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Integrated care: meaning, logic, applications, and implications – a discussion paper

Dennis L. Kodner, *PhD, Adjunct Associate Professor of Health and Public Administration, Health Policy & Management, Wagner Graduate School of Public Service, New York University, 40 West Fourth Street, New York, New York 10003, USA*

Cor Spreeuwenberg, *MD, PhD, Dean, Faculty of Health Sciences, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands*

Correspondence to: Dennis Kodner, Tel./Fax: +1-732-708-1426, E-mail: dlk1@nyu.edu

Abstract

Integrated care is a burgeoning field. As is often the case in new areas of inquiry and action, conceptual clarification is demanded. Without such attention, it would be difficult to advance theory and practice in this increasingly important professional arena. In the following discussion paper, the authors explore the intellectual territory of integrated care, and underscore the need for a patient-centric imperative and meaning. They also examine the practical applications and implications arising from their views. The intention is to stimulate fruitful dialogue and debate about what 'integrated care' *could* and *should* be.

Keywords

integrated care, chronic illness, concepts, terminology

Introduction

Integrated care has become an international health care buzzword. It is attracting considerable attention in North America, Europe and elsewhere as an important framework to develop better and more cost-effective health systems. The goal of the *International Journal of Integrated Care* is to encourage scholarly inquiry in this new field. But, have we defined 'integrated care' well enough to help the community of academicians, scientists, policy analysts and practitioners to understand this concept, and guide the search for solid evidence and lessons?

Like a Rorschach test, integrated care has many meanings; it is often used by different people to mean different things. It is most frequently equated with managed care in the US, shared care in the UK, transmural care in the Netherlands, and other widely recognised formulations such as comprehensive care and disease management [1–3]. However, it is unclear as to whether all of these appellations aptly fall under the rubric of integrated care. This lack of conceptual clarity stands as a major barrier to promoting integrated care in both theory and practice.

Terminology plays a critical communications role in terms of the way we think about, shape, deliver, manage, regulate, finance, and evaluate health care. Phrases like integrated care can only be understood if we examine their context and logic. In the following discussion paper, we will explore what integrated care *could* mean and *should* mean, and will also discuss several important implications. We take a bottom-up, patient-centred perspective, which is largely informed by our long experience in primary care, public health, and various forms of integrated care. Our aim is to stimulate fruitful dialogue and debate in the spirit of laying the groundwork for an evidence-based integrated care.

Meaning and logic of 'integration'

It is impossible to address the meaning of integrated care without first examining the roots and core notions of integration. The word 'integration' stems from the Latin verb *integer,* that is, 'to complete.' The adjective 'integrated' means 'organic part of a whole,' or 're-united parts of a whole.' It is mostly used to express the bringing together or merging of elements or components that were formerly separate.

The idea of comprehensiveness overlaps with that of integration. Similar to the original meaning of the Greek verb 'diagnosis,' 'comprehensive' denotes '(full) understanding of a situation.' In other words, what is connoted is a desire to understand the relationship of elements that constitute the entirety.

Integration is at the heart of systems theory and, therefore, central to organisational design and performance [4,31]. All organisations (and systems) are, to some extent, hierarchical structures that are comprised of separate, but interconnected components; these components are supposed to play *complementary* roles in order to accomplish their joint tasks [5]. However, the division, decentralisation, and specialisation found in the architecture of more complex organisations usually interfere with efficiency and quality goals [6]. Therefore, the fulfilment of system aims necessitates co-operation and collaboration among and between the various parts of the organisation or system [7]. In this sense, integration is the ''glue'' that bonds the entity together, thus enabling it to achieve common goals and optimal results [8].

These ideas are, of course, applicable to the health care enterprise—whether we are referring to its institutions and providers, or the health, social service and related systems in which they operate [9,10]. Health systems and health care institutions are among the most complex and interdependent entities known to society [11]. Historically, many factors have worked to divide various types of health care institutions and services on the one hand, and administrators, physicians, nurses and allied professionals on the other—differing rules, inter-sectoral boundaries (as between health care, mental health care, and social care), funding streams, and institutional and professional cultures, to name the most obvious. Without integration at various levels, all aspects of health care performance suffer. Patients get lost, needed services fail to be delivered, or are delayed, quality and patient satisfaction decline, and the potential for cost-effectiveness diminishes [12–14].

Managers are not the only actors with an interest in health care integration. In the 1970s and 1980s, physicians became interested in applying systems theory to their own domain. This reflected concern that the then rapidly emerging trend of specialisation would end up disintegrating professional practice and fragmenting patient care. The rise of general or family practice at the end of the twentieth century grew out of the idea that medicine needs more integration, not less. McWhinney [15] sees the family physician not only acting across specialty and clinical boundaries, but also bridging the very difficult gap between medical and social problems. Referring to systems thinking, he stresses that the integration of knowledge and working methods in general medical practice is necessitated by the bio-psychosocial nature of illness, as well as the complexity of the health care system in which medical care is delivered.[1] Consequently, general practitioners in Europe and family practitioners in the United States have developed guiding principles, which, in part, advance comprehensiveness and forms of integration as key professional goals. For example, WONCA Europe (2002) [16] has called for general practitioners to take a comprehensive, person-centred approach, including exercising responsibility for the co-ordination of care. This echoes similar recommendations on primary care made by the U.S. Institute of Medicine (1996) [17].

Finally, we would be remiss if the economic imperative of health care integration was not mentioned. Policymakers and payers in both the public and private sectors place great hope in its ability to save money, or at the very least, to ensure that health care resources are used more wisely.

Perhaps Gröne and Garcia-Barbero [18] do the best job of summing up what health care integration generally means: the ''bringing together of inputs, delivery, management and organisation of services as a means [of] improving access, quality, user satisfaction and efficiency.'' Nonetheless, various authors emphasise different aspects. Brown & McCool [19], for example, suggest that integration allows for greater efficiency and effectiveness, less duplication and waste, more flexible service provision, and better co-ordination and continuity. The WHO Study Group [20], on the other hand, sees virtue in its ability to encourage more holistic and personalised approaches to multidimensional health needs. The foregoing discussion should make it clear that there are different meanings and interpretations of integration in general, and integration in the health care field in particular. Ours is a pragmatic, rather than an ideological or idealistic view of health care integration. It need not mean that *all* parts of the health system are merged, or that merger is *complete.* Indeed, as Freeman et al. [21] point out, it may be helpful to think of discontinuities in health care as inevitable. Even in the most carefully designed systems, health professionals must find innovative ways to get around the almost certain flaws and gaps. Therefore, for us, integration may be seen as a step in the process of health systems and health care delivery *becoming* more complete and comprehensive.

[1] The bio-psychosocial model is often misunderstood. Some hold that the model demands physicians deal with the biomedical and psychological and social problems of their patients. This meaning suggests that medicine should become a resource for healing all society's ills, clearly something that is beyond the professional realm. According to McWhinney [15], this interpretation misses the point, namely that all serious illness is simultaneously a medical, psychological and social problem.

A patient-centric view on integrated care

Surely, the lack of integration in health care touches both consumers and providers, although not equally. The largely systems- or organisation-driven logic presented in the previous discussion finds solid support for integration in efficiency terms. However, looking at health care integration from the unique vantage of patients and specific patient populations sheds badly needed light on the subject.[2] Professionals seldom look at the world of health care through the patient lens. This is not surprising. Traditionally, caregivers demand that their patients be compliant, that is, follow their instructions. Care-seekers, therefore, usually do not expect that their concerns will come first, or even be seriously addressed. This attitude, though changing, has permeated health care until now.

Our humanistic or *patient-centric* view argues strongly that populations with physical, developmental or cognitive disabilities—often with related chronic conditions or complex illnesses—endow the concept of health care integration with a unique logic and meaning. Vulnerable individuals, such as the diverse group described above, have complicated and ongoing needs (which frequently are part-medical, part-physical, part-psychological, and part-social), experience difficulties in everyday living, require a mix of services delivered sequentially or simultaneously by multiple providers, and receive both cure and care in home, community and institutional settings. These mostly long term, incurable, unpredictable and costly conditions present major challenges to both patients and family carers: making sure that needed services are delivered, preventing and managing flare-ups and crises, transitioning from one type or level of care to another, maintaining health and functioning, and coping with individual and family stress [22].

The provision of health care, social services and related supports (e.g. housing) at the right time and place to such individuals is equally daunting. Problems typically include difficulties with obtaining needs assessments, putting together comprehensive service packages, co-ordinating multiple providers and services, ensuring continuity, monitoring health and functional status, responding to crises, supporting family carers, and, finally, performing all of these essential activities within existing funding and resource constraints [23].

These circumstances are more or less found in all countries. What accounts for the poor ‘‘fit’’ between the needs of these multi-problem patients and the existing infrastructure of cure and care? According to Hardy et al. [24] and Kodner [3], there are several explanations. First, required services are the responsibility of many sectors, jurisdictions, institutions, and providers. Second, the various components of care and cure work in parallel with separate funding streams and budgets, and frequently conflicting regulations. Third, health and social care differ distinctively in terms of language, culture, professional roles and responsibilities, and clinical or service approaches.

Our analysis suggests more of a patient-oriented definition of integration.[3] We, therefore, propose the following: Integration is a coherent set of methods and models on the funding, administrative, organisational, service delivery and clinical levels designed to create connectivity, alignment and collaboration within and between the cure and care sectors. The goal of these methods and models is to enhance quality of care and quality of life, consumer satisfaction and system efficiency for patients with complex, long term problems cutting across multiple services, providers and settings.[4] The result of such multi-pronged efforts to promote integration for the benefit of these special patient groups is called ‘integrated care.’[5]

Practical applications

This paper has touched on several reasons to encourage the development of integrated care. The authors' perspective, already discussed at length, is that the overriding rationale is to solve the many problems arising from the complex presentation of chronic and disabling diseases and conditions. Behind this approach is the desire, above all, to enhance quality and provide a better level of service—that is, one that is more sensitive to the personal circumstances and wishes of the individual patient. Other aims are geared to improving the efficiency, cost-effectiveness and organisational aspects of the health system in which curing, caring and patient management takes place.

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[2] For the purpose of this paper, we use the term ‘patient.’ However, we recognize that it may be more appropriate to refer to certain consumers as ‘clients’, particularly in the social service and housing sectors.

[3] Parenthetically, much of the effort devoted to the development of so-called ‘integrated delivery systems’ in the U.S. has focussed on the organisational and functional levels. Little has been achieved beyond the aggregation of a system's operating units. As a result, the ideal of seamless, well-coordinated health care has remained elusive, as has the hope that such integration can affect quality patient outcomes. (See, for example, Shortell et al. [32]). We would suggest that this is partly a reflection of a ‘‘top-down’’ approach to integration, as well as the all-important lack of a patient-centric focus.

[4] Adapted from Kodner & Kay Kyriacou [3].

[5] Hardy et al. [24] defines ‘integrated care’ as a ‘‘coherent set of products and services, delivered by collaborating local and regional health care agencies’’ to multi-problem patients. It is clear from the focus and context of this excellent article that the meaning of our respective terminology overlaps.

Conceptually, this is good as far as it goes. To obtain *real* results for *real* people, however, we must translate this general understanding into more concrete and practical terms.

A continuum of strategies—from the *macro* to the *micro*—are available to foster integrated care [3,24,25]. The application of these strategies is not only crucial to achieving more humanistic patient outcomes, but also better results in both efficiency and cost-effectiveness terms. The list of methods and tools found in Box 1, though not exhaustive, are most useful in addressing the barriers and bottlenecks which often occur at various levels in five important, interlocking domains:

- *Funding:* More often than not, form follows financing. This means that the division, structure and flow of funds for health and social care and related services can affect virtually all aspects of integrated care.
- *Administrative:* The manner in which government regulatory and administrative functions are structured and devolved can help eliminate program complexities, streamline eligibility and access, and better manage system resources.
- *Organisational:* Networking, both vertically and horizontally and through formal or informal means, is a major method to improve how organisations work together [26]. Collaboration is another important strategy [27]. Joint working relationships within and between agencies in the heath and social care sectors can optimise resources, facilitate overall efficiency, and enhance the capacity for 'seamless care,' that is, the smooth and uninterrupted provision of necessary care [28,29].
- *Service delivery:* The mode of service delivery and management—how staff are trained, perform their responsibilities and tasks, work together, and relate to patients and family carers and their needs—have a major impact on a number of critical variables in integrated care. Such variables include service access, availability and flexibility, continuity and co-ordination of care, consumer satisfaction, and quality and cost outcomes; and,
- *Clinical:* Shared understanding of patient needs, common professional language and criteria, the use of specific, agreed-upon practices and standards throughout the lifecycle of a particular disease or condition, and the maintenance of ongoing patient-provider communication and feedback are essential quality ingredients in integrated care.

Box 1. *Continuum of integrated care strategies*

Funding:
- Pooling of funds (at various levels)
- Prepaid capitation (at various levels)

Administrative:
- Consolidation/decentralisation of responsibilities/functions
- Inter-sectoral planning
- Needs assessment/allocation chain
- Joint purchasing or commissioning

Organizational:
- Co-location of services
- Discharge and transfer agreements
- Inter-agency planning and/or budgeting
- Service affiliation or contracting
- Jointly managed programs or services
- Strategic alliances or care networks
- Consolidation, common ownership or merger

Service delivery:
- Joint training
- Centralised information, referral and intake
- Case/care management
- Multidisciplinary/interdisciplinary teamwork
- Around-the-clock (on-call) coverage
- Integrated information systems

Clinical:
- Standard diagnostic criteria (e.g. DSM IV)
- Uniform, comprehensive assessment procedures
- Joint care planning
- Shared clinical record(s)
- Continuous patient monitoring
- Common decision support tools (i.e. practice guidelines and protocols
- Regular patient/family contact and ongoing support

Source: Adapted from [3,24,25].

Suggested throughout this paper, there are varying degrees of completeness, comprehensiveness and formality in integrated care. However, as Leutz [25] observes, the level, type, and combination of strategies used, would depend on the characteristics of the patient population and the specific challenges they face in obtaining appropriate, quality care. Therefore, patients with particularly severe and unstable conditions requiring intensive, ongoing medical and social attention from a host of providers for relatively long duration would demand a complex solution necessitating more, and more structured forms of integration from several of the operational domains described above. The corollary would also be true: less complex patient groups would require narrower span and less thoroughgoing interventions.

Discussion and implications

Integrated care, though increasingly recognised as a critical adjunct to health care delivery and patient management, is a modern-day *Tower of Babel.*[6] As is often the case with nascent fields, especially those with a strongly multidimensional character, the defining concepts and boundaries lack specificity and clar-

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[6] In this biblical parable, workers on this tower were doomed to speak (i.e. babble) in different languages, thus sowing impossible confusion.

ity. Thus, the definitions, which are commonly used, tend to be vague and confusing. This makes it difficult to develop the knowledge base so essential to refine and move the field ahead.

The concept of integration is a defining variable in the meaning of integrated care. In this paper, we identified two different but overlapping ways of looking at this important notion. In the first, integration reflects a largely hierarchical or ''top-down'' process driven by more generalised organisational exigencies for perfection or optimisation. The second is a patient-centred and ''bottom-up'' view, in which the characteristics and needs of specific patient groups, and their ''fit'' (or lack thereof) with existing systems of care and cure more or less determine the *what*, *how*, and *where* of integration. We believe that this particular frame of reference is especially useful. It endows the term 'integrated care' with a logic and meaning of greatest relevance to multi-problem patients with serious chronic and disabling conditions.

In this paper, we presented our own definitions of integration and integrated care, which reflect this understanding. Further, we suggested how these concepts could be applied and operationalised. We accept that there are alternative interpretations, and look forward to wider discussion of these ideas. It would, however, be in the best interest of the burgeoning field of integrated care for such discussion to ultimately arrive at a consensus on the field's boundaries, basic concepts, terminology and typology—sooner rather than later.[7]

There are several implications that arise from our views. In closing, we would like to sketch some of the more salient points:

- *Patient benefit.* Earlier, we broadly identified a target population who we believe would distinctly benefit from integrated care. However, what is needed are more detailed insights with respect to the successful impact of integrated care on specific patient groups (e.g. the frail elderly), including the level, type, and combination of strategies involved in successful initiatives.
- *Barriers.* There are numerous macro and micro barriers to integrated care. Major contextual, institutional and professional factors were briefly described in this paper, and many are addressed in greater detail in Hardy el al. [24]. We must better understand these key variables and how they affect experience and performance in differing countries, patient populations, organisational environments, and program designs.
- *Costs.* Integrated care is supposed to be more efficient. However, savings from integration are only a ''hope'' [25]. The total costs of integrated care—including outlays for staff and support systems, services, and start-up—must be carefully defined, tracked and calculated before we can make pronouncements on the strategy's cost-effectiveness.
- *Patient and family involvement.* Successful integrated care (i.e. models that are effective in meeting patient needs) demands the ongoing involvement of patients and family carers in programme planning, implementation and oversight. This will ensure that user needs and expectations are reflected where it counts, and that consumer satisfaction issues can be realistically addressed.
- *Research and evaluation.* Integrated care is a complicated phenomenon. We must not only systematically examine the interventions themselves, but also a wide range of outcomes including health, psychosocial, and economic measures. Equally as important, studies should focus on the experience of patients served by such approaches [21]. This makes it incumbent on researchers and evaluators to employ an array of quantitative and qualitative methods and techniques to answer the many efficiency and effectiveness questions that various stakeholders are likely to pose [30]. Finally, a shared research agenda—national and/or cross-national in scope—would be helpful in theory-, model-, and evidence-building.

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[7] Perhaps an international working party established by, or working in collaboration with, the *International Journal of Integrated Care* would be most suitable for this task

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