

What Is Integrated Care? Core Models, Principles, and the Science Behind Multidisciplinary Healing

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At Tyack Health, integrated care isn't just an abstract ideal — it's the organising principle behind every clinical decision, every team interaction, and every care plan we deliver. Healthcare systems around the world were largely built to treat one disease at a time, in one clinic at a time, by one clinician at a time. That architecture is increasingly out of step with the reality of the people those systems are meant to serve.

In 2023, an estimated 37.2% of the adult population worldwide experienced multimorbidity — a figure that rises above 50% among adults aged 65 and older. For these individuals, fragmented, siloed care doesn't just create inconvenience. It actively causes harm.

Integrated care is the structural and philosophical response to that mismatch. It isn't a single intervention, a single model, or a single team structure. It's a coordinated approach to organising health services around the whole person, rather than around separate diseases or institutional boundaries. Understanding what integrated care actually *is* — its definitions, its organising frameworks, and the science that supports it — is the essential first step toward evaluating, building, and improving it. That's what this article sets out to provide.

Defining integrated care: what the evidence actually says

The term "integrated care" means different things to different people. There is no consensus definition — a multiplicity that stems from its polymorphous nature, applied across disciplinary perspectives including public administration, social science, and psychology, as well as differing professional viewpoints such as clinical vs. managerial and holistic care vs. disease management.

Despite this variation, several authoritative definitions give us a solid foundation to work from.

The WHO defines integrated services as health services that are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease-management, rehabilitation, and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector, and according to their needs throughout the life course.

The people-centred framing goes further: integrated, people-centred health services means putting people and communities, not diseases, at the centre of health systems, and empowering people to take charge of their own health rather than being passive recipients of services.

At its most operational, integrated care is an approach to overcome care fragmentation, especially where this is leading to an adverse impact on people's care experiences and outcomes. It may be best suited to people with medically complex or long-term care needs, yet the term should not be solely

regarded as a means to managing medical problems — the principles extend to the wider definition of promoting health and wellbeing.

What connects these definitions is a consistent emphasis on coordination, continuity, and person-centredness — not the particular organisational form those features take. In other words, it's about what happens for the patient, not just how the system is structured on paper.

Why siloed care falls short: the problem integrated care solves

Where healthcare is accessible, it is often fragmented and of poor quality. For healthcare to be truly universal, it requires a shift from health systems designed around diseases and health institutions towards health systems designed for people.

Integrated care provides a shift from a reactive approach to a proactive one, focused on prevention and integration between healthcare, long-term care, and social care. This isn't simply a philosophical preference — it reflects a genuine clinical reality.

Today's changed spectrum of health conditions — including multimorbidity and chronicity — points to the inadequacies of medical care centred primarily on the diagnosis and treatment of each disease separately. The aim of treatment should be the identification of all modifiable biological and nonbiological factors and the attainment of individual goals. The traditional boundaries among medical specialties, based mostly on organ systems, appear increasingly inadequate in dealing with symptoms and problems that require an integrated approach.

The costs of fragmentation are measurable and real. Patients with multiple chronic conditions who navigate disconnected systems often face duplicated testing, contradictory treatment plans, medication conflicts, and preventable hospitalisations — all of which drive up costs while undermining outcomes. No one benefits from a system like that, least of all the patient.

The biopsychosocial model: the scientific foundation of integrated care

Integrated care doesn't emerge from administrative convenience. It's grounded in a scientific model of health that predates the modern integrated care movement by decades: the biopsychosocial model, first articulated by psychiatrist and internist George Engel in his landmark 1977 paper in *Science*, "The Need for a New Medical Model: A Challenge for Biomedicine."

In that paper, Engel criticised the reductionist biomedical model of patient care, which regards patients as disease-based objects, ignoring the possibility that the subjective experiences of patients are important for clinical care practice and research. Engel proposed the biopsychosocial model, taking into account the patient as a person and the social context where he or she lives — including the existing healthcare system — in the understanding of the aetiology of disease and humanism in medical practice.

The biopsychosocial model is widely used in research into complex healthcare interventions. It is the basis of the World Health Organisation's International Classification of Functioning (WHO ICF), it is used clinically, and it is used to structure clinical guidelines. It is now generally accepted that illness and health result from an interaction between biological, psychological, and social factors.

With chronic diseases now accounting for most morbidity and many deaths in developed countries, healthcare systems designed around acute biomedical care models are struggling to improve patient-reported outcomes and reduce healthcare costs. There is consequently a greater need to apply the biopsychosocial model to healthcare management.

The biopsychosocial model isn't merely a theoretical orientation — it's the scientific rationale for why multidisciplinary teams are genuinely necessary. A patient living with type 2 diabetes, depression, and social isolation can't be adequately supported by a single specialist working in isolation. Their biology, psychology, and social circumstances are interdependent, each one shaping the others. At Tyack Health, this biopsychosocial understanding underpins the structure of every multidisciplinary care team and every collaborative clinical decision we make.

The spectrum of integration: from co-location to full systems integration

One of the most common sources of confusion around integrated care is the assumption that integration is binary — that a system either is or isn't integrated. In reality, integration exists on a spectrum. The WHO Regional Office for Europe and subsequent researchers have consistently described integration as operating across multiple levels and dimensions.

Levels of integration

Level	Description	Example
Micro	Patient-level coordination of care plans and clinical encounters	A shared care plan between a GP and a mental health worker
Meso	Organisational-level collaboration between teams and institutions	A hospital and a community health centre sharing a patient registry
Macro	System-level policy, governance, and financing alignment	Pooled budgets between health and social care authorities

Research has found a disproportionate focus on micro-level interventions, with a lack of focus on meso-organisational and macro-system levels in which programmes operate. This is a meaningful blind spot: clinical-level integration without systemic enablers rarely scales or sustains over time.

The continuum of integration

Integration also varies in depth, from loose coordination to full structural merger:

1. **Linkage / referral** — Providers communicate via referral letters; care remains separate
2. **Co-location** — Multiple disciplines share a physical space but maintain separate workflows
3. **Care coordination** — Active coordination of care plans across providers, often via a designated coordinator
4. **Clinical integration** — Shared care protocols, joint assessments, and unified clinical records
5. **Full service integration** — Merged governance, budgets, and accountability structures under a single organisational framework

It is often suggested that the strongest form is the "fully integrated" model, characterised by integrated teams working in an organisation with a single set of governance and accountability rules and common budgets and incentives. There is evidence to suggest that the more severe the patient's need, the more appropriate it may be to develop fully integrated organisations. Yet what appears to matter most is not the organisational solution but what happens at the service and clinical level.

That last point is worth sitting with. The quality of the relationships, communication, and shared decision-making within a care team often matters more than how that team is formally structured.

Core frameworks: the key models of integrated care

1. The Rainbow Model of Integrated Care (RMIC)

Developed by Pim P. Valentijn and colleagues (2013) at Tilburg University, the Rainbow Model of Integrated Care is one of the most comprehensive and internationally validated conceptual frameworks available.

To address the wide range of definitions and absence of a universal framework, the RMIC was developed to conceptualise different dimensions of integrated care into a unified model. It was developed based on a literature review and two international Delphi studies. It distinguishes four integrated care dimensions — clinical integration, professional integration, organisational integration, and system integration — two enablers (functional integration and normative integration) at micro-, meso-, and macro-levels, two guiding principles of integration (person-focused care and population-based care), and three interrelated outcome dimensions (population health, experience of care, and cost).

The RMIC's practical strength lies in its measurement tools. The type of integration consists of coordination activities at the micro (individual), meso (population), and macro (system) level and refers to four domains: delivered and coordinated services to patients (clinical coordination), collaboration between healthcare professionals (professional coordination), collaboration between healthcare organisations (organisational coordination), and implementation of new policies and regulations (system coordination). Functional and normative enablers are needed to establish connectivity between these levels — technical competence refers to communication tools usable by all professionals and organisations in a network, whereas cultural competence refers to the development and maintenance of a common goal.

The RMIC has been validated in renal care, Parkinson's disease, maternity care, primary care in China and Australia, and regional health systems in Singapore — making it one of the few frameworks with genuine cross-national empirical grounding.

2. The Collaborative Care Model (CoCM)

Where the Rainbow Model provides a conceptual architecture, the Collaborative Care Model (CoCM) provides a clinically operationalised model with the deepest evidence base in integrated behavioural health.

Developed at the University of Washington in the 1990s, CoCM has been the subject of more than 90 randomised controlled trials and several meta-analyses showing that it is more effective than usual care for patients with comorbid mental and physical conditions.

CoCM brings together an interdisciplinary team including a primary care provider (PCP) or specialty medical provider, a behavioural health care manager (BHCM), and a psychiatric consultant to deliver high-quality, patient-centred mental health care where the patient is already receiving care. By using validated mental health screening, measurement-based care, care coordination, and evidence-based interventions, CoCM improves early detection, treatment, and relapse prevention for mental health conditions like depression, anxiety, and substance use. A shared electronic health record and patient registry ensure seamless communication and proactive follow-up, preventing patients from falling through the cracks.

The clinical results are clear. At 12 months in the landmark IMPACT trial, 45% of intervention patients had a 50% or greater reduction in depressive symptoms from baseline, compared with 19% of usual-care participants (Unützer et al., 2002). Collaborative care doubled depression treatment response rates; patients got better faster.

CoCM has five core principles: patient-centred team care, population-based care, targeted measurement-based treatment, evidence-based care, and accountable care.

3. The Chronic Care Model (CCM)

Developed by Edward Wagner and colleagues at the MacColl Centre for Health Care Innovation, the Chronic Care Model is a systems-level framework specifically designed for managing long-term conditions.

Developed through extensive systematic literature review, the CCM brings together evidence-based factors and components that are widely documented to have a positive impact on patient outcomes, quality of care, and cost savings. It consists of six main domains: community, health system, self-management support, delivery system design, decision support, and clinical information systems.

The Chronic Care Model is particularly important because it explicitly addresses the system preconditions for integrated care — not just the clinical encounter itself. It recognises that a well-intentioned clinician working within a poorly designed system will still produce fragmented care. Good intentions alone aren't enough; the system has to be built to support them.

4. The WHO Framework on Integrated People-Centred Health Services (IPCHS)

Adopted with overwhelming support by Member States at the World Health Assembly in May 2016, the WHO Framework on Integrated People-Centred Health Services (IPCHS) calls for a fundamental shift in the way health services are funded, managed, and delivered. It supports countries' progress towards universal health coverage by shifting away from health systems designed around diseases and health institutions towards health systems designed for people.

The vision for the Framework is a future in which all people have equal access to quality health services that are co-produced in a way that meets their life course needs and respects their preferences, are coordinated across the continuum of care, and are comprehensive, safe, effective, timely, efficient, and acceptable — and all carers are motivated, skilled, and operate in a supportive environment.

It's a vision that resonates with how we think about care at Tyack Health — one where the person is always at the centre, and the system is built around them.

Five organising principles of effective integrated care

Across frameworks, five principles consistently emerge as the structural pillars of effective integrated care. These same principles guide how Tyack Health approaches the design and delivery of its multidisciplinary services.

****Person-centredness.**** The care plan is organised around the patient's goals, values, and life circumstances, not around institutional workflows or disease categories. Every person's situation is unique, and their care should reflect that.

****Continuity.**** Longitudinal relationships between patients and care teams, with information flowing seamlessly across encounters and settings. People deserve to feel known by their care team, not like they're starting from scratch at every appointment.

****Coordination.**** Explicit mechanisms — shared care plans, care coordinators, patient navigators, joint case conferences — that prevent patients from falling between services. The role of patient navigator is designed to support patients in navigating the health and social care systems and to overcome barriers to accessing services. Patient navigators are sometimes also referred to as care navigators, community health workers, or patient or case managers.

****Comprehensiveness.**** The scope of care encompasses the full range of a person's needs, including physical, mental, social, and preventive dimensions. Treating the whole person means attending to all of these, not just the most visible presenting concern.

****Accountability.**** Providers are accountable and reimbursed for quality of care and clinical outcomes, not just the volume of care provided. This shifts the incentive toward what actually matters: people getting better.

What integrated care is not: clearing up common misconceptions

It's worth addressing some common misconceptions, because integrated care is sometimes used as a catch-all term that can lose its meaning.

****Integrated care is not co-location.**** Placing a psychologist in a medical clinic doesn't constitute integration if there's no shared care planning, communication protocol, or joint accountability. Co-location is a precondition, not an outcome.

****Integrated care is not multidisciplinary teams alone.**** A team of specialists who each submit separate reports without shared decision-making or unified care planning isn't delivering integrated care — it's delivering parallel care. (For a detailed comparison of multidisciplinary, interdisciplinary, and transdisciplinary team structures, see our guide on **Multidisciplinary vs. Interdisciplinary vs. Transdisciplinary Care: Which Team Model Produces the Best Patient Outcomes?**)

****Integrated care is not one universal model.**** There is no single correct "PHC-oriented" model of care — they need to be adapted to the local context and can be implemented with a focused and staged approach. A model of care is a means of delivering integrated, equitable, and responsive care to people who need it, not an end in itself. What works in one community or setting may need thoughtful adaptation in another.

****Integrated care is not easy to implement.**** Although some integrated care programmes have been established internationally, relatively few have expanded beyond the initial pilot phase and become mainstream. Little evidence is available on how to implement integrated care, and it remains largely unclear which implementation strategies contribute to successful upscaling. (See our guide on **How to Build and Implement a Multidisciplinary Care Team** for the step-by-step operational framework.)

Acknowledging these realities isn't defeatist — it's honest. Building genuinely integrated care takes sustained effort, clear structures, and a shared commitment across the whole team.

Key takeaways

****Integration is a spectrum, not a binary state.**** It ranges from basic care coordination to full structural integration across clinical, organisational, and system levels — and the appropriate depth depends on patient complexity and care setting.

****The biopsychosocial model is the scientific foundation.**** George Engel's 1977 framework — now embedded in the WHO International Classification of Functioning — establishes that illness and health result from interacting biological, psychological, and social factors, making multidisciplinary approaches scientifically necessary, not merely administratively convenient.

****The Rainbow Model of Integrated Care provides the most comprehensive conceptual architecture.**** Valentijn et al.'s RMIC (2013) identifies six integration dimensions (clinical, professional, organisational, system, functional, and normative) across three levels (micro, meso, macro) and has been validated internationally across multiple disease contexts.

****The Collaborative Care Model has the strongest clinical evidence base.**** With more than 90 RCTs demonstrating effectiveness for depression, anxiety, and comorbid physical-behavioural health conditions, CoCM is the most rigorously evaluated integrated care model available to clinicians today.

****Organisational form matters less than what happens at the clinical-service interface.**** Research consistently shows that the quality of coordination, communication, and shared decision-making between care teams and patients predicts outcomes more reliably than the structural model adopted.

Conclusion

Integrated care isn't a trend or a policy preference — it's a scientifically grounded response to the epidemiological and structural realities of 21st-century healthcare. The frameworks explored here — from Engel's biopsychosocial model to the Rainbow Model of Integrated Care to the Collaborative Care Model — provide both the theoretical architecture and the practical vocabulary that clinicians, administrators, and policymakers need to design care that genuinely works for people with complex, multidimensional needs.

Understanding these definitions, models, and principles is the foundational step. The subsequent questions — which team model produces the best outcomes, how to build and implement a multidisciplinary care team, and what the evidence shows about measurable impact — build directly on this conceptual base. At Tyack Health, these aren't merely academic questions. They shape the practical design of every service pathway and every clinical team we bring together. Readers ready to move from definition to evaluation are encouraged to explore our comparison of *Multidisciplinary vs. Interdisciplinary vs. Transdisciplinary Care*, and those ready to take action should consult our implementation guide, *How to Build and Implement a Multidisciplinary Care Team: A Step-by-Step Guide for Healthcare Organisations*.

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