INTERNATIONAL ACADEMIC PUBLICATION DOSSIER

THE VIEN GUT MODEL

Integrated Outpatient Care for Complex Chronic Multimorbidity

Part A – FOUNDATIONAL DOCUMENTS

DOCUMENT A.3

THE GLOBAL HOW GAP

Why complex chronic multimorbidity is not served

by existing single-disease guidelines

The Vien Gut Model — International Academic Publication Dossier

First systematic compilation — March 2026

Ho Chi Minh City, Vietnam

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POSITION OF THIS DOCUMENT WITHIN THE ACADEMIC DOSSIER OF THE VIEN GUT MODEL

Document A.3 is not a procedural document, not a document applied to a single disease axis, and not a document presenting clinical evidence at the target-organ level. A.3 is the document that provides international evidence confirming a proposition that A.1 and A.2 have already prepared at the theoretical level: the HOW gap in the care of complex chronic multimorbidity is not a perception unique to Vien Gut, but a global, systemic gap that has already been acknowledged by many guidelines, international consensus documents, and independent studies.

Within the four-tier architecture of the dossier, A.3 belongs to Tier 1 — Basic Architecture. If A.1 identifies the structural break in the EBM chain at the stage of clinical application, and A.2 defines the three layers WHAT – HOW – DATA-to-operate as the framework for filling that gap, then A.3 provides the layer of international evidence confirming that the HOW gap truly exists on a global scale. Only after A.3 does the reader have a sufficient foundation to move into A.4–A.5, Part B, Part C, and Part D without mistaking the Vien Gut Model for merely a local experience.

GUIDE FOR READERS OF A.3

• To understand the overall architectural statement of the full dossier, read A.0.

• To understand the EBM reference framework and the structural break in the EBM chain, read A.1.

• To understand the precise definitions of the three layers WHAT – HOW – DATA-to-operate, read A.2.

• To understand the detailed operational terminology, read A.4.

• To understand the standardized terminology table, read A.5.

• To see how the Vien Gut Model transforms HOW into operational processes, read B.1–B.5.

• To see how this framework is applied to each disease axis, read C.1–C.n.

• To see how the HOW gap is carried into academic dialogue and multicenter validation, read Part D.

SUMMARY

Document A.3 presents international evidence confirming that the HOW gap in the care of complex chronic multimorbidity is a global problem. Its central argument is that modern medicine has built the WHAT layer very strongly through single-disease guidelines, and that the international community has also begun to acknowledge the limitations of the single-disease model for patients with multimorbidity. However, after acknowledging the gap, the world still has not created a HOW + DATA-to-operate architecture that is concrete enough, structured enough, operational enough, and transferable enough for outpatient care of complex chronic multimorbidity. This document synthesizes three layers of evidence: the scale of chronic multimorbidity as a global reality; the lack of HOW in single-disease guidelines and international consensus documents; and the measurable clinical consequences of fragmented care models. On that basis, A.3 identifies four structural features of the global HOW gap and clarifies the position of the Vien Gut Model: it does not replace the WHAT of guidelines, but adds HOW and DATA-to-operate to bring the WHAT into integrated, individualized, and verifiable outpatient practice.

BACKGROUND

Vien Gut emerged from outpatient treatment practice for patients with severely complicated gout accompanied by complex chronic multimorbidity in a context of limited health-care resources, a shortage of deeply specialized physicians, and an initial model based mainly on general internal medicine doctors. Over nearly two decades, one repeated observation kept appearing: when receiving patients with severe gout together with chronic kidney disease, heart failure, cirrhosis, diabetes, and multiple overlapping pathological spirals, the real problem was not a complete lack of drugs or a complete lack of guidelines. The problem was that there was no HOW to apply several guidelines simultaneously to one patient carrying four to seven severe diseases at once.

This observation began as a clinical intuition, but was gradually confirmed by two sources: first, the accumulated practice data at Vien Gut; second, the international literature on multimorbidity, integrated care, and the consequences of fragmented care. It is precisely from the intersection between Vien Gut's practice and international evidence that A.3 was written as a document clarifying that the HOW gap is not an internal discovery, but a systemic gap in modern medicine in the era of chronic multimorbidity.

OBJECTIVES AND SCOPE OF THE DOCUMENT

Document A.3 has five objectives. First, to demonstrate that complex chronic multimorbidity is a global reality rather than a clinical exception. Second, to compare two groups of international documents — single-disease guidelines and multimorbidity consensus documents — in order to show that the medical community has acknowledged the gap but has not yet provided a concrete HOW. Third, to synthesize the evidence showing that fragmented care models produce measurable clinical consequences. Fourth, to describe the global HOW gap through clear structural characteristics. Fifth, to place the Vien Gut Model in its correct academic position: a model proposing an operational answer to a gap that has already been acknowledged by the international community.

This document does not include: the three-layer EBM framework; the detailed definitions of WHAT, HOW, and DATA-to-operate; specific operational processes; or target-organ clinical evidence. Those contents have been or will be presented in A.1, A.2, B.1–B.5, and Part C. A.3 does only one thing: it confirms, through international evidence, the existence of the global HOW gap.

1. PRACTICE-BASED ORIGIN

This document originates from a recurring pattern of observation at Vien Gut over nearly two decades of operation: each time a patient with severely complicated gout was received, the real problem was not a lack of drugs or a lack of guidelines. The problem was that there was no HOW to apply multiple guidelines simultaneously to a patient carrying four to seven severe diseases at once. What began as a clinical intuition was gradually confirmed by cohort data, international collaboration, and the literature on multimorbidity. From there, Vien Gut arrived at a recognition: this is not a problem unique to Vien Gut or to gout. It is a global, systemic problem, and it can be described in precise academic language.

A.3 therefore does not aim to “prove” that Vien Gut is right by retelling internal experience. A.3 has a more demanding task: to place Vien Gut’s experience within a global picture, so that the reader can see that the problem the Vien Gut Model is trying to answer has, in fact, already been named by the world at different levels. The difference lies here: most international documents stop at acknowledgment or principle-level recommendations, whereas the Vien Gut Model takes one step further by designing HOW + DATA-to-operate into a structured operational architecture.

2. THE SCALE OF THE PROBLEM — COMPLEX CHRONIC MULTIMORBIDITY IS A GLOBAL REALITY

Complex chronic multimorbidity is no longer an exception. It has become a defining reality of twenty-first-century medicine. The international data summarized in the earlier version of A.3 already showed this quite clearly: Barnett et al. [1] demonstrated, in more than 1.7 million patients in Scotland, that 42% of adults had at least two chronic diseases, and that this proportion exceeded 80% in those over 80 years of age; in lower-income groups, multimorbidity appeared 10–15 years earlier. WHO [2] and United Nations statements likewise show that most of the global disease burden now belongs to chronic non-communicable diseases, and that much of this burden is multimorbid in nature. In Vietnam, national strategic documents also acknowledge that non-communicable diseases account for a very large share of mortality and disease burden.

The important point is not simply “more diseases.” The crucial point is this: disease reality has shifted toward multimorbidity, while health systems are still organized primarily around single diseases. Medical

training, specialty structures, guidelines, randomized trials, care pathways, and the design of medical records all still bear the strong imprint of the single-disease model. This is the structural paradox: the reality of disease has changed, but the operational architecture of medicine has changed much more slowly. A.3 considers this paradox to be the essential context for understanding the HOW gap.

3. COMPARING TWO SOURCES OF INTERNATIONAL DOCUMENTS

3.1. Single-disease guidelines — robust WHAT, but no HOW for multimorbidity

Major single-disease guidelines such as EULAR/ACR for gout, KDIGO for CKD, ESC for heart failure, and EASL for cirrhosis all provide a very strong WHAT: treatment targets, drugs of choice, intervention thresholds, evaluation criteria, monitoring principles, and disease-specific management milestones. This is the strongest achievement layer of modern medicine, and it is also the layer that the Vien Gut Model preserves intact. But when these four guidelines are applied simultaneously to one patient, they do not adequately answer the most important questions of complex outpatient multimorbidity care: who coordinates, which axis is prioritized first, according to what principle are conflicts resolved, based on what longitudinal dataset, and when must a transfer safety valve be activated. In other words, single-disease guidelines are strong in WHAT, but they do not describe the HOW for multimorbidity.

3.2. International multimorbidity consensus documents — the gap has been acknowledged, but not filled

International documents on multimorbidity and integrated care have gone one step beyond single-disease guidelines in that they actually name the problem. NICE NG56 [3] acknowledges that single-disease guidelines are unsuitable for many people with multimorbidity, and recommends reducing treatment burden and establishing a clear coordinator. JA-CHRODIS and WHO ICOPE emphasize that the single-disease model causes fragmented care and that person-centered integrated care is needed. Hughes [5] and Muth [6] show that applying many single-disease guidelines simultaneously creates treatment burden and lacks integrated clinical decision support. However, after acknowledging the gap, these documents still remain mainly at the level of principles. They do not provide a HOW that is concrete, structured, role-defined, action-threshold-based, longitudinal-data-enabled, safety-valve-equipped, and directly operational for severely multimorbid patients in outpatient care.

3.3. A new paradox: many high-level treatment targets have already been shown to be achievable, yet the architecture needed to bring those targets into complex outpatient multimorbidity care is still missing

One point that needs to be clarified more explicitly in the revised version of A.3 is this: international medicine does not merely lack HOW; at the same time, many high-level treatment targets have already been demonstrated to be achievable in research settings or cohorts. Crystal-free on the gout axis, delaying or postponing kidney replacement therapy on the CKD axis, reducing worsening heart failure on the cardiac axis, and hepatic recompensation on the liver axis all already have different degrees of evidence showing that they are attainable. Therefore, the current gap should not be understood simply as “medicine still does not know which targets are achievable.” The gap lies in the fact that, between the evidence for these high-level targets and real outpatient practice for complex multimorbidity, there is still no operational architecture strong enough to pursue those targets safely, sustainably, and in a verifiable way in real patients. This is a very important bridge between A.3, A.0, and Part D.

4. EVIDENCE OF THE CLINICAL CONSEQUENCES OF THE HOW GAP

The HOW gap is not an abstract remark. It produces measurable clinical consequences. According to the synthesis in the earlier version of A.3, international studies have consistently documented several consequences: fragmented care is associated with increased potentially inappropriate medications, higher all-cause mortality, more unplanned emergency visits, more duplicate testing, higher costs, and greater patient exhaustion because patients must coordinate among multiple specialties by themselves. At the same time, primary care physicians and clinicians also report persistent tension between “doing the right thing according to single-disease guidelines” and the risk of harming multimorbid patients.

These consequences matter because they transform a “conceptual gap” into a “gap with measurable consequences.” That means the HOW gap is not merely a matter of convenience. It is directly related to treatment safety, treatment effectiveness, cost burden, and patients’ quality of life. From an academic perspective, this is precisely the basis on which A.3 asserts that HOW must be treated as a real problem layer in medicine, rather than as a secondary organizational detail that varies from one institution to another.

5. THE HOW GAP — STRUCTURAL SUMMARY

From the analysis above, the global HOW gap can be described through four structural characteristics.

First, there is no overall coordinator. Guidelines do not specify who carries final responsibility when several guidelines apply to one patient at the same time.

Second, there is no mechanism for resolving inter-guideline conflicts. When a drug that is good for one axis harms another axis, most guidelines do not describe how priorities should be adjudicated.

Third, there is no structured longitudinal dataset. Guidelines rely mainly on cross-sectional views, whereas complex multimorbidity requires time-series data to identify trends, pathological spirals, and windows of opportunity.

Fourth, there is no safety valve with a pathway. Transfers are often made late, after decompensation has already occurred, and there is no reintegration process when the patient returns to outpatient care.

These are four structural deficits, not four individual failings. The Vien Gut Model will later address each deficit in turn through the Clinical Conductor, the conflict-resolution matrix, DATA-to-operate, and the two-way transfer valve. But in A.3, our task is not yet to describe those solutions in detail; our task here is to establish that these four deficits truly exist in the global picture.

6. WHY THE HOW GAP IS ESPECIALLY SERIOUS IN COMPLEX OUTPATIENT MULTIMORBIDITY

The HOW gap may exist everywhere, but it becomes most dangerous in outpatient care. In inpatient settings, several layers of concentrated resources partly conceal it: bedside multidisciplinary consultation, continuous monitoring, on-duty nursing, emergency response, and rapid escalation mechanisms. In outpatient care, those resource layers disappear. The patient goes home and lives with multiple diseases, multiple drugs, multiple risks, and multiple potential breakpoints between visits. If a structured HOW and sufficiently strong DATA-to-operate are absent, the interval between two visits

becomes a “secondary blind zone” — a period in which breakpoints may form but no one sees them early enough.

This explains why the global HOW gap is especially relevant to the problem the Vien Gut Model has had to face. Vien Gut did not develop its model by downgrading an inpatient model into outpatient care. The model was formed directly in LMIC outpatient care, where the HOW gap reveals itself most directly. That is what makes A.3 more than a general review of multimorbidity: it is the document explaining why a structured HOW architecture becomes a vital requirement in complex outpatient multimorbidity.

7. THE RESPONSE OF THE VIEN GUT MODEL

The Vien Gut Model does not deny the role of guidelines. WHAT remains fully respected. What this model adds are the two layers that guidelines do not provide by themselves: HOW and DATA-to-operate. A.3 is not tasked with presenting that solution in detail — that belongs to Part B and Part C — but it must clearly state the principle: the Vien Gut Model does not try to replace evidence with experience; it tries to bring evidence into practice through a clearer operational architecture.

Specifically, Part B will describe HOW as a structured architecture: the first visit activates the operating system, the treatment plan is organized by phases, windows of opportunity are identified, the role of the patient is defined, and enabling conditions are managed. Part C will show how those layers are applied to each disease axis. Part D will take the next step: engaging in dialogue with research groups that have published the corresponding targets and progressively moving the model into a pathway of multicenter validation. Therefore, the correct academic position of the Vien Gut Model is not “a model outside guidelines,” but an effort to build HOW + DATA-to-operate for what guidelines already know at the WHAT level but still cannot adequately operationalize for complex multimorbid patients.

8. LIMITS OF THE DOCUMENT’S SCOPE

Document A.3 includes: international evidence on the scale of chronic multimorbidity; comparison between single-disease guidelines and multimorbidity consensus documents; evidence of the clinical consequences of the HOW gap; a structural summary of the global HOW gap; and the academic positioning of the Vien Gut Model in that context.

Document A.3 does not include: the three-layer EBM framework; the definitions of WHAT, HOW, and DATA-to-operate; specific operational processes; target-organ clinical evidence; or the detailed dialogue-validation pathway for each target. Those contents belong to A.1, A.2, B.1–B.5, Part C, and Part D.

9. THE POSITION OF A.3 WITHIN THE VIEN GUT DOCUMENT SYSTEM

A.3 completes the foundational triad of Part A. A.1 identifies the break in the EBM chain. A.2 defines the three architectural layers used to fill that gap. A.3 provides international evidence confirming that the HOW gap truly exists on a global scale and has measurable clinical consequences. After A.3, the reader has sufficient grounding to move into A.4–A.5, Part B, Part C, and Part D without reading the model as a local experience, but rather as an operational answer to a globally recognized problem.

CONCLUSION

The HOW gap in the care of complex chronic multimorbidity is not a conclusion unique to Vien Gut. It is a gap that has been identified, at different levels, by NICE, WHO, JA-CHRODIS [3,2,4], and many international studies. Its consequences are measurable: increased inappropriate medication, increased mortality, increased emergency use, increased costs, loss of windows of opportunity, and patients being left to coordinate themselves across multiple single-disease systems.

What the international community has so far achieved mainly at the level of principle recommendations, the Vien Gut Model attempts to carry further at the level of operational architecture: building a HOW + DATA-to-operate that is concrete, structured, operational, and capable of entering a validation pathway for patients with complex chronic multimorbidity in outpatient care. A.3 is therefore not merely a review of evidence. It is the document that establishes the academic legitimacy of the entire dossier: the gap that the Vien Gut Model seeks to answer is real, systemic, and global in scale.

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Foundational and operational documents within the academic dossier of the Vien Gut Model: A.0–A.2, A.4–A.5, B.1–B.5, C.1–C.n, Part D.