

EFFECTIVENESS OF INTEGRATED CARE: TERMINOLOGY AND APPROACH



Graeme Smith

School of Psychology, Psychiatry and
Psychological Medicine

Monash University

Melbourne, Australia

INTEGRATED CARE



Does integrated care result in better health outcomes achieved as economically as possible?

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TERMINOLOGY

Quality improvement

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TERMINOLOGY

Synonym

- integrated medicine

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TERMINOLOGY

Conceptual terms

- complexity
- dual disability
- patient-centred practice
- disease management

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TERMINOLOGY

Practices

- interprofessional collaboration
- collaborative practice
- shared care
- integrated intervention

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TERMINOLOGY

Clinical tools

- case management
- disease management plans
- clinical decision making
- clinical decision rules
- care pathways
- information transfer
- screening for illness and complexity

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How would we recognise integrated care if we saw it?

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Integrated care by individual clinicians (Engel)

- acceptance by one individual clinician of responsibility for all aspects

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Integration *of* care

- assessment and care split on organ systems
- psychosocial elements split off

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Integration *of* care

- **Formulation:** why has this patient become ill in this way at this time?

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Integration *of* care

- **Plans** for
 - linking
 - monitoring
 - advocacy
 - outreach
 - patient involvement
 - Who will do what when?

CONCEPTUAL TERMS



COMPLEXITY

CONCEPTUAL TERMS



Complexity in patient

- number of organ systems
- number of psychosocial elements

CONCEPTUAL TERMS



Complexity of Care

- number of disciplines
- number of types of intervention

CONCEPTUAL TERMS



Individual patients may be complicated

- combination of elements following Newtonian laws

CONCEPTUAL TERMS



System are complex

- complexity theory following quantum physics laws

CONCEPTUAL TERMS



Chronic illness often complicated

- not always complex

CONCEPTUAL TERMS



Inter-professional collaboration

- unrealistic to assume that it is sufficient to bring professionals together without a theoretical framework
- surprisingly little theoretical consideration of this complex process

D'Amour D et al J Interprofessional Care 2005

CONCEPTUAL TERMS



Inter-professional collaboration

- ***inter-agency:*** no ground rules about the method of collaboration

CONCEPTUAL TERMS



Inter-professional collaboration

- ***multidisciplinary teamwork:*** requires only a degree of cooperation and conferring, without a defined philosophy

CONCEPTUAL TERMS



Inter-professional collaboration

- ***transdisciplinary teams:*** a degree of discipline-free, often novel approach that requires transparency of the conceptual basis of its functioning and its interventions

TOOLS FOR MANAGEMENT



Case management

- philosophy of care
- operationalisation

TOOLS FOR MANAGEMENT



Case management: key features

- assessment
- planning
- linking
- monitoring
- advocacy
- outreach

Huber DL Lipincott's Case management 2002

TOOLS FOR MANAGEMENT



Case management

- **Nursing models:** shift towards illness management role, community focus
- **Social work models:** varies, emphasis on advocacy
- **General health care models:** disease management, rehabilitation.
- **Managed Care:** cost-containment emphasis
- **Interdisciplinary models**

Huber DL Lipincott's Case management 2002



Disease management plans

- an intervention designed to manage or prevent a chronic condition using a systematic approach to care and potentially employing multiple treatment modalities

Weingarten SR et al BMJ 2002

TOOLS FOR MANAGEMENT



Disease management plans (eg US Government) emphasise

- use of evidence-based practice
- screening, education and monitoring

TOOLS FOR MANAGEMENT



Clinical decision support system

- generate patient-specific assessments or recommendations
- presented to clinicians for consideration

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Efficacy vs effectiveness

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Integrated Care **Review of Reviews of controlled trials**

- 13 systematic reviews
 - heart failure
 - diabetes
 - rheumatoid arthritis
 - cardiovascular disease
 - stroke
 - chronic obstructive pulmonary disease

Ouwens et al Int J Qual Health Care 2005

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Integrated Care

Review of Reviews of controlled trials

- **Definition**

- organizational process of coordination
- seeks to achieve seamless and continuous care
- tailored to meet the patient's needs
- holistic view

Ouwens M et al Int J Qual Health Care 2005

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Integrated Care: Review of Reviews N=13

- **Limited evidence for positive effects on quality of care**
 - 1 significant positive effect on **functional health status**
 - no significant effects on **patient satisfaction and quality of life**
 - 3 significant positive effect on **hospital re-admission or length of stay**
 - 1 (on stroke) significant positive effect on **mortality**.
 - No significant positive effects on **financial benefit**

Ouwens M et al Int J Qual Health Care 2005

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Effectiveness of integrated Primary Care

- Insufficient studies for meta-analysis

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Effectiveness of integrated Primary Care

Depression

- better medication adherence
- reduced symptom severity
- greater remission rate

Genischen et al Psychol Med 2006

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Effectiveness of integrated Primary Care

Comorbid depression and physical illness

- improvement as great
- better physical functioning

Callahan et al Am J Geriat Soc 2005

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Determinants of successful interprofessional collaboration

Systemic

- social
- cultural
- professional system
- educational system

San Martin-Rodriguez et al Journal of Interprofessional Care
2005

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Determinants of successful inter-professional collaboration

Organisational

- Structure
- Philosophy
- Support:
- Resources:
- Communication

San Martin-Rodriguez et al Journal of Interprofessional Care
2005

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Determinants of successful interprofessional collaboration

Interactional

- Willingness, and belief in the philosophy of collaboration
- Trust
- Communication
- Mutual respect

San Martin-Rodriguez et al Journal of Interprofessional Care
2005

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Case Management

- No reviews of reviews

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Case Management

Nurse led

- 10 studies
- Positive effect on patient satisfaction

Latour et al 2006

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Disease Management Plans

- benefit may be smaller than generally believed because of failure to evaluate the roles of potential effect modifiers

Shojania and Grimshaw Am J Med 2004

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Disease Management Plans

Education, feedback and reminders to **service providers** associated with significant improvements in

- adherence to guidelines
- disease control.

Weingarten et al BMJ 2002

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Disease Management Plans

Education of **patients**, reminders to them and financial incentives associated with

- significant improvements in disease control.
- biggest impact in depression, diabetes or hypertension

Weingarten et al BMJ 2002

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Clinical decision support systems

Systematic review: predictors of improved clinical practice

- automatic provision of decision support
- provision of recommendations
- provision of decision support at the time and location of decision making
- computer-based decision support

Kawamoto et al BMJ 2005

METHODOLOGY OF INTEGRATED CARE



Paucity of evidence



Operationalisation

How should the questions be formulated and operationalised?

- better theoretical bases
- tighter hypotheses
- more detailed descriptions of
 - target patients
 - interventions

METHODOLOGY



Outcome measures: which ones?

- patient centred
- health care centred
 - cost-benefit
 - cost-offset

Carlson et al Psycho-oncology 2004

METHODOLOGY



Call for in-depth exploration using non-traditional methods including qualitative ones

Dixon-Woods M et al. J Health Serv Res Policy 2005

METHODOLOGY



- Systematic reviews prioritise randomly controlled trials
- Questions asked require qualitative methodology as well
- Cochrane Qualitative Research Methods Group & Campbell Process Implementation Methods Group

METHODOLOGY



Synthesis of Data

Reviewers must

- ask the right questions
- define concepts
- define inclusion criteria
- use expert advisory group

Bravata et al Ann Inter Med 2005

METHODOLOGY



Synthesis of Data

Reviewers must use

- techniques for greater pooling
- model-based analyses for re-analysis
- new qualitative techniques
- narrative synthesis of qualitative and quantitative data

Bravata et al Ann Inter Med 2005

METHODOLOGY



- What is it about this programme that works for whom in what circumstances?
- Realist review: a generative model of causality focusing on mechanisms and contexts

Pawson et al Journal of Health Services Research & Policy 2005

METHODOLOGY



- Failure of translation of research into practice: efficacy vs effectiveness
- Health Technology Assessments

METHODOLOGY



The Institute of Medicine report

- "Crossing the Quality Chasm: A New Health care System for the 21st Century"

METHODOLOGY



Interprofessional collaboration: shared what?

- responsibility
- decision-making
- health care philosophy
- data
- planning
- intervention

D'Amour D et al J Interprofessional Care 2005

METHODOLOGY



Inter-professional collaboration

- aim at producing transdisciplinary practitioners
- need for formal courses

METHODOLOGY



Interprofessional collaboration

- professionals differ from patient to patient.
- requirement to reflect daunting
- operationalise to provide ready framework

METHODOLOGY



Interprofessional collaboration

Ad hoc teams require

- patient-centred collective action appropriate to the complexity
- construction of a team life that engenders trust and respect

D'Amour D et al J Interprofessional Care 2005



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Parliament of Victoria

Human Services Complex Needs Act 2003

“to facilitate the delivery of welfare, health, mental health, disability, drug and alcohol and support services to certain persons with multiple and complex needs by providing for the assessment of such persons and the development and implementation of appropriate care plans”

Outcomes to be Achieved



- Improved client outcomes
 - Model will assist in stabilising client and improving health and well being
- Joined up service response
- Sustainable cost savings