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Inpatient Care Evolves in Real Time. Coding Shouldn't Have to Catch Up.

How CMX CARE™ connects care delivery, documentation integrity and revenue performance across inpatient professional fee coding.

A CodaMetrix Informative Series

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How CMX CARE™ connects care delivery, documentation integrity and revenue performance across inpatient professional fee coding.

Inpatient care is complex, fast-moving and highly collaborative. A patient's condition can change throughout a hospital stay. Multiple providers may contribute to care. Diagnoses evolve, treatment plans shift and clinical decisions often happen across many moments, teams and service lines.

But inpatient professional fee coding often depends on fragmented documentation, provider-assigned diagnosis codes or retrospective coder review. When the patient timeline is difficult to assemble, care complexity may be underrepresented, diagnosis codes may be inaccurate or incomplete and coding teams may need to manually search across the EHR to understand what happened.

That disconnect creates more than a revenue cycle challenge. It creates an enterprise challenge for clinical, clinical informatics, IT and revenue cycle leaders who are working to improve accuracy, reduce burden and create a more connected view of care across the health system.

This white paper explores why inpatient professional fee coding is vulnerable to inaccuracy and how the CMX CARE platform extends autonomous coding into inpatient professional fee coding. By aggregating clinical information across the inpatient journey, CMX CARE helps create a more complete picture of care across specialties, encounters and service lines. The platform supports more accurate coding, documentation integrity and higher coder productivity, while also helping health systems align reimbursement with the care documented and delivered, without shifting the burden to providers.

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The Inpatient Professional Fee Coding Challenge

Inpatient care moves in real time. Coding often has to reconstruct it.

Hospital care does not happen in a straight line. A single inpatient stay may span five or more days; an AHRQ-published review notes that the average length of stay for hospitalization is 5 ½ days.[1] Across that stay, patients may move through multiple provider encounters across hospitalists, specialists, consultants and care teams. Many of those encounters may be billable, but the full picture of care can be difficult to capture when documentation is fragmented across the patient record.

5½ DAYS the average length of stay for hospitalization[1]

3–5% of hospital net revenue lost annually[2]

As diagnoses evolve, treatments change and multiple providers contribute to the same patient's care journey, coding teams are often left to manually assemble the timeline after the fact. That retrospective process can make it harder to identify every billable encounter, select accurate diagnosis codes and ensure coding reflects the full complexity of care delivered. And the hardest gaps to close are the ones that leave no trace. When a billable service is never captured, there is no charge to review, no claim to correct and no signal in any downstream work queue that anything is missing.

The impact is both financial and compliance-related. Too many billable encounters may go unclaimed, inaccurately coded or coded in ways that create compliance risk. HFMA has reported that hospitals lose about 3–5% of net revenue annually to revenue leakage, including inefficiencies, missed billing opportunities and underpayments. HFMA also identifies incomplete clinical documentation, inaccurate coding and missed charges as mid-cycle vulnerabilities, reinforcing the need for more accurate, connected coding and charge capture workflows.[2]

For clinical and informatics leaders, this is not simply a billing issue. It is a data integrity issue. If the coding process cannot see the full patient story, the enterprise may not have an accurate view of the care delivered, the complexity managed or the resources required.

Health systems need a more complete way to connect care delivery, documentation and coding across the inpatient stay.

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Coding Accuracy Matters

Whether coding is provider-assigned or coder-driven, accuracy starts with the full patient timeline.

Coding accuracy is not only about preventing revenue leakage. It is about representing the care delivered in a compliant, defensible and clinically accurate way.

Inpatient professional fee coding can vary across health systems. In some organizations, providers assign diagnosis codes or drop charges after the encounter. In others, coding teams review documentation and assign codes retrospectively. Many organizations operate with a combination of both models across departments, specialties and service lines.

Each model creates different risks. In a provider-assigned workflow, a diagnosis code may be too broad, non-specific or incomplete. It may not reflect the full complexity of the patient's condition or the care they received. In a coder-driven workflow, the challenge is often reconstruction. Coders may need to manually piece together the patient timeline across fragmented documentation to identify billable encounters, evaluate clinical context and support accurate, compliant coding.

Across both models, inaccuracies can appear in multiple forms. A billable encounter may be missed. A charge may never be captured. A diagnosis code may be inconsistent with the clinical record. Coding may underrepresent the documented care, creating missed revenue, or overstate the documented care, creating compliance risk.

There is an important asymmetry among these failure modes. An inaccurate charge leaves a trail, a code, a claim, something an audit or retrospective review can catch and correct. A service that was never captured leaves nothing behind. Even a rigorous audit program cannot review a charge that was never created: you can't audit an absence. That is why this portion of the opportunity remains invisible to most existing revenue integrity workflows, no matter how well they perform.

That is why the opportunity should be framed more broadly than undercoding alone. The core issue is accuracy and context.

An illustrative example:

At one academic medical center, analysis of a 30-day cohort of internal medicine, hospitalist and cardiology encounters identified **59% audit inaccuracy in original diagnosis codes assigned by providers across 100 cases.**

After review, the cases were correctable to a net

+3.1

codes per case.[3]

The same analysis identified an estimated

$8.4MM

in annual revenue recovery opportunity.[3]

These findings reinforce a larger reality:Inpatient professional fee coding depends on context. Whether diagnosis codes are assigned by providers or coding teams, accuracy requires visibility into the care journey across providers, encounters and service lines. When that context is fragmented, provider-assigned codes may not fully represent the care delivered, while coding teams may spend valuable time reconstructing what happened. Autonomous coding can change both workflows by assembling the patient timeline and applying coding intelligence more efficiently and consistently.

Extending Autonomous Coding Across Inpatient Care

A different approach to provider-assigned diagnosis coding.

CMX CARE extends the CodaMetrix autonomous coding platform to inpatient professional fee coding across the health system.

In many provider-driven workflows, physicians assign diagnosis codes themselves at the point of care. But providers are trained to deliver care, not to perform professional coding, and they may not have visibility into the patient's complete journey across providers, encounters and service lines. As a result, provider-assigned codes may not fully or accurately represent the care delivered.

CMX CARE uses a different model. Rather than serving as a provider-facing assistive tool during care, it aggregates clinical information across the patient timeline and applies coding intelligence to assign diagnosis codes more accurately and consistently. This reduces the coding burden on providers while giving coding teams and downstream revenue cycle workflows a more complete representation of care.

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How It Works

Building a fuller view of the patient's care journey.

CMX CARE supports real-time, touchless coding by building a fuller view of the patient's care journey across the health system. As documentation is completed, CMX CARE helps surface coding opportunities that may otherwise slip through with no change to how providers document care.

The goal is to capture the full context of care more accurately, without adding administrative work for clinicians and without requiring coding teams to manually piece together the patient journey across the EHR.

Key capabilities include:

Charge gap detection
Missing charges are identified and coded autonomously once documentation is complete.

Real-time auditing
Provider-assigned codes can be evaluated as documentation is completed, helping identify missed coding opportunities and improve accuracy.

Full-service capture
CMX CARE supports more complete tracking of bedside services so teams can capture care accurately for billing.

Shared visit support
For encounters involving multiple providers, CMX CARE helps assemble the bill appropriately based on the full care context.

Multi-service-line visibility
The platform helps capture patients wherever they have been in the health system, supporting coding across inpatient hospitalist encounters, specialty care, procedural services and other relevant points of care.

Coder workflow support
High-confidence bedside cases can be coded and billed touchlessly, alleviating coding burden on providers and coding teams, while cases requiring review can be routed to coders with stronger context and less manual assembly.

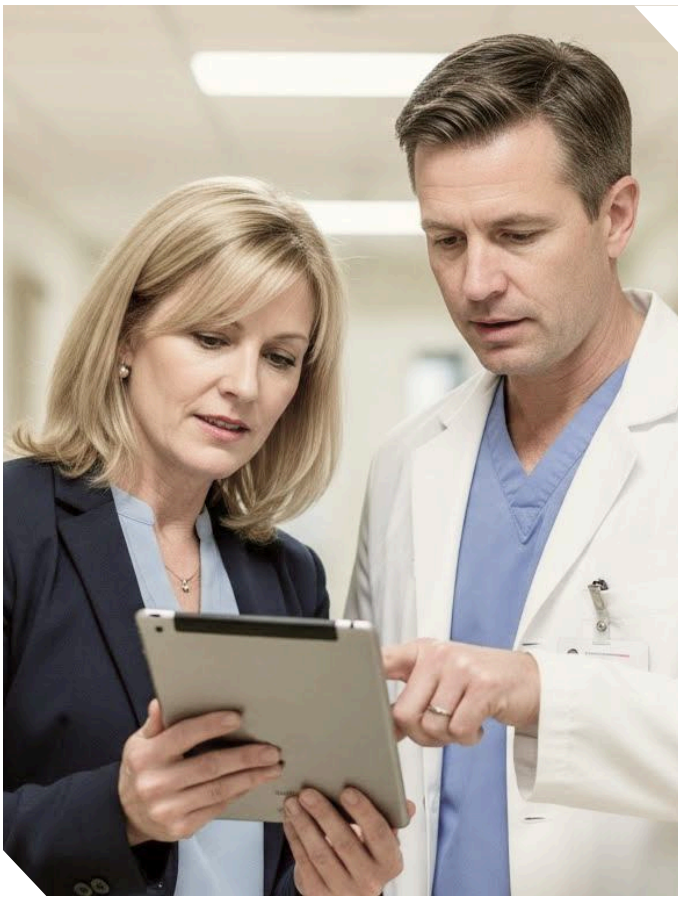
Together, these capabilities help shift inpatient professional fee coding from a fragmented, retrospective workflow to a more connected model. Coding teams can spend less time searching for the patient story and more time focusing their expertise where it is needed most.

The Broader Value: Connecting Clinical Care and Revenue Performance

Revenue integrity starts with accurate clinical capture

For health system leaders, the value of CMX CARE extends beyond revenue recovery. It supports a more accurate, enterprise-level view of care delivery.

That matters because the patient timeline is not only a billing artifact. It is a clinical and operational record of what happened, who contributed, how complexity changed and how care was managed across the inpatient stay. When that timeline is incomplete, the organization may lose visibility into the true work of care.



CMX CARE helps create connections across clinical care, documentation integrity, coding accuracy and revenue performance. By supporting accurate coding earlier in the workflow, it creates a cleaner, more complete foundation for downstream teams while helping providers better capture the work they are already doing, without the burden.

For clinical leaders, that means care complexity can be represented more accurately. For CMIOs and clinical informatics teams, it means coding intelligence can help strengthen the organization's data layer that connects documentation, care delivery and reimbursement. For CIOs, it means the platform can support enterprise workflow transformation without adding another disconnected application. For coding, CDI and revenue cycle teams, it means less manual reconstruction, stronger context and a more reliable path to compliant reimbursement.

The value can also extend upstream. By surfacing documentation gaps across the patient timeline, such as unsigned notes, CMX CARE can provide provider teams with feedback that supports stronger documentation practices and helps ensure the care delivered is captured and billed appropriately.

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Implementation: From Kickoff to Sustained Value

Successful implementation depends on workflow fit, trust and clinical alignment.

A successful CMX CARE implementation is more than a product deployment. It is a workflow transformation that connects clinical teams, coding teams, informatics, IT and revenue cycle leadership around a more accurate, touchless model.

CodaMetrix estimates that implementation takes

20–24 weeks

from kickoff to sustained value.[4]

Implementation should be designed to reduce burden rather than introduce another task for providers. That requires careful attention to workflow integration, documentation review, reporting, monitoring and change management.

For clinical and informatics leaders, adoption depends on trust. The platform must fit the way care is documented and delivered. It must help create a more accurate picture of care without disrupting clinical workflows. It must also provide enough transparency, standardization, and governance for coding, compliance and revenue cycle teams to trust the output.

For IT leaders, CMX CARE should align with enterprise platform strategy rather than be viewed as another isolated application. It extends autonomous coding intelligence into inpatient professional fee coding across specialties while supporting broader organizational goals around automation, data integrity and scalable workflow transformation.

Potential success measures may include coding accuracy improvement, reduced coding-related denials, professional fee coding lift, revenue opportunity identified, reduction in manual review, reduction in queries or rework, provider engagement and coder productivity enhancements.

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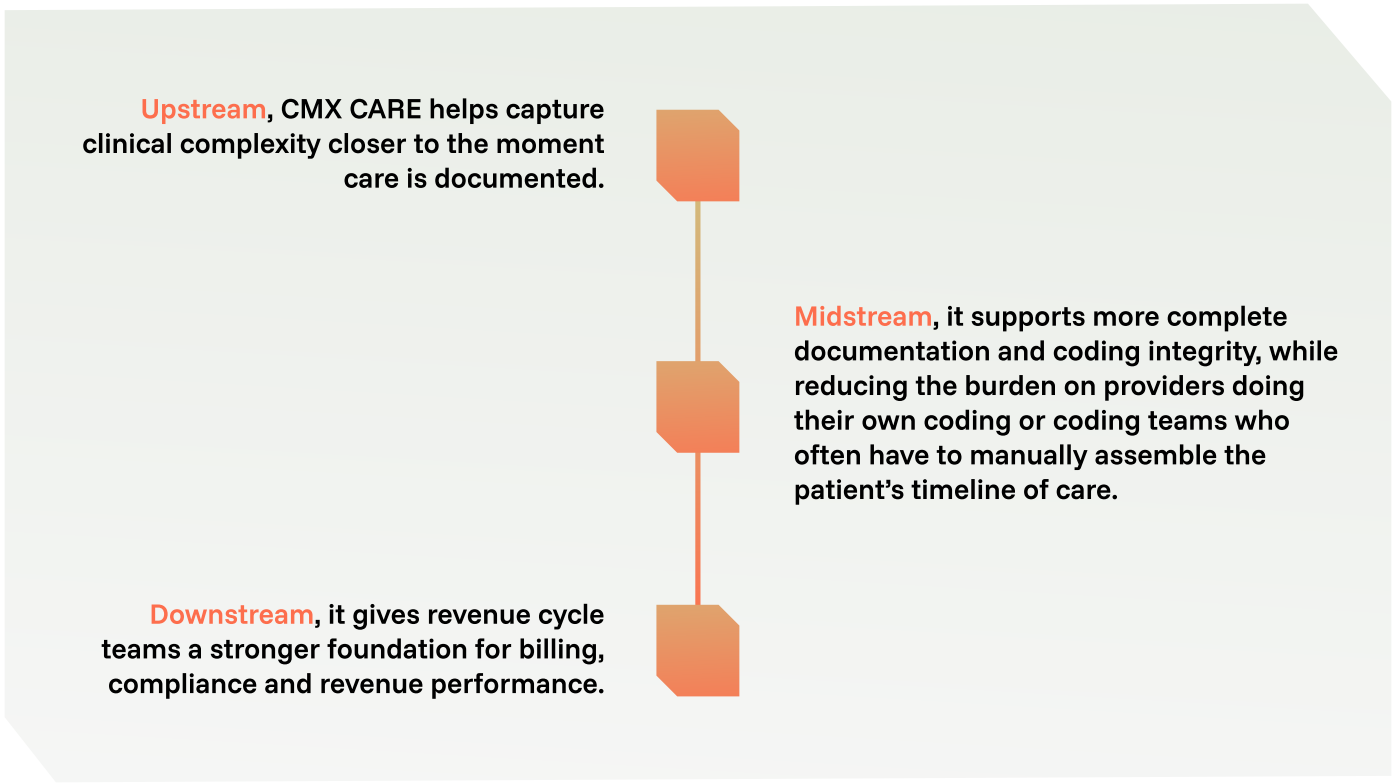
From Fragmented Documentation to a Connected Timeline of Care

A more complete coding workflow starts with the full patient story

The CMX CARE platform supports the full journey from care delivery to compliant reimbursement by helping assemble a more complete patient timeline across the inpatient stay.



This connected timeline matters because inpatient care often crosses providers, encounters and service lines. A patient may be admitted under one service, evaluated by multiple specialists, receive procedural care, experience a change in condition and continue to generate billable professional services across the stay. If the coding process only sees isolated pieces of that journey, it may miss the larger picture.

CMX CARE helps create a more connected model for inpatient professional fee coding, one that better reflects the care delivered across the enterprise. It supports accurate clinical capture, more complete coding and a stronger bridge between care delivery and compliant reimbursement.

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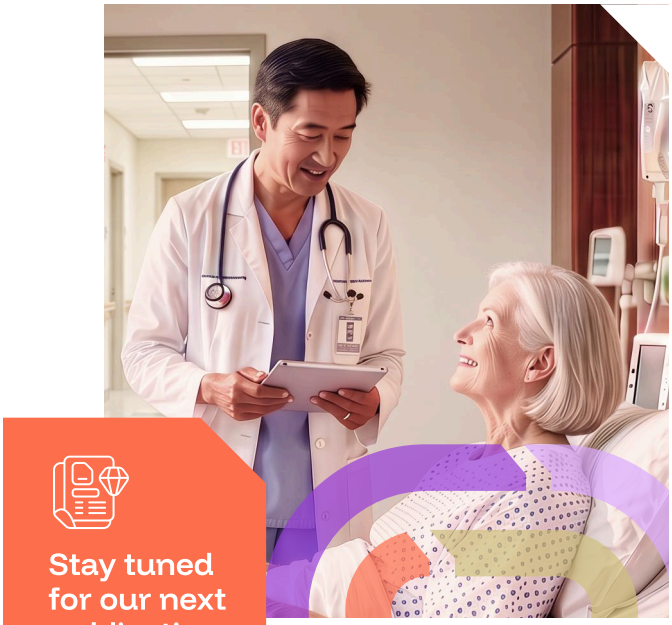
Building a more connected future for inpatient coding.

When it comes to inpatient professional fee coding, the challenge is complex, but the path forward starts with a more complete view of the care journey. By connecting documentation, coding and clinical context across the inpatient stay, health systems can better understand where billable care is being missed, where coding inaccuracies are occurring and how to support more accurate, compliant reimbursement without adding burden to providers or coding teams.

CodaMetrix helps deliver a more complete picture of care

Join us to be part of the conversation.



Stay tuned for our next publication.

References:

1. Tipton K, Leas BF, Mull NK, et al. Interventions To Decrease Hospital Length of Stay. Technical Brief No. 40. Rockville, MD: Agency for Healthcare Research and Quality; September 2021. Available from: https://www.ncbi.nlm.nih.gov/books/NBK574438/

2. Adeleke O. "Why AI is such a promising tool for eliminating a hospital's revenue leakage." Healthcare Financial Management Association. Published January 30, 2026. Available at: https://www.hfma.org/ai/why-ai-is-such-a-promising-tool-for-eliminating-a-hospitals-revenue-leakage/

3. CodaMetrix. Analysis of a 30-day cohort of internal medicine, hospitalist and cardiology encounters at an academic medical center (n=100). Data on file. 2026.

4. CodaMetrix. CMX CARE implementation timeline. Data on file. 2026.