How important is continuity of care and integration in the provision of effective support?

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No conflicts to declare.

Outline

- History
- Current conceptual thinking/definitions
- Evidence in health services generally
- How continuity and integration are operationalized in MH services
- The evidence for their associations with outcomes for people with SMI
- Summary and take home messages

Background

- **Continuity of care** and **integration** are expressed health policy imperatives internationally (Haggerty 2003; Kodner 2009)

- AKA: continuum of care; **coordination of care**; discharge planning, case management, care management, disease management, service integration, system integration, seamless care etc.....

Current Concept of Continuity of Care

Continuity of care: a multidisciplinary review

Jeannie L Haggerty, Robert J Reid, George K Freeman, Barbara H Starfield, Carol E Adair, Rachael McKendry

The concept—and reality—of continuity of care crosses disciplinary and organisational boundaries. The common definitions provided here should help healthcare providers evaluate continuity more rigorously and improve communication

Patients are increasingly seen by an array of providers in a wide variety of organisations and places, raising concerns about fragmentation of care. Policy reports and charters worldwide urge a concerted effort to enhance continuity,[1–3] but efforts to describe the problem or formulate solutions are complicated by the lack of consensus on the definition of continuity. To add to the confusion, other terms such as continuum of care, coordination of care, discharge planning, case management, integration of services, and seamless care are often used synonymously. This synthesis was commissioned by three Canadian health services policy and research bodies. The aim was to develop a common understanding of the concept of continuity as a basis for valid and reliable measurement of practice in different settings.

NATIONAL GALLERY/BRIDGEMAN

Seven ages of man?

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Assessing the literature

226 (39%) were in primary medical care, 109 (19%) in mental health care, 92 (16%) in disease specific care,

Current Concept of Continuity of Care

"The degree to which a series of discrete health events is experienced as coherent and connected and consistent with the patient's medical needs and personal context". (Haggerty 2003)

- 2 central elements: care over time and focus on the individual
- 3 types: informational, management and relational

Current Concept of Integration

"The organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money." (WHO 2008)

- 2 levels – services (program) level and system level
- 3 types – functional, physician, clinical
- 2 dimensions – horizontal, vertical
- 4 developmental stages – traditional, transitional, advanced, breakthrough

Clinical Integration:

"The coordination of health services across providers, functions, activities, processes, and settings in order to realize maximum value for persons for whom the system has assumed responsibility"

(Conrad & Shortell 1996)

Current Concept of Care Coordination

"The deliberate organization of patient care activities between 2 or more participants (incl. the patient) involved in a patient's care to facilitate the appropriate delivery of healthcare services. Organizing involves the marshalling of personnel and other resources needed to carry out all patient care activities, and is often managed by the exchange of information among participants responsible for different aspects of care" *(AHRQ 2007)*

Relationship among 3 related terms:

- Integration:

- Care Coordination:

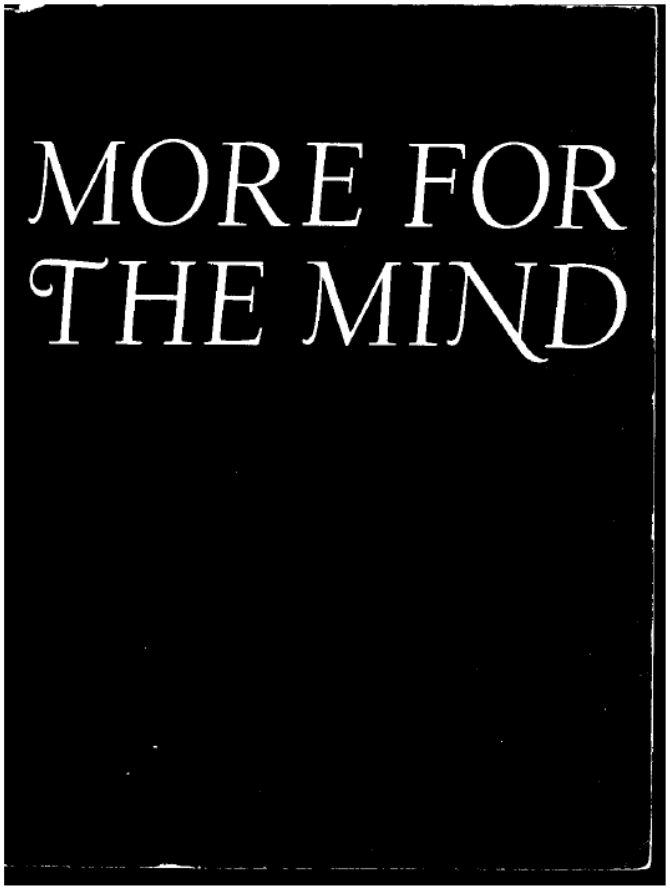
- Continuity of Care:

The Evidence in Health Services Generally

Concept	Volume of Evidence	Strength of Evidence	Key Refs
System Integration	Minimal	Weak	Leatt 2000, Gilles 2006 Suter 2007 (R)
Service Integration	Moderate	Moderate	Ouwens 2005 (RR)
System Continuity	Minimal	Weak	Same as system integration above
Service Continuity	Large	Good	Walraven 2010 Freeman 2012*
Care Coordination	Large	Very Good	AHRQ 2007 (RR)

- Wide range of outcomes: care quality, patient symptoms, functioning/Qol, satisfaction, health service use, costs (less)
- * Best evidence is for relationship continuity

Continuity of Care in MH Services - Policy



CMHA 1963
A cogent case for continuity of care; also discusses co-ordination and integration at great length

President's New Freedom Commission on Mental Health 2003

Out of the Shadows at Last 2006

Continuity of Care in MH Services – Current Concept

- *"a process involving the orderly, uninterrupted movement of patients among the diverse elements of the service delivery system"* (Bachrach 1981)

- Comparative emphasis in MH services: (Haggerty 2003)
  - Access, coordination w/ broader services/relationship stability

- Note recent conceptual work confirms multiple components (VanDyk 2013)

How is **Continuity** operationalized in MH services? PROGRAM LEVEL

- Provider or team-based approaches:

  Assertive Community Treatment

  Intensive Case Management

  w/ other aspects like Housing First and supportive employment approaches

  Mental health care navigator (works for the person/family); proctor model (professionally supervised peer support)

- Event-based approaches:

  Discharge-based approaches: Discharge Planning, Aftercare, Critical Time Interventions, Crisis Mobile/Outreach Teams (incl. newer models that span hospital and home tx (e.g. Hopkins 2006)

How is **Continuity** operationalized in MH services? SYSTEM LEVEL

- Integration!
  - variety of mechanisms (examples in Wiktorowicz 2010)
    - governance and service structures (e.g. IO networks), funding mechanisms etc.

- How do we know it when we see it?
  - Examples of attributes rated by clients:

    I've had to repeat my history every time I need help.

    If I run into problems I can get services even in the middle of the night.
  - Examples of attributes rated using charts:

    # times seeing new, unknown providers

    # 30 day treatment gaps

The Evidence:
(Continuity and outcomes for SMI to 2002)

- Diverse definitions and methods, measurement uni-dimensional; lacking patient perspective (Adair, 2003)
- First review - 5 studies 1994 - 2002 – observational or quasi-experimental designs
- 4 system level; 1 program level
- Outcomes: symptoms (-/+), functioning (ND), hospital use (ND), referral completion (+), costs (+)

- Conclusion: insufficient evidence – mostly methods issues

Some Alberta-based Evidence

- System level - cohort study 2001-2003:
  - 17m follow-up of 411/486 adults w/ SMI (85%)
  - 3 Alberta regions (Edmonton, Calgary, Red Deer)
  - Used both client ratings rated and chart ratings
  - ***Across*** hospital and community services incl. agencies

Key Findings

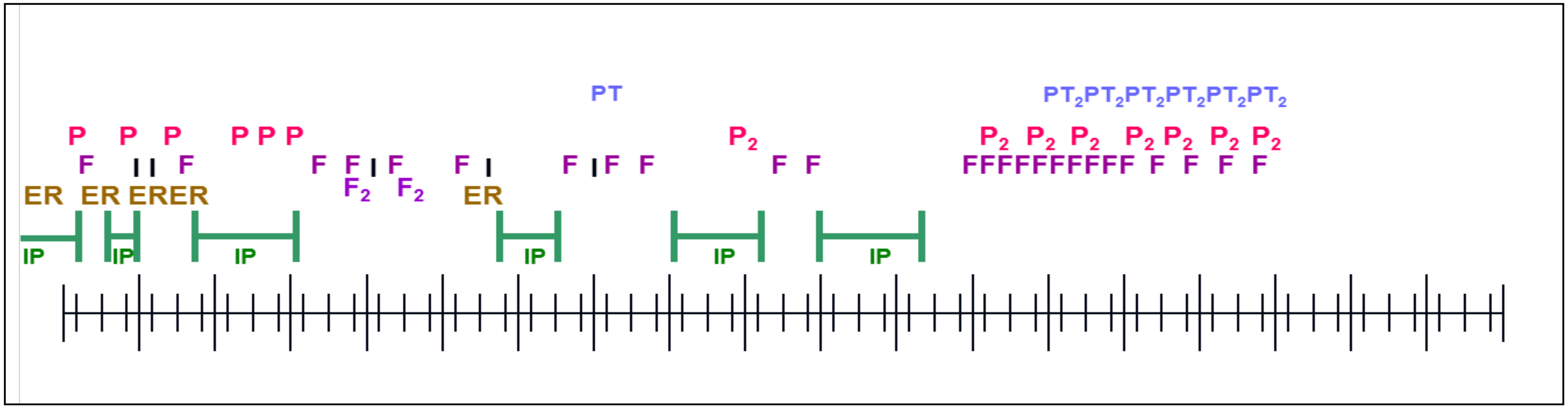
- Continuity assoc. w/ better QoI, functioning, service satisfaction (but not symptom severity), after adjustment for confounders* (Adair 2005)

- Costs – total not different by level of CoC, but cost shifts… (Mitton 2005)

- Still an observational design, could not confirm causal direction

* age, suicidality, income, diagnosis, problem severity

Why it's hard to generate best evidence at the system level



- Enormous heterogeneity of trajectories – noisy research!
- Need large samples over long follow-up periods across many services
- Best evidence would require randomization of whole systems of care

More Recent Evidence

- 11 studies since 2003 – still no RCTs
- mix of program and system level studies
- 9/11 found sig. associations with one or more of:
  - fewer/shorter hospitalizations, better functioning, medication adherence, service satisfaction, better Qol, reduced/redistributed costs and lower mortality

- Inconsistency likely attributable to methods
- Higher quality and more recent studies have stronger associations (forthcoming pub)

How is **Integration** operationalized in MH Services?

- Most focus has been PROGRAM-level and on:
  - Integration with primary care (shared care) (Collins 2010; WHO 2007)
  - Integration of mental health and addictions treatment

    e.g. extensive theoretical literature; little rigorous outcomes research but considered a 'best practice' (http://www.samhsa.gov)

    - some advancement of practice but many identified barriers (e.g. Libby 2008)

The Evidence: (Integration and outcomes for SMI)

- System-level – a couple of early studies (1990s) failed to show improved outcomes for homeless and dually diagnosed (Rosenheck 2001 + 2003; Lehman 1994)
- Recently shift (in context of concurrent disorders) to more thoughtful and targeted integration approaches; e.g. use of systems and organizational sciences (Rush 2008; CECA/MHCC/CCSA 2014)

Integration in Mental Health Services – some recent exemplary work

- Andrews 2007 (Australia) - needs-based stepped care model for total population mental health (including SMI) – hypothetical based on good population-level data including prevalence and cost data

- Nicaise 2014 (Belgium) applied organizational science analysis to an integration plan while still at the policy stage in Belgium (including integration approaches) – identified key design problems before implementation

Summary of Evidence in MH Services

Concept	Volume of Evidence	Strength of Evidence	Key Refs
System Integration	Minimal	Weak	Wiktorowicz 2010
Service Integration	Moderate	Moderate	Presented by others
System Continuity	Minimal	Weak	Adair 2005; Mitton 2005
Service Continuity	Large	Good but indirect	Adair 2003; forthcoming review
Care Coordination	Large	Very good	AHRQ 2007

- Outcomes: care quality, patient symptoms, functioning/Qol, satisfaction, health service use, costs (less evidence)

How important is **continuity** in the provision of effective support for SMI?

Take home messages:

- ✓Strong and long consensus that it's important
- ✓*Reasonably* good agreement on the concept
- ✓Service level - strong but *indirect* evidence that improving CoC via specialized programs like ACT improves outcomes for individuals (fidelity and capacity are important)
- ✓System level - limited but suggestive evidence that CoC measured *across the service system* also improves outcomes

How important is **integration** in the provision of effective support?

Take home messages:

- ✓Service level - accumulating reasonably good evidence
- ✓System level - evidence limited (esp. on its own)
- ✓lack of evidence **does not equal** lack of effectiveness
- ✓No one size fits all (process or structure)
- ✓Integration is not a cure for inadequate resources
- ✓Integration may not save $$, at least in the short-term
- ✓Multi-level outcomes research will be resource-intensive – probably best done as demonstration project evaluation with strong foundation in systems/organizational theory

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