

When Payment Rewards the Completed Encounter, Unresolved Need Can Become Financially Invisible: Designing Pharmacy Remuneration Around Follow-Up, Continuing Care, and Equity

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Abstract

Pharmacy remuneration commonly attaches financial recognition to discrete activities or completed encounters, even when medication-related need persists beyond the point at which the billable event ends. This creates a potential mismatch between the unit of payment and the longitudinal work required to make care effective. This conceptual and policy article develops a Continuity-Oriented Remuneration Framework for examining that mismatch. The framework separates five questions that payment systems frequently collapse: what work was initiated, what follow-up remains necessary, whether the underlying need was resolved, whether coordination with other actors occurred, and whether structural conditions alter the resources required to achieve continuity. Evidence from pharmacy remuneration, value-based payment, unfunded professional services, transitions of care, service sustainability, spatial pharmacy access, and equity-adjusted payment indicates that professional authority, service delivery, payment recognition, and patient benefit are not interchangeable. A completed encounter can therefore be an administratively valid endpoint without being a clinically meaningful endpoint. The framework does not prescribe a universal payment formula or presume that fee-for-service, capitation, performance payment, or continuity-sensitive payment is inherently superior. Instead, it proposes that remuneration be evaluated according to which forms of clinically relevant work it makes economically visible, which incentives it creates, which work remains unrecognized, and which distortions it may introduce. Continuity-sensitive design is most defensible when payment components remain attributable, operationally feasible, resistant to unnecessary activity, and responsive to unequal resource requirements without using demographic identity as a proxy for individual need. The central policy implication is that remuneration should be judged by the work and consequences it recognizes across time, not solely by the completion of a reimbursable encounter.

Keywords: Pharmacy remuneration, Continuity of care, Follow-up, Payment incentives, Unresolved need, Health equity

Introduction

Pharmacy practice has expanded beyond product supply into medication management, prevention, clinical

assessment, prescribing-related services, monitoring, and other forms of patient-facing care. Contemporary reviews of pharmacist payment arrangements nevertheless show that remuneration remains heterogeneous, that value-based models are still developing, and that implementation depends on infrastructure and professional context as well as formal payment design [1-3]. The resulting policy problem is larger than whether pharmacists should be paid for additional services. It concerns the unit of work that a payment system recognizes as valuable.

Access this article online

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Received: 16 February 2026; Accepted: 03 June 2026

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How to cite this article: Larsen N, Mansour A, Fischer J. When Payment Rewards the Completed Encounter, Unresolved Need Can Become Financially Invisible: Designing Pharmacy Remuneration Around Follow-Up, Continuing Care, and Equity. Ann Pharm Educ Saf Public Health Advocacy. 2026;6(2):26-38. <https://doi.org/10.51847/M43ZWtWCAH>

Pharmacy value is multidimensional. It may incorporate clinical outcomes, service quality, resource use, access, patient experience, or other consequences that cannot be represented adequately by activity counts alone [4]. At the same time, community-pharmacy service portfolios continue to diversify in response to primary-care demand, regulatory change, workforce needs, and professional development [5]. The more heterogeneous the work becomes, the less defensible it is to assume that every meaningful contribution begins and ends within the same administrative encounter.

Delivery conditions also differ among pharmacies. Organizational characteristics, teamwork, workload, and capacity are associated with the frequency and type of nondispensing services that community pharmacies provide [6]. Jurisdictional differences are equally important: advanced pharmacy services may be formally authorized, publicly remunerated, locally commissioned, privately funded, or not separately funded at all [7]. Consequently, two pharmacies can perform clinically similar work within very different financial environments, while two services paid under a common label may require very different amounts of continuing work.

This article addresses that mismatch by treating remuneration as an incentive architecture. The central question is not simply whether a pharmacy encounter receives payment. It is whether the payment unit corresponds sufficiently to the work unit, whether relevant work continues after that unit closes, whether the patient's underlying need is actually resolved, and whether the financial design changes what providers have reason and capacity to do next. A continuity-oriented perspective therefore begins with a distinction among encounter completion, work completion, care resolution, and longitudinal responsibility.

How encounter-based payment defines the unit of valuable work

A payment system creates an economic boundary around recognized activity. Provider status alone does not eliminate that boundary. In a large claims analysis of pharmacist vaccination services, outpatient professional service claims remained rare even in states where pharmacists possessed provider status, demonstrating that formal billing authority and realized payment are distinct institutional conditions [8]. An activity can therefore be professionally permitted and clinically

delivered while remaining weakly represented in claims or payment flows.

The same principle applies to the architecture of dispensing remuneration. Qualitative work on community-pharmacy funding has shown that stakeholders perceive funding models as capable of prioritizing throughput differently from quality-oriented activities and have proposed alternative principles intended to align payment more closely with service quality [9]. The relevant theoretical point is not that dispensing payment is intrinsically undesirable. Dispensing is valuable work. The problem arises when the financial boundary surrounding that work becomes the practical boundary for everything the system recognizes.

Performance-linked payment changes the boundary but does not remove it. Independent pharmacy owners participating in performance-based payment environments have reported concerns about financial losses, control over performance measures, and accountability for outcomes that pharmacies cannot fully determine [10]. These observations expose a second distinction: paying for an outcome does not necessarily mean the provider controls all processes generating that outcome.

Broader payment research reinforces this interpretation. Fee-for-service can encourage activity, capitation or global budgets can discourage marginal activity or shift risk, and pay-for-performance can redirect effort toward measured outcomes while neglecting dimensions that remain outside the metric [11]. None of these forms is incentive-neutral. Their practical significance depends on what becomes payable, what becomes measurable, what remains outside the contract, and which consequences the provider can influence.

For pharmacy remuneration, the "completed encounter" is therefore more than an administrative label. It can function as a signal that the remunerable unit of work is finished. When the patient's medication-related need also ends at that point, the payment and care boundaries may align. When assessment, monitoring, coordination, supply restoration, clarification, or therapeutic follow-up remains necessary, the boundaries diverge. That divergence is the starting condition for financial invisibility.

Unresolved need as unpaid work

Evidence that community pharmacists perform services without dedicated remuneration shows that such

divergence is not merely theoretical. Pharmacists have reported providing patient-focused activities for which no government, insurer, or patient payment is available [12]. The existence of unfunded work does not prove that every unpaid activity reflects unresolved clinical need. It does establish that clinically relevant professional effort can occur outside an explicit payment unit.

Community-pharmacy surveys similarly distinguish remunerated from unremunerated service provision and show that the intensity of both varies among pharmacies [13]. This variation matters because an encounter-based system can record the initiating activity while remaining silent about work that follows. If a pharmacist must revisit a medication problem, obtain missing information, clarify a plan, arrange another professional's input, or check whether an intervention has become workable, the relevant question is whether this continuing work is represented anywhere in the remuneration architecture.

Financial recognition also has to be usable. Multi-stakeholder work on community-pharmacy professional services has identified sustained funding, workforce capability, integration and responsiveness to patient need among important priorities for service quality [14]. Payment that formally exists but is operationally difficult to access can remain functionally weak.

Implementation research on Medicaid billing illustrates this problem directly. Community pharmacists have described barriers involving credentialing, registration, billing processes, technical systems, organizational resources and knowledge even after reimbursement pathways were authorized [15]. The concept of financial visibility must therefore include more than a nominal fee schedule. Work becomes economically recognizable only when a payable category exists, relevant actors are eligible to use it, the claiming mechanism is practicable, and the administrative cost of recognition does not overwhelm the value of the work.

Within a continuity-oriented account, unresolved need is not defined by the absence of a bill. It is the clinically relevant remainder after an initiating encounter has ended: information still needed, monitoring still pending, implementation still uncertain, access still incomplete, coordination still outstanding, or an intervention whose adequacy cannot yet be known. When work addressing that remainder is necessary but not financially recognized, unresolved need becomes a source of unpaid or implicitly subsidized care.

Follow-up and continuing care

Continuity becomes visible when the temporal boundary of care is examined explicitly. Medication transitions between hospital and home illustrate this clearly. National surveys of hospital and community pharmacies in Germany identified persistent weaknesses in medication-information transfer and continuity of supply, including community-pharmacy reports of substantial medication-supply disruption after discharge [16]. A discharge event can therefore be administratively complete while medication-management work remains unfinished.

Community pharmacies can also participate in explicitly longitudinal models. An integrated medication-management program in North Carolina involved more than one hundred pharmacies and linked community pharmacy activity to broader care-management infrastructure [17]. The importance of such arrangements is not that every pharmacy should adopt the same program. They demonstrate that pharmacy work can be organized as an ongoing contribution to a patient's care trajectory rather than as a set of isolated transactions.

Financial incentives can interact with this temporal structure, although payment is not sufficient to create continuity by itself. A study of incentivized relational continuity in Australian general practice found that financial incentives operated within existing professional norms and organizational routines rather than replacing them [18]. This finding is especially useful as a boundary condition. A payment for follow-up cannot produce useful follow-up where the provider lacks time, information, workforce, authority, or an actionable reason to reconnect with the patient.

Community-pharmacy sustainability research reaches a compatible conclusion. Professional services persist when their organizational, professional and resource conditions support continued delivery [19]. Continuity-sensitive remuneration therefore requires two separate questions: should a type of longitudinal work receive recognition, and can the pharmacy realistically perform that work well?

The clinically important distinction is between continuing contact and continuing care. More contacts are not automatically better. Follow-up is meaningful when a later action performs work that could not be completed at initiation, updates the care state, identifies unresolved problems, supports implementation, restores continuity, or confirms that no further intervention is

needed. This distinction creates the analytical structure in Table 1.

Table 1. Longitudinal pharmacy-work states that separate encounter completion from continuing-care completion

Continuing-care state	What can remain unfinished when the initiating encounter closes	Subsequent pharmacy work that may be required	Why encounter-based recognition can miss the work	Condition required for meaningful follow-up	Clinically meaningful endpoint
Information remains incomplete	Current regimen, indication, prescriber intention, laboratory information, discharge changes, or other decision-relevant information is unavailable or uncertain	Obtain, reconcile or clarify information before acting	The initiating encounter may be billable even though the information problem persists afterward	Access to usable information and authority to clarify it	The relevant medication decision can be made with adequate information
Medication access remains incomplete	Prescription, supply, affordability, availability or practical access has not been secured	Resolve supply problems, contact relevant actors, identify feasible alternatives or confirm acquisition	Administrative completion of counselling or dispensing activity does not demonstrate actual access	A realistic route to obtain or substitute therapy	The patient can obtain the intended therapy or an appropriate alternative
Therapeutic implementation remains uncertain	The patient understands the plan but feasibility, initiation, adherence or early response is unknown	Reassess implementation, emerging problems or need for modification	The initial service records advice or initiation, not whether the plan became workable	A clinically justified reason and feasible method to reassess	The plan is being implemented adequately or a new problem is identified
Monitoring remains pending	Safety, effectiveness, symptom response, laboratory response or tolerability cannot yet be evaluated	Review new information and determine whether escalation or modification is required	The value-producing information does not exist at the time of the first encounter	Appropriate timing, access to results and responsibility for response	Monitoring information has been interpreted and acted on where necessary
Another actor's action is required	Prescriber, insurer, laboratory, hospital, social-service or other action is necessary before care can progress	Coordinate, transmit information, track response or redirect the patient	The initiating service may end before reciprocal action occurs	Defined responsibility and communication pathway	Required interprofessional or system action occurs or is appropriately escalated
The need has been addressed but closure is uncertain	A change has been made, but adequacy cannot yet be confirmed	Determine whether further pharmacy involvement remains necessary	Payment may reward intervention initiation without recognizing confirmation of resolution	A defensible closure criterion	The problem is resolved, transferred appropriately, or intentionally left under another accountable actor

Note: The rows represent manuscript-derived work states, not validated stages, billing categories, or mandatory sequences. A patient may move between states, occupy more than one state simultaneously, or require no follow-up when the initiating encounter legitimately completes the relevant work.

Equity consequences of episode-based remuneration

The costs of continuing care are not distributed evenly across pharmacies or populations. In Wisconsin, pharmacies serving Health Professional Shortage Areas commonly provided nondispensing services while reimbursement was absent for many service categories [20]. This does not establish that shortage-area pharmacies are systematically underpaid in every jurisdiction, but it shows how substantial professional-

service activity and weak payment recognition can coexist in settings where access is already constrained. National spatial analyses further show that pharmacy access differs by geography, social context and population composition [21-23]. Rural communities commonly face longer travel burdens or lower pharmacy capacity, while racial and ethnic access disparities vary across rural, suburban and urban settings. These studies do not permit individual need to be inferred from demographic membership. Their relevance is structural:

an identical payment for a nominally identical encounter can operate in environments with very different access costs, service alternatives, patient travel burdens and opportunities for follow-up.

The issue becomes more consequential when local pharmacy capacity contracts. An Ohio analysis documented growth in pharmacy-desert census tracts between 2021 and 2024, with disadvantaged communities disproportionately represented among areas losing convenient access [24]. Pharmacy closure has multiple causes, and these data cannot isolate reimbursement as the causal driver. They nevertheless show why payment evaluation cannot stop at the service transaction. A remuneration structure that appears efficient at the encounter level may coexist with declining local capacity to provide the continuing work on which that encounter depends.

Health-policy evidence shows that distributional adjustment can be incorporated explicitly into payment design. In Medicare's hospital Value-Based Purchasing Program, a health-equity adjustment materially changed the distribution of bonuses and penalties [25]. Economic modeling has likewise demonstrated that reimbursement can incorporate explicit efficiency-equity trade-offs rather than treating distribution as an external consideration [26]. Neither approach supplies a ready-made formula for community pharmacy. Their value is conceptual: equity need not enter remuneration only after the payment model has been designed.

For pharmacy, an equity adjustment should not attach greater economic worth to people because of race, ethnicity, rural residence, deprivation or another demographic label. The relevant target is the additional work, resource requirement, coordination difficulty or access constraint that can be demonstrated or prospectively justified. A patient who requires two interactions rather than one because essential information was unavailable creates a different resource demand. A pharmacy that must perform navigation or coordination because alternatives are scarce may perform work that a simple encounter fee cannot detect. Whether such differences justify adjusted payment is an empirical and policy question; the framework requires only that they remain visible to evaluation.

Incentive-design principles

Making more work payable is not equivalent to designing a better payment system. Any continuity-oriented approach has to decide which activities are sufficiently

attributable to pharmacy action, which consequences are reasonably controllable, and which signals may produce unwanted behavior. Pharmacy owners' concerns about performance measures already show why controllability matters [10]. A payment system becomes vulnerable when providers bear financial consequences for outcomes driven mainly by actors, circumstances or information outside their influence.

The wider performance-payment literature provides a second warning. A recent systematic review of pay-for-performance and patient safety found low-quality and inconsistent evidence of benefit, while pharmacy-specific value-based and comprehensive-medication-management studies identify both financial possibilities and substantial implementation demands [27-29]. Incentive design should therefore avoid assuming that moving payment from activity toward outcomes necessarily solves the problems of fee-for-service.

Three principles follow. First, a remunerated unit should correspond to identifiable work. Payment for follow-up should represent clinically justified reassessment or action, not contact frequency alone. Second, attribution should be proportionate. Pharmacies should not be treated as solely responsible for outcomes requiring prescriber action, laboratory access, insurer authorization, patient resources or system-level capacity. Third, remuneration should preserve the difference between process and outcome. Payment for coordination recognizes work performed; payment for resolution depends on whether the underlying problem reaches an appropriate endpoint. Collapsing these units can make it difficult to determine what an incentive actually rewards. A further principle concerns simplicity. Bundled or capitated payment may be preferable where longitudinal work is predictable and administratively costly to itemize. Separate payments may be useful when important work repeatedly falls outside existing bundles. The conceptual requirement is not maximal granularity. It is sufficient granularity to prevent clinically relevant work from disappearing while avoiding multiplication of billable events that adds administrative volume without patient value.

Finally, equity must be treated as an incentive-design property rather than a decorative adjustment applied after the core model is fixed. An adjustment that rewards demographic classification without measuring additional work would be difficult to defend. An adjustment linked to identifiable access barriers, resource requirements or coordination burdens may be more coherent, but still

requires validation against selection effects, gaming and unintended redistribution.

Development of the continuity-oriented remuneration framework

The evidence assembled here supports neither a single optimal payment method nor the claim that every unresolved medication-related need should create a separate payment. Instead, it supports a different way of specifying what remuneration must account for. Contemporary pharmacy VBP literature shows substantial variation in payment design and implementation requirements [1]. Pharmacy-value theory likewise makes clear that activity, resource use and outcomes are analytically distinct [4]. Transition evidence demonstrates that medication-related work can remain active after a formal encounter has ended [16], while sustainability research shows that continuing services depend on organizational conditions that payment alone cannot replace [19].

The Continuity-Oriented Remuneration Framework therefore treats payment recognition as a configurable relationship between work and time. Its first question is whether an initiating pharmacy service creates work whose clinically relevant endpoint occurs later. Its second is whether later work can be distinguished from unnecessary repetition. Its third is whether resolution depends on coordination with actors or resources outside the pharmacy. Its fourth is whether structural conditions predictably change the resources required to reach the same clinically meaningful endpoint. These questions are deliberately prior to the question of price.

Existing pharmacy payment innovations demonstrate that these components can be combined in different ways

without proving one configuration superior. A community-pharmacy comprehensive medication-management initiative has paired service payment with performance incentives across multiple pharmacy organizations [30]. A small membership-model pilot has shown the feasibility of recurring revenue that is less tightly coupled to each individual dispensing transaction [31]. Community-pharmacy implementation of social-needs screening and navigation similarly illustrates identifiable coordination work whose sustainability and economic viability require explicit consideration [32]. These examples support a configurational approach. Initiation may be recognized through an encounter payment while subsequent clinically justified follow-up is recognized separately. Coordination may be incorporated as a component where cross-organizational work is material. Resolution may inform performance assessment where an endpoint is sufficiently attributable and measurable. Equity adjustment may modify expected resource recognition where access or workload differences are demonstrable. Alternatively, a bundled or capitated payment may internalize several of these units, provided that the bundle does not simply recreate invisibility at a larger scale.

The key theoretical operation is therefore a change in the object being observed. Instead of asking only whether an encounter was performed and paid, the framework asks whether clinically relevant work remained after payment closure, who became responsible for that work, whether the system recognized it, and whether the incentive created by that recognition was proportionate to the work that could actually be influenced. **Figure 1** organizes these relationships without treating movement through them as a mandatory sequence.

From Pharmacy Service to Value: Linking Professional Work, Payment and Outcomes

A conceptual model for value-based payment of community pharmacy services

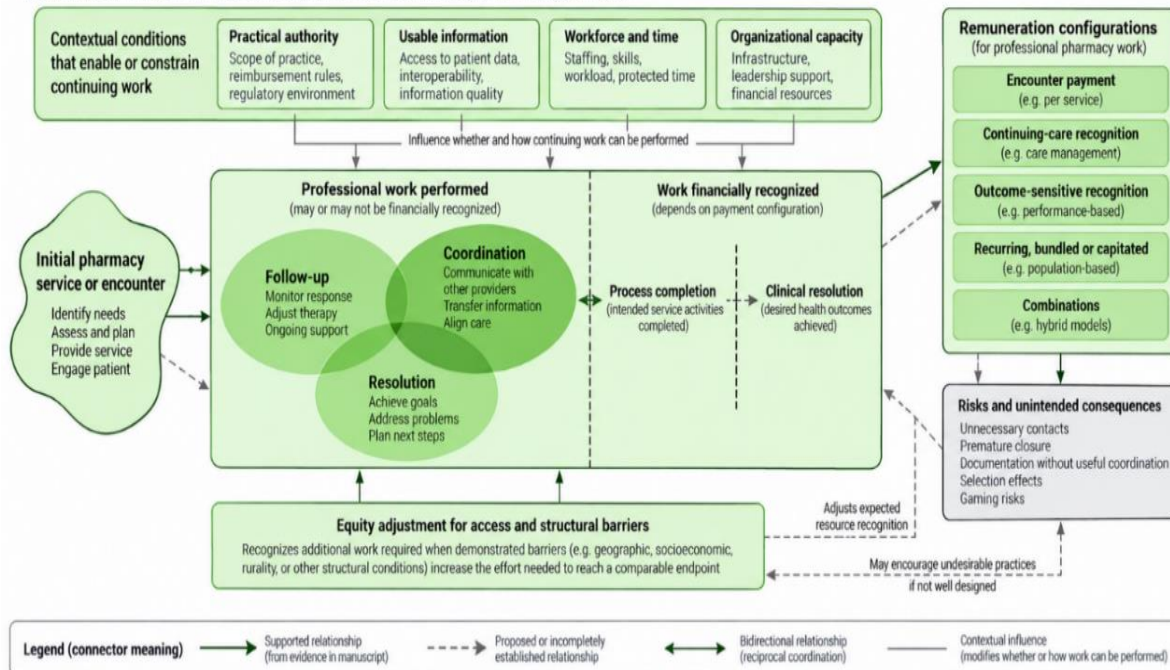


Figure 1. From encounter closure to continuing accountability: a remuneration field for initiation, follow-up, resolution, coordination, and equity

Payment for initiation, follow-up, resolution and coordination

A continuity-oriented remuneration model requires clearer separation of the work that occurs at different points in a care episode. The purpose of separating these components is not to create four fees for every patient. It is to prevent an initiating encounter from becoming the default financial endpoint when clinically relevant work continues afterward.

Initiation refers to the professional work that establishes the problem, provides or begins an intervention, and determines whether further action is needed. Encounter-based payment can recognize this work effectively when the relevant clinical task can be completed at the same time. The weakness arises when initiation is treated administratively as evidence that the whole care problem has been completed.

Follow-up is justified when later reassessment can change management, identify failure of implementation, confirm that an intervention is working, or determine whether further action is necessary. It should not be defined by contact frequency. Paying simply for additional contacts would create an obvious incentive to generate low-value interactions. Follow-up becomes a

distinct remunerable unit only where its timing and content are clinically justified and where some relevant uncertainty remained at initiation.

Resolution describes an endpoint, not merely another interaction. The underlying medication-related issue may be resolved, appropriately transferred, shown to require no further action, or converted into a new care problem. Performance-based pharmacy programs demonstrate both the appeal and difficulty of linking remuneration to outcomes, particularly when pharmacies cannot control every determinant of the measured result [10]. Resolution-sensitive payment should therefore be used only where the endpoint can be defined credibly and attributed sufficiently to the work being rewarded.

Coordination captures work that occurs because successful care depends on another actor. Provider-status and billing studies show that legal authority does not automatically produce usable payment pathways [8]. Likewise, implementation research has shown that organizational systems, registration requirements and administrative infrastructure can determine whether a theoretically payable service becomes financially viable [15]. Coordination payment should recognize substantive

interprofessional or system-navigation work, not the mere recording of attempted contact.

The four units can be combined. A single bundled payment may cover initiation and anticipated follow-up. A recurring payment may internalize ongoing medication-management work. Performance components may supplement service payment where an

outcome is sufficiently measurable. The framework therefore does not require itemization. It requires the payment designer to identify which work is included, which work remains outside the bundle, and what happens financially when the patient still has unresolved need.

Table 2. Distinguishing remunerable continuity work from additional activity without clinical purpose

Work unit	Trigger for recognition	Minimum substantive work represented	Appropriate closure condition	Distortion to avoid
Initiation	A medication-related problem, service need or clinically justified intervention begins	Assessment, intervention initiation, advice, prescribing-related action or other defined professional service	The initiating professional task is completed and any continuing need is explicitly identified	Treating encounter completion as proof that the underlying need is resolved
Follow-up	Relevant uncertainty remains and later information could alter care	Reassessment, interpretation of new information, implementation check or response to emerging problems	Further reassessment is unnecessary, or a new action is initiated	Paying for contact frequency without meaningful reassessment
Resolution	A defined medication-related problem reaches an attributable endpoint	Confirmation that the problem is resolved, appropriately transferred or no longer requires pharmacy action	A defensible clinical or operational endpoint is documented	Rewarding premature closure or relabelling documentation as resolution
Coordination	Progress depends materially on another professional, organization or access pathway	Necessary information transfer, navigation, reciprocal communication, escalation or tracking of required action	Required action occurs, responsibility is accepted elsewhere or appropriate escalation is complete	Paying repeatedly for duplicate messages or unsuccessful low-value contact
Combined or bundled continuity	Several work units predictably occur within one continuing-care arrangement	Agreed longitudinal package incorporating specified responsibilities	Defined bundle period or care endpoint is reached	Hiding substantial additional workload inside a nominally comprehensive payment

Note: The units are analytical payment-design components rather than mandatory billing codes. A remuneration system may combine them where responsibilities and included work are explicit.

Equity adjustment

Equal payment for apparently equal encounters does not necessarily imply equal remuneration for comparable care work. Pharmacies operating in shortage areas may face constrained staffing, weak reimbursement and limited local service alternatives [20]. Rural accessibility also differs substantially from urban access [21], while racial and ethnic disparities in spatial pharmacy access vary by geography [22]. Social vulnerability introduces an additional area-level dimension that may interact with the practical availability of pharmacy care [23].

An equity adjustment should therefore be tied to demonstrable differences in expected resource requirement. Examples include additional navigation required because local alternatives are sparse, extra

coordination produced by fragmented access, or additional work needed to overcome information or service barriers. The relevant adjustment is for the work required to achieve a comparable care opportunity, not for the social identity of the patient.

This distinction is important because area-level disadvantage and pharmacy availability can change rapidly. The expansion of pharmacy deserts documented in Ohio between 2021 and 2024 illustrates how local capacity can deteriorate within a short period [24]. Fixed adjustment categories may consequently become inaccurate if they are not periodically recalibrated.

Existing health-payment policy shows that equity-sensitive adjustment is feasible in principle. An equity adjustment within Medicare hospital value-based purchasing altered the distribution of financial rewards

and penalties [25]. Economic work on value-based pricing has also formalized trade-offs between aggregate efficiency and distributional goals [26]. These models cannot be transferred mechanically to pharmacy, but they demonstrate that equity can be included explicitly within payment design.

The adjustment proposed here should consequently remain conservative. It should respond to observable resource demands, avoid assigning financial value directly to demographic characteristics, and be evaluated for selection effects. Where navigation or social-needs coordination becomes part of pharmacy work, implementation experience also suggests that the sustainability of the supporting workforce must be assessed rather than assumed [32].

Risks of gaming and unintended incentives

Every additional remunerated unit creates a behavioral signal. Provider status may produce little change if billing is impractical [8], while payment redesign can alter priorities even when its quality effects remain uncertain [9]. Pharmacy performance programs have also shown that organizations may perceive financial consequences as linked to factors outside their control [10]. These observations make gaming risk a central design problem, not a secondary implementation detail. Fee-for-service, capitation and performance payment each create different opportunities for distortion [11]. A continuity-sensitive model adds its own. Payment for follow-up may encourage unnecessary contacts. Payment for resolution may encourage premature closure,

selective documentation or avoidance of complex cases. Payment for coordination may reward the number of communications rather than successful transfer of responsibility. Equity adjustment may encourage classification behavior if payment changes sharply at eligibility thresholds.

Operational complexity can create the opposite failure: legitimate work may remain unpaid because billing is too burdensome [15]. Incentives that are theoretically well designed but unusable in practice reproduce financial invisibility. Evidence from pay-for-performance also cautions against assuming that financial incentives reliably improve safety or quality [27]. Pharmacy value-based models have shown encouraging financial signals in some settings, but observational designs and nonsignificant differences in several utilization outcomes restrict causal interpretation [28]. Pharmacists implementing comprehensive medication management have simultaneously reported documentation, data, staffing and sustainability challenges [29].

Implementation evidence therefore supports a safeguards approach. Payment rules should define minimum substantive content, permit audit of repeated claims, separate process completion from outcome achievement, and include balancing measures capable of detecting avoidance of complex patients. Models combining service payment and performance incentives [30], as well as recurring membership-style arrangements [31], offer useful design alternatives but should be judged by their incentive consequences rather than by payment form alone.

Table 3. Predicted failure modes of continuity-sensitive pharmacy remuneration and corresponding safeguards

Remuneration feature	Predicted failure mode	Observable warning signal	Design safeguard	Balancing measure
Follow-up payment	Unnecessary or excessively frequent contacts	Rising contact volume without corresponding clinical actions	Require clinically defined follow-up purpose and minimum substantive content	Actionable findings per follow-up and patient burden
Resolution-linked payment	Premature problem closure	High closure rate with repeated reopening or downstream escalation	Predefine acceptable resolution states and permit transfer as a legitimate endpoint	Reopened problems, adverse events and unresolved carry-forward
Coordination payment	Documentation of messages without effective coordination	High claim volume with low reciprocal response or action completion	Recognize substantive transfer, navigation or tracked action rather than contact attempt alone	Successful responsibility transfer and duplicate-contact rate
Equity adjustment	Classification or selection behavior	Abrupt differences around eligibility thresholds or preferential recruitment	Use transparent resource-need criteria and monitor case mix	Access among high-need groups and changes in patient selection
Performance component	Avoidance of complex patients or problems	Improved measured performance accompanied by narrowing case complexity	Risk adjustment, exclusions where attribution is weak and access monitoring	Case-mix stability and service reach

Bundled or recurring payment	Underprovision of necessary continuing work	Stable payment with falling follow-up or unresolved-problem detection	Specify included responsibilities and minimum continuity expectations	Unresolved carry-forward, access and patient-reported difficulty obtaining help
Highly fragmented payment	Administrative burden exceeds financial value	Low claim uptake despite eligible activity	Consolidate low-value billing units and simplify documentation	Claim completion cost, uptake and provider workload

Note: These are predicted incentive risks derived from the framework and the payment literature; they are not estimates of observed prevalence.

Evaluation measures

Evaluation should preserve the distinctions on which the framework is built. The first domain is initiation: whether eligible patients receive the intended professional service and whether the initiating work is performed adequately. The second is follow-up: whether clinically justified reassessment occurs at an appropriate time and whether it produces information or action that matters. The third is resolution: whether the relevant problem is resolved, appropriately transferred or intentionally remains under continuing management. The fourth is coordination: whether necessary external action occurs and whether responsibility becomes clear.

A fifth measure is especially important: unresolved carry-forward. This represents clinically relevant work or need that remains open after the remunerated unit ends. Tracking it would allow evaluation to distinguish a system in which fewer encounters are required because care is genuinely efficient from one in which unfinished work simply disappears from the payment record.

Measures of activity should be paired with balancing measures. Increased follow-up should be assessed alongside patient burden and unnecessary-contact rates. Higher resolution rates should be examined for case selection and premature closure. Coordination claims should be compared with completed transfers or actions. Equity adjustment should be assessed against access, case mix and distribution of service use. Administrative workload and billing usability also matter because low uptake can indicate that financial recognition exists only nominally, a problem demonstrated in pharmacy billing implementation research [15].

Evaluation should therefore compare remuneration configurations on at least four dimensions: clinical usefulness, provider workload, financial sustainability and distributional consequences. No single measure is sufficient to represent the value of continuing pharmacy care.

Policy implications

Policy development should begin by defining the paid unit before setting its price. Regulators and purchasers need to specify whether payment covers initiation alone, a bundle of anticipated continuing work, defined follow-up, coordination, an attributable outcome, or some combination. Ambiguity at this stage makes later evaluation difficult because the same payment can be interpreted as purchasing very different responsibilities. Pilot implementation should test attribution and usability before widespread deployment. A theoretically eligible service can remain uncommon when billing mechanisms are cumbersome [8]. Payment rules should therefore be tested with the organizations expected to use them, including the documentation burden, information requirements, interfaces with existing dispensing remuneration and consequences for workflow.

Data infrastructure should also be proportional to the incentive. Resolution-sensitive payment requires information capable of showing whether the problem changed. Coordination payment requires evidence that meaningful cross-organizational work occurred. Equity adjustment requires sufficiently robust measures of additional resource need. When those data are unavailable, simpler payment may be preferable to complex incentives based on weak signals.

Finally, remuneration should be treated as one policy lever among several. Workforce capacity, information exchange, professional authority, service integration and patient access remain necessary conditions for continuity [14]. Payment can recognize and encourage useful work, but it cannot substitute for the practical ability to perform that work.

Results and Discussion

The principal contribution of the Continuity-Oriented Remuneration Framework is a shift in the object of payment analysis. Conventional discussions often ask which payment mechanism should replace another. The framework instead asks which units of clinically relevant

work become financially visible under a given mechanism and what incentives follow from that visibility.

This distinction is especially important in community pharmacy because service expansion has outpaced uniform development of payment structures [1]. The existence of unfunded professional activity [12] and variation in unremunerated service intensity [13] indicate that the boundary of paid work can differ from the boundary of professional work. Transition-of-care evidence further shows that clinically relevant medication problems can persist after administratively completed events [16].

A strong rival explanation must nevertheless be retained. Unresolved work may result more from inadequate staffing, fragmented information, limited authority, weak organizational integration or constrained patient access than from remuneration itself. Service sustainability research supports this broader interpretation [19]. Payment redesign would have little effect if pharmacies cannot obtain the information, time or cooperation required to perform the additional work. Remuneration matters most where useful continuing work is feasible, attributable and currently weakly recognized.

The framework also has clear boundaries. Separate follow-up payment is unnecessary when a bundled or capitated arrangement already finances appropriate longitudinal responsibility. Follow-up should not be rewarded when no clinically meaningful reassessment is required. Coordination should not be paid as pharmacy work when another provider has accepted responsibility and no further pharmacy action is needed. Resolution-based incentives are poorly suited to problems whose outcome is largely outside pharmacy control. An equity modifier should not be used when structural resource differences cannot be measured with sufficient validity.

There is also a risk that excessive decomposition of care will recreate the problems of fragmented fee-for-service at a smaller scale. The purpose of distinguishing initiation, follow-up, resolution and coordination is analytical. A final payment system may combine several units when bundling reduces transaction costs without concealing important work. The membership and comprehensive medication-management models identified in pharmacy practice illustrate how recurring, service-based and performance-linked elements can coexist [30, 31].

The framework consequently makes a conditional claim. Continuity-sensitive remuneration is most useful when

clinically relevant work extends beyond the initial encounter, when that work is identifiable and feasible, when responsibility can be defined, and when current payment arrangements do not already finance it adequately. Whether a specific configuration improves outcomes, equity, professional sustainability or total cost requires empirical testing.

Conclusion

A completed pharmacy encounter can be a legitimate administrative endpoint while leaving medication-related work unfinished. When remuneration recognizes only the completed event, later follow-up, coordination, monitoring, access recovery or confirmation of resolution can become economically invisible.

The Continuity-Oriented Remuneration Framework separates initiation, follow-up, resolution and coordination so that payment design can identify what work is being purchased, what remains outside the paid unit, and where equity-related resource differences may matter. It does not require a separate fee for every activity and does not presume that continuity-sensitive payment is inherently superior to encounter-based, bundled, capitated or performance-linked models.

Its policy value lies in making the hidden remainder explicit. Remuneration should recognize continuing work when that work is clinically justified, attributable, operationally feasible and not already financed elsewhere. Any resulting model should be tested for unnecessary activity, premature closure, case selection, administrative burden and unequal access. Under those conditions, payment can be evaluated not only by whether an encounter was completed, but by whether the remuneration architecture supports the work required to bring care to an appropriate endpoint.

Acknowledgments: None

Conflict of Interest: None

Financial Support: None

Ethics Statement: None

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