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From Medication Appropriateness to Therapeutic Optimization: Why Multimorbidity Requires Explicit Reconciliation of Clinical Benefit, Treatment Burden, Feasibility, and Patient Priorities

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ABSTRACT

Medication appropriateness is an important component of medicines management, but multimorbidity creates therapeutic decisions in which a medication can be indication-concordant yet still be poorly aligned with the patient's overall clinical situation. Disease-specific benefit, treatment burden, practical workability, and patient priorities may diverge, change over time, or operate at different levels of care. To develop an evidence-bounded conceptual model of therapeutic optimization that treats these dimensions as analytically distinct and requires their explicit reconciliation rather than assuming that appropriateness, medication count, or deprescribing alone defines success. This original non-empirical article integrates recent and foundational evidence on multimorbidity, polypharmacy, medication review, adverse medication outcomes, treatment burden, shared decision-making, patient priorities, and medicines-review feasibility. The synthesis is conceptual rather than a systematic review and does not estimate intervention effects. The analysis distinguishes medication-level appropriateness from patient-level therapeutic value. It proposes that optimization requires four concurrent questions: whether clinically meaningful benefit remains plausible within the relevant time horizon; what workload and adverse consequences treatment imposes; whether the regimen is practically executable given patient and system capability; and whether its purpose is concordant with what matters to the patient. Discordance among these dimensions should trigger explicit trade-off deliberation and reversible, monitored decisions rather than automatic continuation or discontinuation. Therapeutic optimization in multimorbidity is proposed as a dynamic reconciliation process, not a one-time appropriateness judgment. The model requires prospective validation, context-sensitive measurement, and testing across heterogeneous patients, regimens, clinicians, and health systems.

Keywords: Multimorbidity, Polypharmacy, Medication appropriateness, Treatment burden, Shared decision-making, Patient priorities

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Introduction

Multimorbidity and polypharmacy are common in adult and older populations, but reported prevalence varies materially with definitions, populations, and study methods [1]. This heterogeneity matters because the therapeutic problem is not simply the number of diagnoses or medicines. It is the coexistence of multiple treatment rationales, risks, time horizons, monitoring demands, and patient goals within one person. A medication may be individually defensible for an indication while the combined regimen becomes difficult to justify, enact, or sustain. Population

prevalence therefore establishes the scale of the decision context, not the value of any particular medication for an individual patient.

Contemporary optimization strategies increasingly extend beyond single-drug screening. A recent cluster-randomized primary-care trial operationalized a multicomponent approach involving general-practitioner–pharmacist collaboration, informatics, and clinician engagement [2]. Such architecture shows that medication optimization can be organized as a coordinated care process, but it does not by itself define what constitutes an optimized therapeutic state. The conceptual problem is prior to service design: which dimensions must be reconciled before a treatment decision can reasonably be called optimized?

One omitted dimension is often the work imposed by treatment itself. Treatment burden among older adults varies in magnitude and source, indicating that the lived cost of care is not reducible to medication count or formal prescribing quality [3]. The same regimen may be manageable for one patient and destabilizing for another because of differences in physical capability, cognition, finances, support, access, competing tasks, or tolerance for healthcare workload.

Patient-centred multimorbidity care also cautions against expecting one metric to capture success. The pragmatic 3D trial demonstrated that a structured patient-centred model can improve selected aspects of care without producing uniform effects across all downstream outcomes [4]. This article therefore argues that medication appropriateness should remain an important input, but not the endpoint. Therapeutic optimization is proposed as explicit reconciliation of clinical benefit, treatment burden, feasibility, and patient priorities, with uncertainty and reassessment built into the decision rather than treated as afterthoughts.

Why medication appropriateness is not therapeutic optimization

Medication review and deprescribing can improve medication- or prescribing-level outcomes while patient-level outcomes remain inconsistent across settings, including hospital, long-term-care, and primary-care populations [5–7]. This divergence is clinically consequential. An intervention can reduce potentially inappropriate prescribing, simplify a regimen, or alter medication use without establishing that the resulting state is preferable for the individual patient across symptoms, function, quality of life, adverse events, or healthcare use. Appropriateness measures are therefore valuable for identifying medication-level problems, but they should not be treated as self-validating proxies for net therapeutic benefit.

Medication count is an even weaker stand-alone endpoint. Observational associations between polypharmacy and mortality can change materially after accounting for underlying morbidity [8]. That finding does not show that medication exposure is harmless; rather, it demonstrates how strongly treatment intensity can reflect the illnesses for which treatment was prescribed. A numerical threshold can consequently flag complexity without revealing whether medicines are necessary, beneficial, burdensome, feasible, or aligned with patient goals.

The distinction proposed here is between medication appropriateness and therapeutic optimization. Appropriateness asks whether a medicine is sufficiently justified, safe, and suitable within a recognized clinical frame. Optimization asks a broader patient-level question: given all concurrent conditions and treatments, is continuation, modification, substitution, or withdrawal the most defensible option after benefit, burden, feasibility, and priorities are jointly considered? Evidence from medication-review studies supports the existence of outcome discordance [5]; the four-domain reconciliation rule itself is the proposed contribution of this article, not an established clinical instrument.

Clinical benefit across multiple conditions and time horizons

Clinical benefit in multimorbidity cannot be assumed to accumulate additively across disease-specific recommendations. Guidance for older people increasingly recognizes that conventional guideline logic requires adaptation when competing conditions, risks, life expectancy, and goals alter the relevance of recommended care [9]. A treatment with a plausible long-term preventive benefit may have limited practical value when the expected time to benefit exceeds the patient's relevant decision horizon, while a symptom-directed treatment may remain important despite adding to medication count. No universal numerical weighting follows from this distinction.

Benefit also has to be evaluated against medication-related harm. A systematic review of admissions among older adults documents a substantial burden of adverse drug reactions and adverse drug events, while also showing heterogeneity in definitions and ascertainment [10]. Such evidence cannot predict an individual patient's risk, but it supports a basic decision principle: disease-specific efficacy is not equivalent to net benefit when treatment-related harms, interactions, or vulnerability can offset the intended gain.

Accordingly, polypharmacy may be appropriate when multiple indicated therapies retain meaningful benefits and their combined harms and management demands remain acceptable [11]. The therapeutic target is not minimum medication count. It is a defensible configuration of treatment in which each important benefit claim remains relevant after competing morbidity, adverse-effect exposure, and the practical consequences of the whole regimen are considered.

Guideline evidence also exposes unresolved implementation problems. A recent systematic review found variable quality and gaps in patient-centred, feasibility-oriented, and longitudinal recommendations for multimorbidity and polypharmacy [12]. **Table 1** therefore makes explicit the conflicts that can remain hidden when benefit is considered indication by indication.

Table 1. When disease-specific medication benefit conflicts with multimorbidity-level net benefit

Medication/ indication	Intended benefit	Time horizon	Competing morbidity or risk	Evidence certainty	Condition weakening net benefit
Long-horizon preventive therapy	Future-event reduction	Delayed	Competing mortality, frailty, adverse-event vulnerability	Indication evidence may transfer incompletely	Time to benefit exceeds the relevant horizon
Symptom-directed therapy	Symptom or functional relief	Immedia te–short	Sedation, falls, interactions	Individual response may be observable but variable	Gain is small relative to harm or workload
Risk-reduction therapy requiring monitoring	Lower condition-specific risk	Short–long	Monitoring burden, interactions	Depends on baseline risk and applicability	Absolute gain falls or monitoring becomes disproportionate
Concurrent indicated therapies	Preserve several condition-specific benefits	Mixed	Cumulative harm and complexity	Certainty differs across indications	Aggregate treatment becomes disproportionate

Note*:* Proposed decision states; no medication-specific rule, fixed score, or universal time-horizon threshold is implied.

Treatment burden as a therapeutic cost

Treatment burden is the workload of healthcare and its effects on the patient's functioning and well-being. In multimorbidity it includes more than swallowing medicines: monitoring, appointments, self-management tasks, administrative work, coordination across clinicians, access requirements, and the cognitive and emotional effort of sustaining care. An integrative review identifies multiple burden domains, determinants, and consequences, supporting treatment burden as a multidimensional construct rather than a synonym for non-adherence [13]. In the proposed optimization logic, burden is therefore a therapeutic cost in its own right, even when a patient remains adherent.

Measurement is possible, but it is context dependent. Translation, cross-cultural adaptation, and validation of the Arabic Multimorbidity Treatment Burden Questionnaire illustrate that an instrument cannot simply be assumed to function equivalently across languages and settings [14]. This constrains any attempt to turn burden into a universal score within an optimization model. The relevant question is not merely whether burden is "high," but which treatment tasks generate it, for whom, under what social and healthcare conditions, and whether those demands are modifiable.

Treatment burden is also associated with outcomes that matter to patients. A cross-sectional study found an inverse association between treatment burden and health-related quality of life in people with multimorbidity [15]. The design does not establish that burden causes poorer quality of life; worse health may itself generate additional treatment work, and residual confounding is plausible. Nevertheless, the association reinforces the decision relevance of burden. A clinically appropriate medicine may still contribute to a regimen whose cumulative workload erodes the value of treatment unless burden is surfaced, attributed to specific tasks, and weighed alongside anticipated clinical benefit.

Feasibility, capability, and regimen workability

Feasibility asks whether a treatment plan can be carried out reliably in the patient's actual circumstances. This is not equivalent to pharmacological appropriateness. General-practice pharmacist-led person-centred medicines reviews have evaluated medication appropriateness and patient-reported outcome domains separately, supporting

the need to keep medication-level quality and patient-experienced consequences analytically distinct [16]. The proposed concept of regimen workability extends that separation: a clinically defensible regimen can still fail as a therapeutic plan if its administration, monitoring, coordination, or access requirements exceed available capability.

Capability is distributed. A scoping review of shared decision-making for people with complex care needs identified facilitators and barriers at patient, clinician, team, and organizational levels [17]. Accordingly, an apparent "adherence problem" may reflect cognitive or physical limitations, fragmented prescribing, poor communication, inadequate support, inflexible services, or administrative demands. Treating feasibility as a patient trait would therefore mislocate many causes of treatment failure.

Material resources also shape what can be enacted. In a national survey with a choice-experiment component, people with multimorbidity altered healthcare priorities under tighter financial constraints [18]. Hypothetical choices do not establish real-world behavior, but they demonstrate that priorities are sensitive to resource conditions. Formal availability of a treatment is therefore not the same as practical access, and expressed preference cannot be interpreted independently of constraint.

Table 2 separates recurring treatment work from pharmacological appropriateness so that feasibility failures can be located before they are mislabeled as unwillingness or poor adherence.

Table 2. When an appropriate regimen becomes unworkable in everyday care

Treatment task	Frequency/complexity	Capability required	Burden pathway	Feasibility failure signal	Modifiable support
Medication administration	Repeated dosing or device use	Memory, dexterity, comprehension	Cognitive/practical workload	Missed or incorrect doses	Simplification, aids, caregiver support
Monitoring and follow-up	Tests and appointments	Mobility, scheduling, self-monitoring skill	Time, travel, procedural burden	Missed tests or reviews	Coordinated, accessible monitoring
Regimen coordination	Multiple prescribers or changes	Information management	Fragmentation and uncertainty	Conflicting instructions	Shared records, pharmacist coordination
Medication access	Refills, cost, authorization	Financial/administrative capacity	Financial and bureaucratic workload	Supply gaps or rationing	Cost-sensitive options, refill/access assistance

Note: Proposed synthesis of burden and feasibility evidence; categories and supports are context dependent.

Patient priorities and goal concordance

Patient priorities add a decision dimension that cannot be inferred from diagnosis, adherence, or prescribing quality. Conversations involving pharmacists, people with dementia, and care partners have shown that medication discussions can surface what matters most, including trade-offs relevant to medication use and the role of care partners in decision-making [19]. This evidence is context specific and does not establish a universal conversation protocol, but it illustrates why the purpose of treatment should be made explicit rather than assumed from the indication alone.

Goal concordance is attractive as an endpoint because it asks whether care aligns with patient goals, yet its measurement remains unsettled. A scoping review in geriatrics and palliative care found substantial heterogeneity in how goal concordance is described and measured [20]. The proposed model therefore does not treat "goal concordance" as a validated scalar variable. A patient may also hold several goals that conflict, change with health status, or differ from the preferences of caregivers or clinicians. Such disagreement is information to be reconciled, not measurement noise to be erased.

Importantly, health priorities can be elicited in clinically feasible ways. Work on Patient Priorities Care demonstrated a process for identifying individual health priorities among older adults with multiple chronic conditions [21]. Feasible elicitation, however, is not evidence that elicited priorities are stable, sufficient, or automatically translated into better outcomes. Within therapeutic optimization, priorities function as an explicit input to deliberation: they help determine which benefits are worth pursuing, which burdens are acceptable, and which compromises are defensible. Clinical judgment still has to address safety, evidence uncertainty, feasibility, and the possibility that preferences will change after treatment experience or health transitions.

Reconciling benefit, burden, feasibility, and priorities

Reconciliation becomes necessary when the four dimensions point toward different actions. Patient-centred prioritization research shows that rankings of healthcare processes can change when patient-valued criteria and uncertainty are made explicit [22]. That finding does not provide universal weights for medication decisions, but it demonstrates why implicit aggregation is problematic: clinicians and patients may reasonably reach different conclusions depending on which outcome, workload, or uncertainty is foregrounded. Therapeutic optimization therefore requires the competing signals to be visible before a decision is made.

Evidence for priorities-aligned care is promising but not definitive. A nonrandomized controlled evaluation reported improvement in selected outcomes while retaining uncertainty about the magnitude and transferability of benefit [23]. Earlier nonrandomized work likewise associated priorities-aligned decision-making with favorable patient-centred and healthcare-burden outcomes, but its design cannot establish that alignment itself caused those changes [24]. These findings support treating priorities as clinically relevant; they do not validate a four-domain optimization rule.

The proposed reconciliation process asks sequentially but not hierarchically: What meaningful benefit is still expected, and over what horizon? What treatment workload or harm accompanies that benefit? Can the patient and care system execute the regimen reliably? Is the therapeutic purpose compatible with the patient's current priorities? Agreement across domains supports continuation, whereas discordance creates a decision problem rather than an automatic stop signal. Importantly, discordance can arise without any domain being erroneous: a therapy may remain clinically defensible yet impose unacceptable work, or remain strongly preferred yet be impracticable without additional support. The appropriate response may be modification, support, substitution, a monitored trial, or discontinuation. **Table 3** makes these discordant states explicit and emphasizes reversible next steps rather than fixed scores.

Table 3. Therapeutic decisions requiring explicit reconciliation rather than automatic continuation or withdrawal

Decision state	Benefit signal	Burden signal	Feasibility signal	Patient-priority signal	Reconciliation question	Reversible next step
Benefit retained, workload excessive	Meaningful	High	Possible but fragile	Goal-concordant	Can benefit be preserved with less treatment work?	Simplify task, schedule, or monitoring and reassess
Benefit plausible, execution unreliable	Meaningful or uncertain	Variable	Low	Goal-concordant	Is non-achievement a drug problem or a capability/system problem?	Add support or redesign delivery before judging failure
Clinically defensible, priority-discordant	Meaningful	Acceptable	Workable	Low concordance	Is the expected gain worth pursuing for this patient now?	Clarify goals; consider time-limited continuation or alternative
Low or uncertain benefit, persistent burden	Weak/uncertain	High	Variable	Low or uncertain concordance	What justifies continued exposure and workload?	Consider monitored dose reduction, substitution, or withdrawal

Note: All decision states and next-step rules are proposed. They do not constitute validated thresholds or medication-specific deprescribing instructions.

The proposed therapeutic optimization reconciliation model

The proposed model treats therapeutic optimization as a revisable decision state, not a property intrinsic to a medicine. Older adults with multiple chronic conditions report heterogeneous outcome goals and healthcare preferences [25], so the value assigned to a treatment cannot be inferred solely from its indication. The model therefore keeps clinical benefit, treatment burden, feasibility, and patient priorities analytically separate until reconciliation. No domain receives a fixed weight, and none can independently certify optimization.

Reconciliation is iterative because treatment consequences and patient judgments may emerge only after a decision is enacted. Experience from priorities-aligned care identifies negotiation, serial trials, and start/stop/continue decisions when competing goals cannot be resolved in one encounter [26]. The model

translates that process principle into a therapeutic loop: assess the four domains; identify agreement or discordance; choose the least irreversible clinically defensible action; specify what outcome would justify continuation, modification, or reversal; and reassess after a relevant interval or health transition.

Implementation is itself a boundary. Patient Priorities Care has been feasible in routine care but has required workflow, documentation, clinician participation, and organizational support [27]. The proposed model therefore locates system capability around, rather than outside, therapeutic reasoning. This prevents a common category error in which failure to obtain, administer, or monitor treatment is attributed to patient choice when the limiting factor is organizational or material. A conceptually preferred option that cannot be delivered safely or accessed reliably is not yet a workable therapeutic plan.

Figure 1 visualizes the resulting architecture: four nonequivalent domains enter a proposed reconciliation field, discordance can downgrade decisional confidence, and monitoring returns new information to the same domains rather than treating the first decision as final.

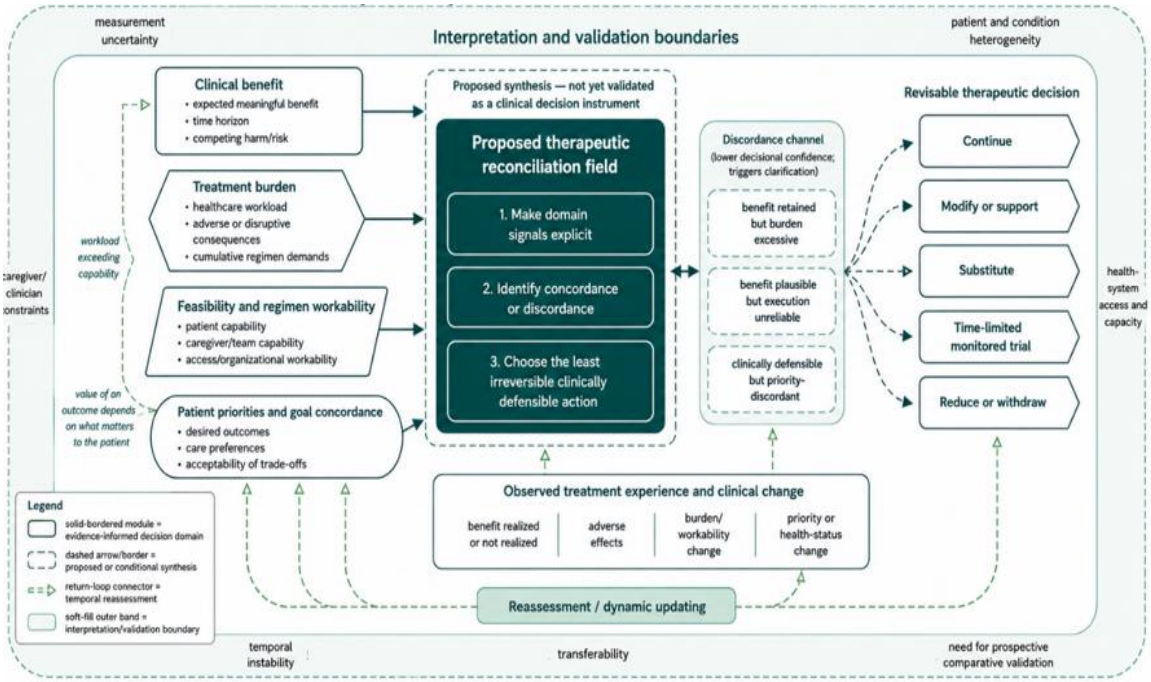

Figure 1. Therapeutic value remains provisional until benefit, burden, feasibility, and patient priorities are reconciled and reassessed

Discordant cases and trade-off decisions

The most informative cases are those in which conventional medication-quality signals and patient-level value diverge. In a primary-care cluster-randomized deprescribing trial among older patients with hyperpolypharmacy, deprescribing-related medication changes occurred while patient-level outcome effects were limited or mixed [28]. The implication is not that deprescribing lacks value, but that successful medication reduction and successful therapeutic optimization are different claims. A medication can be stopped appropriately without producing a detectable improvement in broader outcomes, and continuation can sometimes remain justified despite high medicine counts.

Transferability also matters. A randomized physician-led medication-review study in patients with diabetes and severe mental disorder evaluated optimization in a clinically distinctive comorbidity context [29]. Such populations may have treatment dependencies, service structures, and competing risks that differ from those represented in more general polypharmacy evidence. A reconciliation process must therefore remain sensitive to the condition combination, treatment purpose, and care setting rather than importing a generic rule.

Preference signals can also conflict with behavior. In a trial substudy, older adults' willingness to deprescribe and their medication adherence did not form a simple one-to-one relationship [30]. Stated willingness should therefore not be treated as equivalent to capability, adherence, or completed medication change. Discordance should trigger clarification: Is the obstacle uncertainty about benefit, fear of symptom recurrence, practical difficulty, caregiver

influence, or a system constraint? The proposed model treats such discrepancies as diagnostic information for deliberation rather than evidence of irrationality or noncompliance. The same logic applies when caregivers and patients differ: the disagreement should be localized to the relevant benefit, burden, feasibility, or priority claim before action is taken.

Monitoring, reassessment, and dynamic reconciliation

Optimization can decay as circumstances change. Treatment burden and self-care show a complex association in multimorbid people with hypertension [31]. Because that evidence is cross-sectional, it does not demonstrate a temporal feedback mechanism; nevertheless, it illustrates why workability should not be assumed to remain stable after a medication decision. New symptoms, functional decline, caregiving changes, financial pressure, service access, or accumulating monitoring tasks may alter the balance without any change in the original indication.

Reassessment therefore needs outcomes beyond medication count. A core outcome set developed for hospital deprescribing trials in older people spans medication-related and patient-relevant domains [32]. That specific set is not automatically transferable to every optimization context, but its methodological lesson is important: evaluation should prespecify outcomes capable of detecting both medication change and what that change means for the patient. For the proposed model, relevant follow-up might include achievement of the intended clinical purpose, adverse effects, experienced burden, regimen execution, and continued concordance with patient priorities, selected according to context rather than a universal score.

Medication change itself may also require staged monitoring. A deprescribing roadmap for people with dementia emphasizes identifying targets, planning tapering when relevant, making preparatory arrangements, and following patients closely [33]. Those steps cannot be generalized as instructions to deprescribe all therapies. They support a broader process principle: when a therapeutic decision is reversible, its safety depends partly on defining how reversal, escalation, or re-initiation will occur if the expected balance does not materialize. Dynamic reconciliation thus converts monitoring from surveillance into a planned mechanism for updating the decision. Reassessment should occur at clinically meaningful triggers—such as treatment initiation, dose change, adverse effects, functional change, care transition, or a shift in stated priorities—rather than only at arbitrary calendar intervals.

Boundary conditions and validation needs

The proposed model has several boundaries. First, the four domains are decision categories, not validated latent variables with established weights. Existing multimorbidity and polypharmacy guidelines vary in quality and do not uniformly operationalize patient-centred, feasibility-oriented, and longitudinal recommendations [12]. The model should therefore be tested against, rather than presumed to solve, current guideline limitations.

Second, measurement is incomplete. Goal concordance is operationalized heterogeneously across geriatric and palliative-care research [20], and comparable uncertainty applies to how burden, feasibility, and net benefit should be combined. A future instrument would require content validity, reliability, responsiveness, and evidence that measurement adds value beyond ordinary clinical assessment. Fixed cut points would be unjustified without such work.

Third, premise-supporting evidence is not model validation. Priorities-aligned care has shown selected favorable results in a nonrandomized controlled design [23], but this does not establish the effectiveness of the proposed reconciliation architecture. Likewise, medication reduction may diverge from patient-level outcomes [28], so validation cannot define success solely as fewer medicines or fewer prescribing problems.

Prospective evaluation should test whether explicit reconciliation changes decisions, decision quality, workload, patient-relevant outcomes, medication-related harms, or care use compared with credible alternatives. Outcome selection should be multidimensional and context sensitive; core-outcome-set work in deprescribing provides a methodological anchor without supplying a universal endpoint set [32]. Studies should also examine subgroup performance, clinician and patient burden, caregiver involvement, equity and access, cross-system transferability, temporal stability, and unintended consequences. Failure to outperform simpler approaches, poor reproducibility, or systematic disagreement between domains would constitute reasons to revise or reject the model rather than merely implementation barriers. Validation must also distinguish whether poor performance reflects the model's conceptual structure, unreliable measurement, insufficient decision support, or failure of the surrounding care system.

Results and Discussion

The central argument is that medication appropriateness and therapeutic optimization operate at different levels. Appropriateness can identify medication-level problems, but systematic evidence shows that improvements in prescribing or medication reduction do not guarantee uniform improvement in patient-level outcomes [5]. In multimorbidity, the relevant decision therefore extends from "Is this medicine appropriate?" to "Is this treatment configuration worth continuing for this person, in this context, now?" The proposed answer requires explicit reconciliation of benefit, burden, feasibility, and patient priorities.

This reframing has practical implications for pharmacy practice without assigning pharmacists sole ownership of the decision. Pharmacist-led person-centred medicines reviews can keep appropriateness and patient-reported domains visible as distinct outcomes [16]. Pharmacists may therefore help identify interactions, cumulative workload, execution problems, discrepancies between prescribed and actual use, and opportunities for simplification, while prescribers, patients, caregivers, and other clinicians contribute condition-specific judgment and goal interpretation. The reconciliation task is inherently shared when risks or treatment purposes cross professional boundaries.

The model also resists false precision. Goal concordance currently lacks a uniform measurement approach [20], while patient-centred prioritization is sensitive to the criteria and uncertainty incorporated into the decision [22]. These findings argue against a universal optimization score. A transparent record of why a domain favors continuation, modification, or withdrawal may be more defensible than reducing heterogeneous judgments to an unexplained total.

The model's strongest test is not whether it produces more deprescribing. It is whether explicit reconciliation improves the quality and revisability of therapeutic decisions without imposing disproportionate workload or worsening safety, access, or continuity. Multidimensional outcome development in deprescribing research demonstrates the importance of evaluating medication and patient-relevant consequences together [32]. Future studies should compare the proposed approach with structured medication review, priorities-aligned care, and usual practice; assess inter-rater agreement and patient–clinician concordance; and examine whether reassessment changes decisions appropriately as circumstances evolve. Until such evidence exists, the model should be regarded as a testable decision architecture rather than a clinical standard.

Conclusion

Medication appropriateness remains necessary in multimorbidity, but it is not a sufficient definition of therapeutic success. The proposed Therapeutic Optimization Reconciliation Model reframes the endpoint as a revisable judgment about whether expected clinical benefit, treatment burden, practical feasibility, and patient priorities can be defended together for a particular person and time.

The model deliberately avoids fixed weights, universal medication-count targets, and an assumption that continuation or deprescribing is intrinsically preferable. It distinguishes medication-level quality from patient-level value, stated preference from regimen capability, formal availability from practical access, and an initial decision from its subsequent performance. Discordance among domains is treated as a reason for deliberation, support, modification, or a monitored reversible trial rather than an automatic rule.

The proposal remains bounded by heterogeneous measurement, patient and condition variation, uncertain transferability, changing priorities, caregiver and clinician constraints, and health-system capacity. Its value therefore depends on prospective testing against simpler approaches, multidimensional patient-relevant outcomes, and explicit assessment of workload, equity, safety, and unintended effects. Therapeutic optimization should be claimed only when the reconciliation process—and not merely an appropriateness screen—has been shown to support better decisions in the contexts where it is used.

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