout and satisfaction with work-life integration](#) among physicians and compared to the general U.S. population. In [2014](#), [2017](#), [2020](#) and

[2021](#), the AMA partnered with Mayo Clinic and the Stanford WellMD Center to conduct follow-up studies and gain a longitudinal view of changes in burnout over time. In addition, AMA-supported research [described differences in occupational burnout, depressive symptoms, career satisfaction and work-life integration](#) by race and ethnicity in a sample of U.S. physicians. This research has been integral to initiating and continuing the national dialogue on clinician burnout, well-being and mental health.

Burnout and other factors

The AMA collaborated on research in 2017 to [describe the reciprocal relationship among three domains of physician well-being](#): resilience, culture of wellness and efficiency of practice—which are all necessary components of effective solutions that promote physician well-being

and reduce burnout. Although the AMA recognizes burnout as a result of systems issues rather than an individual physician problem, physicians are uniquely resilient, prompting further interest in [evaluating the relationships between burnout and resilience](#).

Cognitive task load can affect a physician's ability to perform and can contribute to burnout. The AMA collaborated with other researchers to [evaluate cognitive task load](#), measured by the National Aeronautics and Space Administration (NASA) Task Load Index (TLX), and whether it correlated with burnout scores in a large national study of U.S. physicians.

AMA researchers also contributed to a study of [physician mistreatment and discrimination](#) and the association with burnout.

Medical licensure applications

Physicians can experience mental health concerns that affect their practice and patient care, but often avoid seeking treatment. The AMA, along with researchers at Mayo Clinic, [determined that many physicians are reluctant to seek medical care](#) for treatment of a mental health condition due to concerns about repercussions to their medical licensure, since disclosure of medical conditions is required on some licensure applications and renewal forms. This research supported the AMA's efforts to advocate for state licensing entities to change their application and renewal forms to remove questions that discourage physicians from seeking mental health treatment.

Physician workforce

The AMA recognizes the serious effects a dwindling physician workforce will have on the future of health care in the U.S. Through research, the AMA has quantified the potential loss to the physician workforce by [evaluating physicians' intent to reduce their clinical hours](#) or [leave the practice of medicine](#). Another study [estimates the significant costs](#) related to physician turnover and reduced clinical hours attributable to burnout each year. Continued research further explores this issue, providing [estimates for excess costs](#) of turnover in general in addition to the excess costs of turnover due to burnout.

Electronic health records

EHRs were identified in early AMA research as one of the primary detractors of satisfaction for physicians in practice. A 2016 time-motion study of physician time in ambulatory practice quantified the amount of time physicians spend working in their EHRs versus the amount of time spent face-to-face with their patients. The study

found that for every hour physicians provide direct clinical face time to patients, nearly two additional hours are spent on EHR and desk work within the clinic day. Outside office hours, physicians spend another one to two hours of personal time each night doing additional computer and other clerical work.

The AMA subsequently studied physicians' perceptions of EHR usability, [evaluating its association with burnout](#), and [assessing the associations of usability with patient interaction and work-life integration](#). Other AMA-supported research aimed to [determine the relationship between physician-perceived EHR usability and workload](#) by specialty and evaluate for associations with professional burnout. Later research evaluated [gender differences in primary care physicians' EHR use](#).

As part of the AMA's commitment to improving the use of EHRs in medical practice, the AMA aims to build the evidence base for [established EHR-use metrics](#) and their ability to quantify elements of efficiency of practice and teamwork, as well as their relationship to burnout, professional satisfaction, and physician well-being. **Through its EHR Use Research Grant program, the AMA has invested nearly \$1.5 million in research** to build the evidence base on the validity and value of EHR use metrics. Rigorous research continues to advance the science on the use of EHR audit log data, transactional data, or other EHR user data to identify patterns in EHR use that may detract from patient care or EHR efficiency; contribute to burnout, stress or attitudinal shifts related to work and career; or may inform decisions about workflows, teamwork and resource allocation at the practice level. Study findings continue to be published in peer-reviewed literature, adding valuable contributions to this field of research, and setting a path forward for using EHR audit log data to improve the way EHRs are used in clinical practice.

COVID-19

The COVID-19 pandemic placed extraneous stress and burden on the already taxed clinical workforce. The AMA collaborated with partners at Hennepin Healthcare to [evaluate physician stress during the early days of COVID-19](#), as well as the [prevalence and correlates of stress and burnout](#) among U.S. health care workers during the COVID-19 pandemic. AMA-supported research has demonstrated [work intentions of the physician workforce during COVID-19](#) as well as [trends in EHR inbox messaging during COVID-19](#). Other AMA-supported research evaluated [post-traumatic stress symptoms](#) among health care workers treating COVID-19 patients and [childcare-related stress](#) among physicians.

Digital health

The AMA prides itself on being a leader in the movement for greater digital health adoption. Our research aims to grow the body of evidence on physicians' motivations and requirements for the integration and use of digital clinical tools. A key part of this focuses on studying telehealth and virtual health care delivery to ensure it remains available to physicians and patients as a long-term solution for patient care.



Adoption of clinical tools

In 2016 the AMA conducted a comprehensive study of physician's motivations and requirements for the adoption of digital clinical tools. We repeated the study in [2019](#) and [2022](#) to determine the degree to which adoption had occurred, and to identify attitudinal shifts among physicians toward their use and adoption.

Return on health

Building on existing research, the AMA in collaboration with Manatt Health, developed a "Return on Health" framework to [articulate the value of digitally enabled care](#) that accounts for ways in which a wide

range of virtual care programs can increase the overall health and generate positive impact for patients, clinicians, payors and society.

Telehealth

The AMA participated in the Telehealth Impact Study Work Group of the COVID-19 Healthcare Coalition to [study, describe, and document](#) the experience and attitudes of physicians and other frontline clinicians during the COVID-19 pandemic. In 2022 the AMA published results from a survey of physicians aimed to gather insights on the experiences of current and expected future use of telehealth to inform ongoing research and advocacy, resource development, and continued support for physicians, practices, and health systems.

Practice sustainability

Medical practices face unique challenges in sustaining business operations while providing high-quality patient care. Regulatory and administrative burdens can hinder patient care and professional satisfaction—and make it difficult to manage and sustain practice operations. Through a variety of research, the AMA has identified some of these challenges and is committed to supporting practices in navigating and overcoming them as the health care practice environment continues to evolve.

Effects of alternative payment models

In 2015 the AMA partnered with the RAND Corporation to [identify and evaluate the effects of emerging alternative payment models](#) on physicians and physician practices. The AMA and RAND followed up on this study in 2018 to [measure progress and changes](#) since the first study.

Behavioral health integration

The AMA, in recognizing the importance of mental health care and the potential for increased access through integration of behavioral health services into primary care, partnered with the RAND Corporation to [describe factors influencing physician practices' integration of behavioral health services](#).

Effects of changes to E/M coding requirements

The AMA is seeking to examine, categorize and measure the impact of 2019 and 2021 Program Year changes to the Centers for Medicare and Medicaid Services' (CMS) physician documentation requirements and coding of evaluation and management (E/M) office visit services. To inform AMA's ongoing efforts to reduce physicians' administrative

burden, and to determine whether any measured changes in time spent on documentation and coding are associated with changes in physician burnout levels, the AMA partnered with the University of California San Francisco on this three-year research effort.

Challenges of practicing in physician-owned private practice

The AMA partnered with Mathematica in 2020 and 2021 to define, analyze and assess the factors that create and sustain high-performing, physician-owned private practices. The [report](#) showcases valuable insight into the nature of high-performing private practices, advantages and challenges to private practice, and the changes that physicians in private practice foresee. The AMA continues to investigate, through qualitative and quantitative research, elements of private practice to inform policy, guide physician leaders, and further support practice owners in building and sustaining successful independent practices.

