Systems Breakdowns In Healthcare

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Executive summary

U.S. healthcare delivery continues to be shaped by structural "systems breakdowns" that drain labor capacity and undermine throughput, even as national spending rises. Peer reviewed evidence published since 2019 consistently indicates that administrative activity is a large and persistent share of total healthcare spending, with multiple studies and syntheses placing administrative expenses around 15% to 25% of national health expenditures, equating to roughly $600 billion to $1 trillion annually when benchmarked to 2019 spending levels. (Chernew & Mintz, 2021). [1]

These macro costs manifest operationally as time loss, rework, and delays. One nationally representative study using the 2019 National Electronic Health Records Survey found U.S. office-based physicians spent a mean of 1.77 hours per day completing documentation outside office hours, and the authors estimated about 125 million hours of "after-hours" documentation in 2019. (Gaffney et al., 2022). [2] A separate large-scale EHR note analysis (104,456,653 notes; 1,960,689 patients) found that 50.1% of words were duplicated from prior documentation, with duplication rising from 33.0% in 2015 to 54.2% in 2020, a quantifiable indicator of rework and information overload embedded in clinical workflows. (Mohan et al., 2022). [3]

Across regulated administrative domains, compliance-related work imposes measurable practice-level burden. For example, in a qualitative study of 30 physician practices, the mean reported cost of participating in Medicare's Merit-based Incentive Payment System (MIPS) in 2019 was $12,811 per physician, and clinicians plus administrators spent more than 200 hours per physician on MIPS-related activities. (Khullar et al., 2021). [4] Prior authorization remains a major driver of administrative workload and care delay; a 2024 peer reviewed survey study reported that provider organizations spend time equivalent to more than 100,000 full-time registered nurses per year on prior authorization. (Sahni et al., 2024). [5] A January 2026 open-access systematic review synthesized 25 studies and concluded that prior authorization requirements are associated with measurable patient harm, including care delays and disease exacerbation. (Murphy et al., 2026). [6]

Fragmentation also persists at the systems layer. ONC's 2023 hospital interoperability data brief shows that 70% of non-federal acute care hospitals engaged in all four exchange domains "routinely or sometimes," yet fewer than half (43%) routinely engaged in all four, and even when hospitals reported routine access to necessary external clinical information (71%), only 42% reported clinicians often used it at the point of care. (Gabriel et al., 2024, ONC Data Brief No. 71). [7]

Sources:

Chernew, M., & Mintz, H. (2021). Administrative expenses in the US health care system: Why so high? JAMA, 326(17), 1679–1680. [1]

Gaffney, A. W., et al. (2022). Medical documentation burden among US office-based physicians in 2019: A national study. JAMA Internal Medicine. [2]

Mohan, V., et al. (2022). Prevalence and sources of duplicate information in the electronic medical record. JAMA Network Open. [3]

Khullar, D., et al. (2021). Time and financial costs for physician practices to participate in the Medicare Merit-based Incentive Payment System (MIPS): A qualitative study. JAMA Health Forum. [4]

Executive summary (continued)

Credentialing delays are widely acknowledged as constraining staffing responsiveness, but peer reviewed literature from 2019–Jan 2026 provides limited standardized cycle-time benchmarks across the full credentialing lifecycle (hospital privileging plus payer network enrollment). This gap is itself a systems failure: organizations struggle to manage what they cannot measure consistently. The most defensible evidence for cycle time constraints therefore relies on official audits and reports in specific contexts. A 2023 GAO report on Veterans Health Administration (VHA) onboarding emphasized that credential verification is a required onboarding task, while also finding that VHA's onboarding system data were unreliable (incomplete, inaccurate, untimely), limiting oversight of onboarding and deferred credentialing tasks. (GAO, 2023, GAO-23-105706). [8]

Implication for healthcare organizations: the dominant breakdown is not a single process step, but a reinforcing loop: payer and regulatory complexity fuels documentation and transaction volume; weak interoperability perpetuates manual workarounds; credentialing and enrollment delays constrain capacity; and measurement gaps prevent targeted fixes. The practical objective for leaders is to (1) quantify where time is lost, (2) standardize and automate the highest-friction transactions, and (3) redesign governance so that cross-functional process owners can change work, not just report on it.

Primary sources used for quantitative trends (latest data available by Jan 2026): ONC hospital exchange trend metrics through 2023, CAQH Index administrative transaction adoption and estimated spend through 2023, and national health expenditure totals through 2024 (published Jan 14, 2026). [9]

Sources (continued):

Sahni, N. R., et al. (2024). Perceptions of prior authorization burden and solutions. Health Affairs Scholar, 2(9), qxae096. [5]

Murphy, J., et al. (2026). Adverse effects of health plan prior authorization on clinical effectiveness and patient outcomes: A systematic review. The American Journal of Medicine, 139(1), 24–32.e1. [6]

Office of the National Coordinator for Health Information Technology. (2024). Interoperable exchange of patient health information among U.S. hospitals: 2023 (ONC Data Brief No. 71). [7]

U.S. Government Accountability Office. (2023). VA health care: VHA lacks reliable onboarding data for new clinical staff (GAO-23-105706). [8]

Key definitions used in the analysis

Administrative burden is defined as nonclinical work required to bill, document, authorize, report, and coordinate across entities, including payer transactions, clinician documentation and coding, and institutional administrative functions. This definition aligns with peer reviewed framing that administrative expense is driven by billing and coding, physician administrative activities, and insurance administrative costs. (Chernew & Mintz, 2021). [1]

Fragmented systems refers to technical and operational fragmentation across organizations, such as incomplete interoperability across "send, receive, find, integrate" domains and low routine use of externally sourced data at the point of care. (Gabriel et al., 2024). [7]

Credentialing delays encompasses delays in verifying clinician qualifications and privileges and, where relevant, onboarding processes that include credential verification. Peer reviewed evidence documents the problem's salience, but standardized cycle-time metrics are limited; where cycle-time measurement is not available, this report uses official audits in defined contexts and labels them as official. (Bell & Katz, 2021; GAO, 2023). [12]

Limitations and how they are handled

The primary limitation is metric heterogeneity: research studies measure "burden" using different denominators (hours per clinician per week, cost per physician per year, share of notes duplicated, adoption percentage, national estimated spend). This report mitigates that by presenting results in three non-additive tables: a study comparison table, a trend-and-policy timeline, and a cost/time loss summary table that explicitly warns against summing categories. [13]

A second limitation is that some operational cycle-time data (especially credentialing) is not widely available in peer reviewed literature, constraining comparability across settings. The report explicitly identifies the gap and uses official reports where appropriate. [14]

Sources:

Bell, D. L., & Katz, M. H. (2021). Modernize medical licensing, and credentialing, too: Lessons from the COVID-19 pandemic. JAMA Internal Medicine, 181(3), 312–315. [15]

Chernew, M., & Mintz, H. (2021). Administrative expenses in the US health care system: Why so high? JAMA, 326(17), 1679–1680. [1]

Gabriel, M. H., et al. (2024). Interoperable exchange of patient health information among U.S. hospitals: 2023 (ONC Data Brief No. 71). [7]

Findings across five focal areas

Administrative burden

Administrative burden is not merely "overhead"; it is a system-level design outcome of multiplayer complexity, differentiated benefit designs, and the need for utilization management, network management, and payment model administration. A 2021 JAMA Viewpoint summarizes evidence that administrative expenses account for roughly 15% to 25% of total national health care expenditures, equating to about $600 billion to $1 trillion per year using 2019 spending as the reference level. (Chernew & Mintz, 2021). [1]

International comparisons reinforce that the U.S. level is structurally high. In a comprehensive 2017 U.S.–Canada comparison (published 2020), U.S. insurers and providers spent $812.0 billion on administration, $2,497 per capita, representing 34.2% of spending in categories where administrative expenditures could be estimated, versus $551 per capita (17.0%) in Canada. The study disaggregates major components such as insurer overhead ($844 vs $146 per capita) and hospital administration ($933 vs $196 per capita). (Himmelstein et al., 2020). [16]

At the organizational level, recent peer reviewed hospital evidence indicates that "administrative cost" is shifting in composition, which complicates simplification strategies. A mixed-methods study using Medicare cost report data from 2011–2022 found that administrative and general salary costs declined as a share of total expenses while total administrative costs increased, implying growth in non-salary drivers such as purchased services, compliance, legal/accounting, and other nonclinical administrative expenditures. It also found rural hospitals spent 18% more on administrative and general salaries (as a share of total expenses) than urban hospitals after adjustment. (Handlon et al., 2025). [17]

> ***Interpretation:*** *The burden is not only labor-driven. Even if organizations compress administrative headcount, non-salary administrative demands can continue to rise because they include compliance-related services, contracted operations, and system integration costs. As a result, high-leverage interventions often require redesigning upstream requirements (standardization, interoperability) rather than solely "making staff faster."*

Sources:

Chernew, M., & Mintz, H. (2021). JAMA, 326(17), 1679–1680. [1]

Himmelstein, D. U., Campbell, T., & Woolhandler, S. (2020). Health care administrative costs in the United States and Canada, 2017. Annals of Internal Medicine. [16]

Handlon, L., et al. (2025). Trends in hospital administrative costs: Urban–rural disparities, barriers, and reduction strategies. Health Affairs Scholar, 3(8), qxaf148. [17]

Credentialing delays

Peer reviewed literature during 2019–Jan 2026 consistently frames credentialing as a bottleneck in workforce agility, especially during surges, but provides limited standardized, comparable cycle-time metrics across settings. For example, a 2021 editorial argues that the COVID-19 emergency highlighted that state licensure and hospital credentialing procedures were ill-prepared for rapid staffing mobilization, reinforcing credentialing as a systems constraint rather than an isolated administrative inconvenience. (Bell & Katz, 2021). [15]

Evidence gap: Within the 2019–Jan 2026 peer reviewed evidence base, there is not a consistent, national, peer reviewed time-series of credentialing cycle time (for example, "days from application to privileges granted") comparable across hospital types and specialties. Because the user requirement prioritizes peer reviewed sources, this report does not introduce non-scholarly benchmark timelines.

Official evidence where peer reviewed metrics are insufficient: In the federal system, GAO provides detailed evidence that credentialing verification is a required onboarding task and that system data quality can itself become a barrier to oversight and improvement. GAO reports that VHA onboarding includes tasks such as verifying clinical staff credentials or checking fingerprints, and found the onboarding system of record (USA Staffing) had unreliable data (incomplete, inaccurate, and not timely), limiting VHA's ability to oversee onboarding and deferred tasks. (GAO, 2023, GAO-23-105706). [8]

> ***Interpretation:*** *Credentialing delays should be treated as a measurable throughput problem, not simply a compliance function. The combination of (a) multi-entity verification requirements and (b) unreliable "system of record" data turns credentialing into a queueing system without reliable instrumentation. Under such conditions, leaders cannot manage capacity, variance, or downstream revenue loss with confidence. The operational priority is therefore to create a credentialing "control tower" with clean timestamps and resolved exceptions, even before full automation.*

Compliance overhead

Compliance overhead spans quality reporting, billing and documentation requirements, and newer rules intended to protect patients or promote interoperability. In many provider organizations, the most visible costs arise not from the existence of regulations but from the operational "translation layer": gathering data, meeting measure specifications, and maintaining auditability in environments where source data are fragmented.

Sources:

Bell, D. L., & Katz, M. H. (2021). JAMA Internal Medicine, 181(3), 312–315. [15]

U.S. Government Accountability Office. (2023). VA health care: VHA lacks reliable onboarding data for new clinical staff (GAO-23-105706). [8]

Compliance overhead (continued)

A quantified example is MIPS participation. In a 2021 peer reviewed qualitative study of 30 physician practices, leaders reported that participating in MIPS for the 2019 performance year cost on average $12,811 per physician (with wide variation), and clinicians and administrators spent more than 200 hours per physician on MIPS-related activities. (Khullar et al., 2021). [4] These are not small "paperwork" costs; in smaller practices they can represent a material share of management capacity and IT spend, and they compete directly with clinical throughput and access.

Rules aiming to protect patients can also add operational layers. The No Surprises Act was implemented via interim final rules beginning in 2021 (Federal Register: "Requirements Related to Surprise Billing; Part I"), contributing to new disclosure and dispute processes. (Federal Register, 2021). [19] While this report does not quantify aggregate provider compliance cost for the No Surprises Act using peer reviewed totals (a gap in readily comparable data), the timeline matters because these patient protection rules are frequently implemented within the same revenue cycle and compliance functions that also manage prior authorization, claims attachments, and audits.

Finally, interoperability-focused rules are explicitly framed as burden reduction but introduce near-term compliance work. CMS's Interoperability and Prior Authorization Final Rule (CMS-0057-F) was released January 17, 2024 and requires impacted payers to implement certain provisions by January 1, 2026, with API requirements primarily extended to January 1, 2027. (CMS, 2024; page last modified 2025). (Official regulation/guidance). [20]

> ***Interpretation:*** *Compliance overhead behaves like a multiplier when systems are fragmented. When data is not exchanged and used routinely, compliance becomes an artisanal production process: humans reconcile, interpret, and re-enter information across systems. The strategic goal is therefore not only to reduce the number of measures or rules, but to reduce the "cost-to-comply per rule" through shared data models, internal controls, and automation.*

Sources:

Centers for Medicare & Medicaid Services. (2024). CMS Interoperability and Prior Authorization Final Rule (CMS-0057-F). [20]
Federal Register. (2021). Requirements related to surprise billing; Part I. [19]
Khullar, D., et al. (2021). JAMA Health Forum. [4]

Fragmented systems

Fragmentation in healthcare is simultaneously technical (missing standards-based exchange) and operational (workflows built around fax, portals, and manual reconciliation). ONC's national hospital interoperability tracking provides a high-quality lens on both progress and remaining "last mile" barriers.

In 2023, 70% of non-federal acute care hospitals engaged in all four domains of interoperable exchange (send, receive, find, integrate) routinely or sometimes, but only 43% did so routinely. (Gabriel et al., 2024). [7] This matters because "sometimes" interoperability still implies queueing and exceptions: staff often must search, request, and reconcile information rather than reliably receiving it within clinical workflows.

The ONC brief also highlights a critical conversion gap from availability to use. In 2023, 71% of hospitals reported routine access to necessary clinical information from outside providers, yet only 42% indicated clinicians routinely used that information when treating patients. (Gabriel et al., 2024). [7] This implies that interoperability improvements that stop at exchange do not automatically reduce administrative burden or improve decisions; workflow integration and clinician-facing usability are decisive.

Finally, fragmentation has equity and resilience implications. The ONC brief reports that lower-resourced hospitals (for example, small, rural, critical access, or independent) engaged less frequently in interoperable exchange than higher-resourced peers. System affiliation is strongly associated with routine interoperability (53% of system-affiliated hospitals are routinely interoperable vs 22% of independent hospitals in 2023). (Gabriel et al., 2024). [7]

> ***Interpretation:*** *Fragmentation is not just "lack of data." It is a systems constraint that forces organizations to build redundant and parallel processes: separate schedules, separate payer portals, separate documentation patterns to satisfy reimbursement rather than care. Reducing fragmentation therefore requires both infrastructure (standard APIs, exchange networks) and governance (shared data stewardship, clear accountability for integration and use).*

Sources:

Office of the National Coordinator for Health Information Technology. (2024). Interoperable exchange of patient health information among U.S. hospitals: 2023 (ONC Data Brief No. 71). [7]

Hidden time and cost loss

Hidden time and cost loss refers to losses not captured in a single budget line but measurable through proxies such as after-hours work, duplicated documentation, and transaction processing time. Evidence since 2019 shows hidden loss is large, persistent, and often concentrated in repeatable administrative transactions.

Documentation and duplication as measurable rework: In 2019, office-based physicians spent a mean of 1.77 hours per day documenting outside office hours, and the implied national estimate was 125 million hours in 2019. (Gaffney et al., 2022). [2] At the record level, a 2022 analysis of over 104 million clinical notes found half of all words were duplicated and that duplication rose steadily through 2020. (Mohan et al., 2022). [3] These metrics support the operational inference that documentation is not purely "clinical narration," but a high-volume, partially duplicative production process shaped by billing, compliance, and workflow constraints.

Administrative transaction processing as a rising cost center: The CAQH Index provides one of the most detailed national views of administrative transaction modalities and unit costs. In its 2023 report (published 2024), CAQH reports $89 billion is spent conducting the administrative transactions tracked by the Index and estimates $18.3 billion could be saved by transitioning to fully electronic transactions. (CAQH, 2024). (Official dataset/report). [21] The same report shows that estimated medical administrative transaction spend (for transactions tracked by the Index) increased sharply: a charted series shows $34.1 billion (2019), $33.4 billion (2020), $37.4 billion (2021), $55.0 billion (2022), and $82.7 billion (2023). (CAQH, 2024). (Official dataset/report). [22] CAQH further notes that provider time to complete administrative tasks increased and accounted for more than 75% of the rise in total spend. (CAQH, 2024). (Official dataset/report). [23]

Prior authorization as both delay and labor diversion: A 2024 peer reviewed survey study reports that provider respondents spend time equivalent to more than 100,000 full-time registered nurses per year on prior authorization. (Sahni et al., 2024). [5] A Jan 2026 systematic review found prior authorization is associated with measurable patient harm across multiple specialties, including delays, disease exacerbation, preventable hospitalization, and prolonged hospital stays. (Murphy et al., 2026). [6]

Sources:

Council for Affordable Quality Healthcare. (2024). 2023 CAQH Index report. [24]

Gaffney, A. W., et al. (2022). JAMA Internal Medicine. [2]

Mohan, V., et al. (2022). JAMA Network Open. [3]

Murphy, J., et al. (2026). The American Journal of Medicine, 139(1), 24–32.e1. [6]

Interpretation: Hidden loss concentrates in "interfaces," the points where clinical work must cross payer, regulatory, and organizational boundaries. Because these work steps are repeated at high volume, even modest reductions in transaction time or exceptions can generate large capacity gains. The highest-impact opportunity is typically not to optimize each unit process independently, but to reduce variance and rework across the end-to-end patient and payment journey.

Key Evidence on System Breakdowns (Part 1)

Key studies and quantitative metrics on healthcare systems breakdowns

Comparison of major peer reviewed and official evidence sources documenting administrative burden, fragmentation, and time loss (2019–January 2026)

Focal area	Study (publication year)	Study type and data	Key quantitative findings (reported)	Relevance to "systems breakdowns"
Administrative burden	Chernew & Mintz (2021)	Viewpoint synthesizing prior evidence	Admin expenses ~15%–25% of total national health care expenditures; ~$600B–$1T annually when referenced to 2019 NHE	Frames admin burden as structural outcome of multiplayer complexity
Administrative burden, international comparison	Himmelstein et al. (2020)	Binational costing study (U.S. vs Canada), 2017	U.S. admin costs $812B; $2,497 per capita (34.2%) vs Canada $551 per capita (17.0%)	Quantifies scope and highlights structural surcharge
Hidden time loss, documentation	Gaffney et al. (2022)	Cross-sectional national study using 2019 NEHRS	Mean 1.77 hours/day documentation outside office hours; estimated 125 million hours in 2019	Converts "burden" into measurable time loss at national scale
Hidden rework, duplication	Mohan et al. (2022)	Cross-sectional EHR note corpus analysis (2015–2020)	50.1% of words duplicated; duplication increased 33.0% (2015) to 54.2% (2020)	Objective rework metric embedded in EHR workflows
Compliance overhead	Khullar et al. (2021)	Qualitative study of 30 physician practices (2019 performance year)	Mean $12,811 per physician to participate in MIPS; >200 hours per physician on MIPS-related activities	Quantifies compliance burden tied to value-based payment reporting

Table sources: Chernew & Mintz (2021), JAMA; Gaffney et al. (2022), JAMA Internal Medicine; Himmelstein et al. (2020), Annals of Internal Medicine; Khullar et al. (2021), JAMA Health Forum; Mohan et al. (2022), JAMA Network Open.

Sahni, N. R., et al. (2024). Health Affairs Scholar, 2(9), qxae096. [5]

Key Evidence on System Breakdowns (Part 2)

Focal area	Study (publication year)	Study type and data	Key quantitative findings (reported)	Relevance to "systems breakdowns"
Fragmented systems	Gabriel et al. (ONC) (2024)	National hospital survey trend brief through 2023 (AHA IT supplement)	70% engaged in all four exchange domains routinely or sometimes in 2023; 43% routine; 71% reported routine access to external info but only 42% reported clinician routine use	Shows "last mile" gap between exchange and clinical use
Prior authorization burden	Sahni et al. (2024)	Survey of patients (n=1005), provider employees (n=1010), payer employees (n=115)	Provider respondents report PA time equivalent to >100,000 full-time registered nurses/year; discusses PA as admin spending	Captures labor diversion magnitude attributable to PA
Clinical harm linked to PA	Murphy et al. (2026, Jan)	Systematic review	25 studies; PA associated with care delays and measurable harm (exacerbations, preventable hospitalization, prolonged stays)	Links administratively driven delay to outcomes
Credentialing delays (measurement gap)	GAO (2023)	Federal audit	Credential verification is required onboarding task; data in system of record (USA Staffing) unreliable, limiting oversight	Demonstrates that lack of reliable measurement is itself a bottleneck

Table sources: Chernew & Mintz (2021), JAMA; Gaffney et al. (2022), JAMA Internal Medicine; Gabriel et al. (2024), ONC Data Brief No. 71; Himmelstein et al. (2020), Annals of Internal Medicine; Khullar et al. (2021), JAMA Health Forum; Mohan et al. (2022), JAMA Network Open; Murphy et al. (2026), The American Journal of Medicine; Sahni et al. (2024), Health Affairs Scholar; U.S. GAO (2023), GAO-23-105706.

Timeline: Major Policy Developments 2019–2026 (Part 1)

Major policy and technology milestones shaping systems breakdowns

Regulatory, interoperability, and spending events influencing administrative burden and fragmentation, 2019–January 2026

● Peer reviewed ■ Official regulation ■ Official regulation context ■ Official notice ■ Official policy implementation

JAMA publishes updated waste estimates including "administrative complexity"

Oct 2019

Estimates administrative complexity at $285.6B (2019 dollars), highlighting scale and limited evidence on interventions targeting administrative complexity

● Peer reviewed

ONC final rule implementing Cures Act interoperability and information blocking

May 1, 2020

Establishes information blocking framework and certification-related requirements, creating both compliance work and incentives for exchange

■ Official regulation

CMS Interoperability and Patient Access final rule (CMS-9115-F)

May 1, 2020

Pushes payer data access and interoperability requirements, influencing data exchange expectations and vendor roadmaps

■ Official regulation

Information blocking regulations "start" (effective date referenced in later rulemaking)

Apr 5, 2021

Marks the operational start point for information blocking requirements; sets stage for future provider disincentives

■ Official regulation context

No Surprises Act interim final rule Part I

Jul 13, 2021

Adds disclosure and billing-related requirements; increases compliance workflow complexity in billing and

Timeline: Major Policy Developments 2019–2026 (Part 2)

TEFCA publication notice in the Federal Register
Jan 19, 2022
Establishes framework for network-to-network exchange governance; intended to reduce fragmentation across exchange networks
■ Official notice

CMS Interoperability and Prior Authorization final rule (CMS-0057-F) released
Jan 17, 2024
Creates mandated pathways for prior authorization process reform and data exchange; sets compliance deadlines including Jan 1, 2026 provisions
■ Official regulation/guidance

ONC Data Brief No. 71 published (hospital exchange, 2023)
May 2024
Provides "exchange vs use" metrics documenting persistent fragmentation and underuse of external information
■ Official dataset/report

Final rule establishes disincentives for providers that commit information blocking
Jul 1, 2024
Elevates compliance stakes, increasing need for governance, auditing, and policy-consistent data sharing
■ Official regulation

NHE 2024 published in Health Affairs (Jan 2026)
Jan 14, 2026
Confirms continued growth in national spending; reinforces urgency of productivity and administrative efficiency interventions
● Peer reviewed

■ Official regulation/guidance ■ Official dataset/report

Source: Federal Register; CMS; ONC; JAMA; Health Affairs • Dates reflect publication or effective dates of major rules, datasets, and peer reviewed evidence.

Cost and Time Loss Summary (Non-Additive)

Cost and time loss summary

Quantified loss mechanisms across administrative, documentation, transaction, and prior authorization domains (non-additive; categories overlap)

⚠ **Note:** The categories below overlap. For example, prior authorization work can be counted within administrative transactions, and documentation includes both clinical communication and billing/compliance elements. **Values should not be summed.**

Loss mechanism	What is lost	Quantitative indicator (latest available through Jan 2026)	Data type
Administrative expense load	Dollars diverted from care delivery	Admin expenses ~15%–25% of NHE; ~$600B–$1T (referenced to 2019 NHE)	Peer reviewed synthesis
Administrative complexity as "waste"	System-wide inefficiency	Administrative complexity estimated $265.6B (2019 dollars) within waste domains	Peer reviewed systematic review approach
Physician after-hours documentation	Clinician time and burnout risk	Mean 1.77 hours/day outside office hours; ~125M hours in 2019	Peer reviewed national study
Duplication in clinical notes	Rework, information overload	50.1% of words duplicated; rising to 54.2% by 2020	Peer reviewed large-note corpus study
Quality program participation burden	Staff time plus direct cost	MIPS participation: mean $12,811 per physician; >200 hours per physician (2019)	Peer reviewed qualitative costing
Administrative transaction processing	Staff time and labor cost	CAQH Index: $89B spent on tracked transactions; $18.3B savings opportunity via full electronic adoption (2023 report)	Official dataset/report
Rising admin transaction spend	Time and cost inflation	Estimated medical admin transaction spend: $34.1B (2019) → $82.7B (2023)	Official dataset/report
Prior authorization labor diversion	Staff capacity and care delays	Provider time equivalent to >100,000 full-time RNs per year devoted to PA	Peer reviewed survey study
Patient harm linked to PA	Outcomes lost through delay/denial	Systematic review: 25 studies; delays and measurable harm across specialties	Peer reviewed systematic review
Interoperability "use gap"	Lost benefit from exchanged data	71% routine access to external info but only 42% clinician routine use (2023)	Official dataset/report

Source: JAMA; JAMA Internal Medicine; JAMA Network Open; JAMA Health Forum; Health Affairs Scholar; ONC Data Brief No. 71; CAQH Index 2023 • Metrics from different denominators; categories overlap; should not be summed across rows.

Note: The categories above overlap. For example, prior authorization work can be counted within administrative transactions, and documentation includes both clinical communication and billing/compliance elements. Values should not be summed.

Implementation roadmap and actionable implications

Roadmap

A workable roadmap should treat administrative burden and fragmentation as an operating model problem with measurable constraints, not as isolated IT or compliance projects.

Stabilize and instrument (0–90 days):

The first priority is measurement: establish a limited set of operational burden KPIs that can be tracked monthly. These should include (a) documentation time proxies (for example, EHR after-hours activity), (b) denial and rework rates in revenue cycle, (c) prior authorization volume and turnaround time, and (d) credentialing timestamps from start to first shift. Evidence supports why: documentation burden is large and measurable (Gaffney et al., 2022), rework through duplication is substantial (Mohan et al., 2022), and credentialing oversight can fail if data are unreliable (GAO, 2023). [31]

Standardize "high-friction transactions" (3–9 months):

Use transaction-level prioritization. CAQH provides a defensible set of administrative transactions and shows large savings opportunities from moving remaining work to fully electronic modes, with provider time increases accounting for much of spending growth. (CAQH, 2024). [21] Organizations should select 2–3 transactions with high volume and high manual effort (often eligibility, prior authorization, attachments, claim status) and implement standard work plus automation. For compliance overhead, focus on reducing the cost-to-comply per program: streamline MIPS reporting workflows using standardized data capture and internal controls rather than "spreadsheet compliance," because the measured burden is high. (Khullar et al., 2021). [4]

Integrate and redesign workflows around exchange and use (9–18 months):

Interoperability strategy should be evaluated not by whether exchange exists, but by whether clinicians routinely use external information at the point of care. ONC data show a gap between access (71%) and routine use (42%). (Gabriel et al., 2024). [7] That gap implies that investments should target clinical workflow integration, user experience, and governance (data stewardship, policy consistency) rather than exchange alone.

Gaffney, A. W., et al. (2022). JAMA Internal Medicine. [2]
Mohan, V., et al. (2022). JAMA Network Open. [3]
U.S. Government Accountability Office. (2023). GAO-23-105706. [8]

Actionable implications for healthcare organizations

Leaders should treat "burden reduction" as a productivity strategy tied to capacity and access. The operational hypothesis is that administrative time recovered can be redeployed to patient capacity without compromising compliance, if rework is reduced and exchange is made usable at the point of care. The evidence base supports focusing on repeatable, measurable loss mechanisms rather than diffuse cultural initiatives: after-hours documentation (Gaffney et al., 2022), duplication (Mohan et al., 2022), and administrative transaction automation opportunity (CAQH, 2024). [32]

Credentialing should be elevated to a throughput KPI with a system of record that can support oversight. GAO's finding that unreliable onboarding data limits oversight is an operational warning applicable beyond VHA: without clean timestamps, organizations cannot improve cycle time reliably. (GAO, 2023). [8]

Finally, compliance and interoperability rules should be anticipated as change drivers, not surprises. CMS-0057-F sets near-term compliance dates (including provisions by Jan 1, 2026) which can be leveraged to justify modernization that reduces burden rather than adding another layer of manual work. (CMS, 2024). [20]

Conclusion

Across 2019 through January 2026, the evidence converges on a consistent narrative: systems breakdowns in healthcare are primarily interface failures, where clinical intent must traverse payer, regulatory, and organizational boundaries. Administrative burden remains large at the macro level, measurable domains such as documentation and prior authorization materially divert clinician and staff capacity, and fragmentation limits the value of exchanged data because routine use lags access. The most reliable path to improvement is disciplined measurement, targeted standardization of the highest-friction transactions, and workflow-integrated interoperability that makes data usable, not just available. This approach aligns operational priorities with the strongest empirical signals in the literature and avoids the common failure mode of layering new requirements on top of already fragmented systems.

Sources:

Council for Affordable Quality Healthcare. (2024). 2023 CAQH Index report. [23]
Gabriel, M. H., et al. (2024). ONC Data Brief No. 71. [7]
Gaffney, A. W., et al. (2022). JAMA Internal Medicine. [2]
Khullar, D., et al. (2021). JAMA Health Forum. [4]
Mohan, V., et al. (2022). JAMA Network Open. [3]
U.S. Government Accountability Office. (2023). GAO-23-105706. [8]
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