ESSAY

A critique of clinical economy: reassessing value and care during covid-19—an essay by Eric Reinhart and Daniel Brauner

For decades, American medical practice has been organised around billing codes, with severe consequences for patient care and physician morale. The interruption of routine clinic visits owing to covid-19 presents an opportunity to reconsider the guiding principles of clinical care, write **Eric Reinhart** and **Daniel Brauner**

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The United States is host to more documented covid-19 cases and deaths than any other country. Under pandemic conditions, deficiencies in the organisation of the American healthcare system have become more visible and their consequences—particularly racial and class disparities in care—intensified.

The routine clinic visit is one feature of this system that has attracted attention by its sudden obsolescence. As is the case across broad swathes of the US, the clinics in which we work and train have been closed or drastically curtailed because of infection risks. Concerns about face-to-face interactions have led some states to prohibit non-urgent appointments in physical clinics during covid-19, provoking a surge in telemedicine. Such interruptions to standard practices are now prompting critical questions: How necessary is the clinic? What functions does it serve? Could its essential medical roles be fulfilled otherwise?

This ongoing disruption has led many to argue that the high volume of clinic visits in the US has been neither medically necessary nor beneficial. Such observations alone, however, are not sufficient to allow us to change and improve our existing practice standards. To do so effectively, we must also re-examine the structural economic pressures by which clinical care has been shaped over the last half century.

In American healthcare, the organisation of care remains determined by disconnected institutions that bill private and government sponsored insurance on a fee-for-service basis. This system is conditioned by mundane, taken-for-granted billing codes that supply the overarching economic incentives for the delivery of care. This essay traces the rise of the contemporary American clinic to illuminate forces shaping this billing structure and how it has arranged relationships between government, medical care, doctors, and patients—relationships largely orchestrated by the American Medical Association (AMA) and its invention of a list.

A strategy for protecting fee-for-service

Historically, the AMA has opposed government involvement in healthcare, fearing that what it called “socialised medicine” would mean layers of bureaucracy and paperwork, loss of physician

autonomy, and decreased financial compensation. This fear intensified in the 1960s as proposals for Medicare and Medicaid gained momentum.

AMA leadership had two options: continue with plan A—a losing battle against government participation and financing of medical care—or generate a plan B. Under the direction of Francis Cox, the AMA developed and implemented plan B: stop resisting government involvement in healthcare and instead co-opt and control it.

The first step in this strategy was to conduct Relative Value Studies, surveys of physicians that catalogued various procedures and charges, initially in California and then nationally. Cox and the AMA used these data to create a list of billable procedures with relative values expressed as “relative value units” (RVUs). In speeches to physicians to advocate for restructuring clinical visits around this list, Cox explained his philosophy: that the adoption of the list was necessary to enable “the private practice of medicine, as we know it, to continue.”¹ He saw RVUs as a means of maintaining the fee-for-service, private practice model under government sponsorship.

The AMA’s Current Procedural Terminology, or CPT manual, came out of the RVU index and consists of a system of billing codes for different services, each corresponding with a particular level of billable charges. A look at the early RVU studies reveals nearly verbatim adoption of these studies in the CPT manual, which was first published by the AMA in 1966, just in time to bill the newly established Medicare and Medicaid national insurance programmes, treating them like large insurance companies. This model continues in its latest iteration, CPT 2020.

With CPT, the AMA had not only found a way effectively to control government involvement in healthcare, it had also developed a way to directly profit from it. In the contracts the AMA established with the Health Care Financing Administration (HCFA)—the government agency that administers Medicare and Medicaid—the AMA made licensing of the CPT to the government conditional on the HCFA’s commitment to publicly endorse the CPT, require its use by physicians, and encourage its use by others.² The CPT codes provided the HCFA with a short term solution to the need for a billing system, even as this

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arrangement would soon prove to have long term unintended consequences. Licensing the CPT codes from the AMA allowed the government to avoid the laborious tasks of producing a new set of original billing codes and generating physician acceptance of them.

The contracts prohibited the HCFA from subsequently developing or considering a competing system. According to a unanimous federal appeals court decision in 1998, which revealed elements of an AMA contract with the HCFA, “the AMA misused its copyright by licensing the CPT to HCFA in exchange for HCFA’s agreement not to use a competing coding system.”³ This arrangement has effectively hamstrung the HCFA, leaving it dependent on the AMA.

The licensing and sale of the CPT system to the government and billing industry has provided a substantial source of AMA revenue for many years.⁴ Although the exact figure gathered from the sale of CPT codes is not disclosed in public documents, the AMA reports that \$208m (£166m; €182m) of its \$390m total revenue in 2019 was derived from “royalties and credentials”; CPT related sales appear to comprise the most significant component of this revenue category.^{5,6} This annual income has allowed the AMA lobby to maintain outsized influence over American healthcare.

The new specialty: partitioning care

The origins of the American clinic today are inextricably tied to the CPT codes. The first CPT manual listed few non-surgical procedures and a clinic visit itself became the main “procedure” of non-surgical doctors. One set of visit codes for “consultation” rewarded specialists with higher RVUs for their expertise; another set of codes was introduced for “primary physicians,” giving rise to a new, distinct specialty.

This billing structure, in which CPT codes dictate levels of RVU reimbursement, has had far ranging consequences for medical training. It has provided financial incentives for rapid increases in specialisation and continues to be a major determinant of deficiencies of investment, quality, and physician numbers in primary care.

The CPT dictated system reformed the doctor-patient relationship. Previously, many specialists cared for patients whose predominant condition fell within their specialty while also addressing a patient’s additional medical needs.⁷ Following the adoption of the CPT manual, specialists were disincentivised from treating conditions outside their specialty or providing “continuing care” if they wanted to bill at higher levels. The CPT system thus effectively installed specialisation and billing as the ordering principles of the American medical system. Although increasing specialisation is necessary in light of advancements in medical knowledge, financially incentivised partitioning of patients’ conditions at the expense of continuity and coherence in patient experience is not an inevitable consequence of specialisation.

The CPT system at first formalised a new model of care that was, in theory, to be managed by a single physician, consigning responsibility for continuity exclusively to the newly conceived “primary physician”—a category defined from its outset by inadequate physician numbers. In 1966, the same year of the first CPT manual, the AMA created the Citizens Commission on Graduate Medical Education and assigned it the task of establishing a clinic based specialty to address an ostensible lack of general practitioners. Recommending the creation of residency programmes to train primary physicians, the commission defined the new specialty “in the first contact sense” and tasked it with “continuing and comprehensive patient responsibility,” which became especially important as other specialists relinquished this role.⁸

Primary physicians’ mandate to provide continuing and comprehensive patient care was stymied, however, by several CPT related influences. When patients became sick, they were often sent to specialists who applied specialty directed guidelines: algorithms for a particular organ or disease to recommend covered procedures. Primary physicians familiar with the patient were largely excluded from decision making processes in favour of specialists’ recommendations, which tended towards polypharmacy and additional procedures. Furthermore, when patients were admitted to hospital, the primary doctor was increasingly side lined in the clinic, such that specialists took over short term care of their patients.

One indicator of the harmful health consequences of this system was the 30 day hospital re-admission rate, which skyrocketed following the associated establishment of “hospitalist” physicians—those responsible only for in-hospital care—in the late 1990s. This reality, which was partly a result of billing incentives for short term hospitalisation and rapid discharge, later led to regulations in the Affordable Care Act that penalise hospitals for high rates of 30 day re-admissions. These regulations do not, however, address the underlying billing system that perpetuates perverse incentives in clinical care and shapes its troubling discontinuities.

The clinic of paperwork

As the partitioning of hospital care reconfigured the role of the clinic, basic screening and vaccinations—tasks better performed by large scale public health initiatives rather than by physicians—became an essential part of the primary doctor’s daily routine and revenue. Primary doctors became increasingly financially dependent on the routine clinic visit, and these visits became standard practice, regardless of whether they were justified by a patient’s condition.

Revenue from routine visits has become so central to primary care that some training programmes now expressly incorporate maximally profitable coding practices (the choice of documented billing codes for services rendered) into residency curriculums, where “accuracy” in coding is measured by whether a trainee has coded for the most and highest possible billable items for a given visit.⁹ Under this organisation of the clinic, when an urgent medical issue does arise, a patient’s own primary doctor is often fully booked with routine visits such that the urgent visit falls to another doctor unfamiliar with that patient’s history. Even in clinics designed to avoid this particular problem, the minutiae of billing requirements frequently threaten to overwhelm attention given to actual care.

Further frustrating the ideal of the clinic was a push by Medicare regulators to enact cost cutting measures. Beginning in the 1990s, multimillion dollar fines were levelled against many large medical centres for billing clinic visits at higher CPT levels without sufficient documentation.¹⁰ Regulators accused doctors of fraud and instituted complex reporting requirements to justify CPT levels, intending to encourage doctors to bill at lower levels and be more prudent in their administration of procedures. Instead, doctors became expert at providing the key terms needed to justify procedures and billed at higher CPT levels, rendering the fines impotent. In 1980 physician and writer Howard Spiro offered this critique: “We are all encouraged to do more in the way of technological activities today than 10 or 30 years ago simply because the third party payers pay for technology and not for thinking... it is easy to assess the costs of the procedures but difficult to assess the cost of a thought.”¹¹

The adoption of electronic medical records further de-emphasised critical clinical thought by enabling the construction of the patient

chart with pre-set, generic qualifying language. The medical record, which had previously served many functions, including tracking the clinical narrative of the patient, became first and foremost a documentary exercise to justify billing. The focus was shifted from patient wellbeing—a difficult concept on which to assign itemised, billable value—to filling out encounter forms, which became increasingly onerous because of efforts to prevent fraud that was defined as inadequate documentation. In this medical chart-cum-bill, the patient as billable customer became most relevant. Furthermore, this system has only compounded the paperwork requirements for physicians, which are noted today as the leading drivers of high rates of physician burnout and dissatisfaction.¹²

The AMA's fear that government involvement in healthcare would result in increased bureaucracy and reduced physician autonomy and satisfaction have been realised; ironically, this reality is largely the consequence of the AMA's own designs.

After covid-19

The current suspension of the clinic as we have known it offers an opportunity to reassess its organisation and structural determinants.¹³ Organisation of medicine around the CPT system rather than patient care bears much responsibility for the broken system from which we are now suffering. As we reopen the clinic, we must disrupt its walls such that patients can be cared for across sites—telephone, video, hospital, patients' homes, nursing homes, and, when necessary, the physical clinic—using electronic charting compiled to enable an understanding of patients' circumstances, not records constructed around key terms to justify billing. Freeing the clinic from a billing centric system, rather than just updating CPT codes and documentation requirements for telemedicine, is necessary for structural changes to advance effective, equitable care as an actionable ethos.

The fee-for-service American healthcare system produces profound inefficiencies and inequities in care. Efforts to address this reality—such as calls for a single payer national system—must confront the specific mechanisms by which this has come to be the case. To do so, historical-economic analyses of the bureaucratic structures embedded in current practices are vital to enable genuine improvements in clinical care, morale, and public health.

Biographies

Eric Reinhart is an MD-PhD candidate at the University of Chicago Pritzker School of Medicine and the Harvard University Department of Anthropology. He has conducted four years of historical and ethnographic research in American clinical contexts, evaluating patient-doctor relationships and their structuring bureaucratic determinants. He is also a candidate in adult psychoanalysis at The Chicago Center for Psychoanalysis. Daniel Brauner is board certified by the American Board of Internal Medicine in general internal medicine, rheumatology, and geriatric medicine, and has been in clinical practice for nearly 40 years. He is a professor in the Department of Medicine, chief of the Division of Geriatrics, and also appointed in the Department of Family and Community Medicine and the Program in Medical Ethics, Humanities, and Law at Western Michigan University Homer Stryker MD School of Medicine. Until 2020, he was an associate professor at the University of Chicago, where he had an active clinical practice and was programme director of the Geriatrics Fellowship and assistant director of the MacLean Center for Clinical Medical Ethics for more than 20 years. He has published on the history of resuscitation and 'do-not-resuscitate' orders, language, and medicine, cognitive impairment and dementia, and other issues in the care of older patients in the US.

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- 1 Cox F. Historical precedence for a relative value study. Proc Fourth Region Conf Rel Value Studies Washington, DC, 1960. American Medical Association Committee on Medical Practices: 21.
- 2 Association of American Physicians and Surgeons. Agreement between the Department of Health and Human Services Health Care Financing Administration and American Medical Association. 1983. www.aapsonline.org/ama-hcfa-cpt-signed-agreement-1983.pdf.
- 3 Practice Management Information Corp v The American Medical Ass'n. 121 F.3d 516, 520-21 (9th Cir 1997). <https://casetext.com/case/practice-management-info-corp-v-the-ama>
- 4 Schlafly A. AMA's secret pact with HCFA. 1998. <https://www.jpands.org/hacienda/article1.html>.
- 5 American Medical Association. 2019 Annual report. <https://www.ama-assn.org/system/files/2020-04/2019-annual-report.pdf>.
- 6 Huntoon LR. CPT coding: practice of medicine or insurance function? *J Am Phys Surg* 2012;17:34-6.
- 7 Howell JD. Reflections on the past and future of primary care. *Health Aff (Millwood)* 2010;29:760-5.
- 8 The Graduate Education of Physician. The report of the Citizens Commission on Graduate Medical Education. Commissioned by the American Medical Association. chairman John S Millis. 1966;37:48.
- 9 Skelly KS, Bergus GR. Does structured audit and feedback improve the accuracy of residents' CPT E&M coding of clinic visits? *Fam Med* 2010;42:648-52.
- 10 Manier JUS sues U. of C. in Medicare overbilling: liability could run up to \$100 million. Chicago Tribune 1999;1.</other>
- 11 Spiro H. The technological imperative in medicine. *Proceedings of a Totts Gap Colloquium* June 15-17, 1980. Wolf S, Berle BB, eds. Plenum Press, 1981.
- 12 Hartzband P, Groopman J. Physician burnout, interrupted. *N Engl J Med* 2020;382:2485-7.
- 13 Cutler DM, Nikpay S, Huckman RS. The business of medicine in the era of COVID-19. *JAMA* 2020;323:2003-4.

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