

Scoping Review of Interprofessional Teamwork Theories in Healthcare: Implications for Policy, Practice & Research

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Learning Objectives

1. To discuss the evolution of theories and trends in the literature on interprofessional teamwork over the past 10 years
2. To feature the use of a conceptual model for policy, practice and research
3. To highlight future research directions

IPE = Interprofessional Education IPP = Interprofessional Practice
IPC = Interprofessional Collaboration IPO = Interprofessional Organization

Scoping Review

“No proven theoretical framework to guide development of IPE”

(Cooper et al., 2004)

“There is minimal explicit use of theories in the design of interventions”

“The interprofessional field is evolving” (Goldman et al., 2009)

“Theoretical perspectives have been minimally employed in the development and evaluation of interprofessional intervention studies” (Reeves et al., 2011)

“Evaluation that is theory led is essential” (Hean et al., 2012)

Methodology

Database Search:

- ✓ CINAHL
- ✓ Medline (OVID)
- ✓ Scholar's Portal
- ✓ Web of Science

Key words:

- ✓ *“Interprofessional Education”*
- ✓ *“Interprofessional Collaboration”*
- ✓ *“Theory”*

Inclusion Criteria:

- ✓ Discussed theoretical perspectives/viewpoints
- ✓ Hand-selected using the reference lists

Other Criteria:

- ✓ Peer-Reviewed
- ✓ English
- ✓ From 2004-2014

Article Selection Process

Scoping Review of Interprofessional Teamwork Theories in Healthcare	Number of Articles
Articles identified through initial database search	2106
Refinement on the term “theory” (-1495)	611
Included articles after removal of duplicates (-27)	584
Articles excluded based on title/abstract (-479)	105
Articles excluded based on full review (-59)	46
Articles added through hand-search (+10)	56
Article selected for final review	56

Articles Reviewed (n=56)

By Country (Top 3)	Count
Canada	21
UK	15
US	9

By Journal (Top 3)	Count
Journal of Interprofessional Care	31
Foundations of Continuing Education	5
Learning in Health and Social Care	4

By Affiliation (Top 3)	Count
University (Academic)	37
University (Academic)/Hospital	6
University (Academic)/Hospital/Research*	6

***Research centres:**

- Research Wilson Centre for Research
- Institute for Clinical Evaluative Sciences
- Ottawa Hospital Research Unit
- Alberta Health Services Workforce Research
- Keenan Research & Li Ka Shing Knowledge Institute
- Research Health Systems & Workforce Research

Evolution of Interprofessional Teamwork



Health Canada (2004): IPE for Collaborative Patient-Centred Practice

“This frame of reference can be seen as a first milestone in the development of this emerging area of inquiry”

“It is an evolving framework, much needs to be learned in this area”

“It should remain flexible and adapt to changes in education and health system” (D’Amour & Oandasan, 2005)

Evolution of Interprofessional Teamwork



Social Theories:

*“Contact hypothesis is a useful theoretical framework to guide the development of IPE interventions”
(Hean & Dickinson, 2005)”*

*“Professional cultures contribute to the challenges of effective interprofessional teamwork”
(Hall, 2005)*

Organizational Theories:

*“New approaches from the organization change literature”
(Ginsburg & Tregunno, 2005)*

*“The most complete models of collaboration seem to be based on strong theoretical background in organizational theory”
(D’Amour et al., 2005)*

Evolution of Interprofessional Teamwork



“Based on Kolb’s research, professional identity is powerful” (Clark, 2006)

“Theories derived from social psychology have been utilized to inform the development of IPE initiatives”

“Stereotypes are known to exist amongst healthcare professional groups”

“Social identity theory explains intergroup discrimination where one group favours their own group over another”

“To facilitate collaborative learning, contact theory looks at outcomes when two opposing groups are brought together” (Craddock et al., 2006)

Evolution of Interprofessional Teamwork



“A patient was admitted to hospital three times due to repeated falls. It took three admissions until the physiotherapist was consulted. This simple example demonstrates the need for a collaboration. If we do not learn to work together, we will continue to go in circles.”
(Allison, 2007)

Need for Collaborative Approach

“When we finally all learn to ‘paddle the canoe’ together, we shall be able to steer toward a sustainable, efficient and effective healthcare system for the future that results in the best outcomes for all patients every time”
(Allison, 2007)

Evolution of Interprofessional Teamwork



“IPE is not a homogenous field”

“It encompasses a wide variety of initiatives of varying duration, at varying levels and using a variety of pedagogic approaches”

“The challenges faced in evaluating IPE can be summarized as the need for evaluations to be underpinned by an encompassing theoretical framework”
(Payler et al., 2008)

“Using complexity for improving education research in health care”
(Cooper & Geyer, 2008)

Evolution of Interprofessional Teamwork



“The IPE field is moving towards inclusion of socio-cultural and more macro theories to underpin practice” (Hean et al., 2009)

*“Service improvement in the workplace serve as a new vehicle through which individual professionals and teams can continually enhance patient care through working and learning together”
(Wilcock, et al., 2009)*

"A firmer understanding of theoretical, pedagogical and practical issues related to continuing IPE is developing” (Reeves, 2009)

Evolution of Interprofessional Teamwork



WHO (2010): Call for increased action on IPE and IPP around the world

*“Despite the number of measures available for assessing and evaluating IPE and IPC, most lack sufficient theoretical and psychometric development”
(Thanhauser, Russell-Mayhew & Scott, 2010)*

“Most shared decision making models failed to encompass an interprofessional approach”

*“Appraisal of shared decision making models highlights the need for a model that is more inclusive of an interprofessional approach”
(Stacey et al., 2010)*

Evolution of Interprofessional Teamwork



Need to design theory-informed interventions/evaluations:

“Framework provides a ‘road map’ for the interprofessional field, including delineation of three types of interprofessional interventions (IPE, IPP, and IPO) and outcomes (intermediate, patient and system)”

(Reeves et al., 2011)

Need for research-based evidence on patient outcomes:

“Greater research-based evidence on effectiveness of IPP in improving patient outcomes in clinical settings may facilitate organizational change toward more stable and sustainable IPE in educational contexts”

(Clark, 2011)

Evolution of Interprofessional Teamwork



“Describes intersection and complementarity of relational and interprofessional learning approaches to health education”

(Cohen Konrad & Browning, 2012)

“Should not limit to frameworks that are linked to IPE alone and instead explore theories that psychosocial and related disciplines can offer”

(Hean et al., 2012)

“Social identity theory provides a powerful framework with which to consider many areas of medical education” (Burford, 2012)

Evolution of Interprofessional Teamwork



“The interprofessional field has been maturing in nature, with the engagement of an increasing number of scholars who have a broadening range of methodological and theoretical interests”

(Paradis & Reeves, 2013)

“Organizational theory encapsulates a range of perspectives from economics, psychology and sociology”

“Implementation theory would seem another fitting theory that may help explain how individual, professional and organizational motivation and commitment can affect interprofessional collaboration” (Suter et al., 2013)

Evolution of Interprofessional Teamwork



“Increasingly, systems theories in general and complexity theories have been employed in health care research” (Suter et al., 2013)

“System theory explains the relationship between person and environment, between psychological, sociological and biological domains in health, offering a rationale for the notion of holistic care” (Barr, 2013)

“Activity theory has been more discussed with potential to encapsulate multi-level personal and organizational collaboration” (Barr, 2013)

Theory in Health Care

“The development of a theoretical framework within which IPE can be located is an important priority” (Cooper et al., 2004)

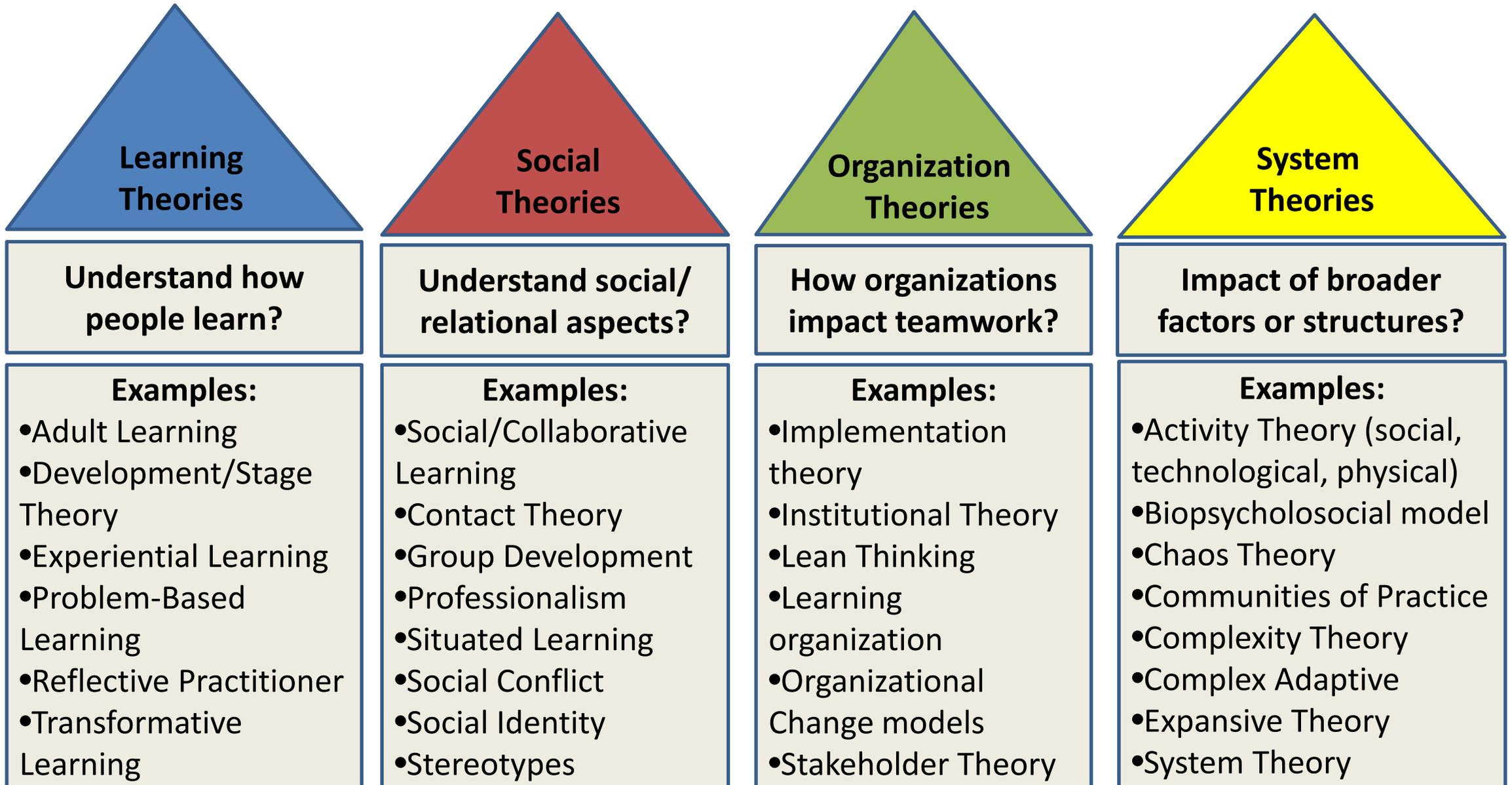
“Theory does not originate and procreate in a vacuum, it comes from our observations and is confirmed by our practice”

“Theories are drawn from a number of academic disciplines, including sociology, psychology, education and management”

“A structure must be developed that classifies and inter-relates theories to help us make sense of what is available to us”

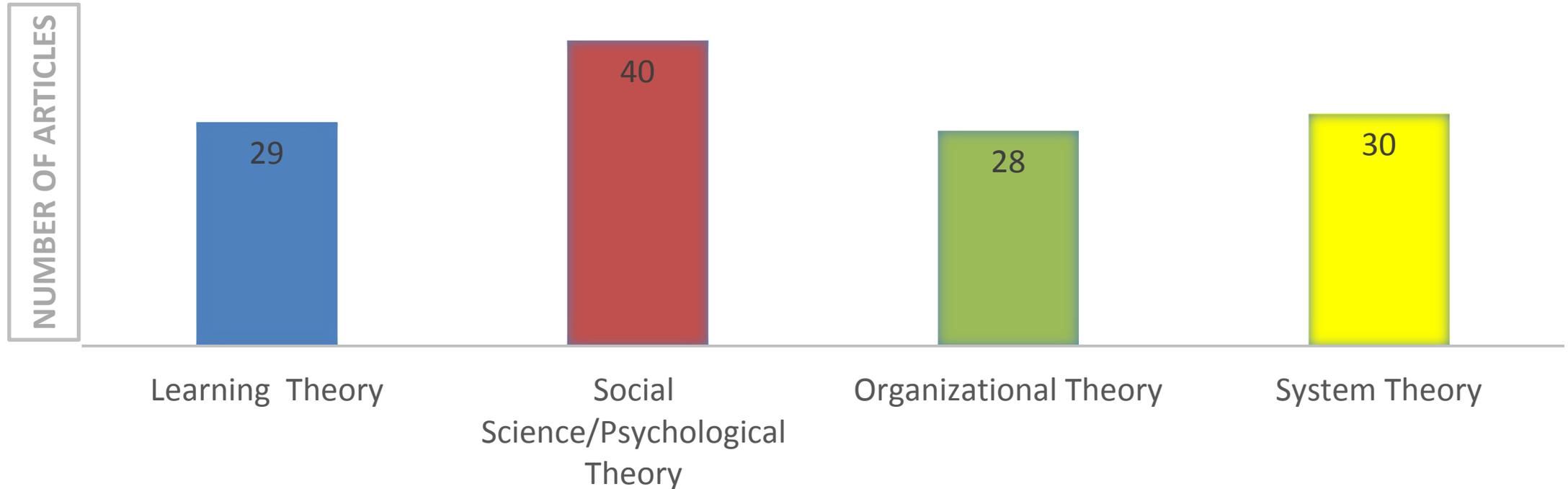
(Hean et al., 2012)

Theories Used for Interprofessional Teamwork



Note: Theories may overlap

Theories Discussed in the Past 10 Years



RESULTS:

- More papers discussed Social Sciences/Psychological Theory (40 papers), compared to System Theory (30 papers), Learning Theory (29 papers), and Organizational Theory (28 papers)

NOTE: *The theories mentioned in the articles were categorized and were not mutually exclusive*

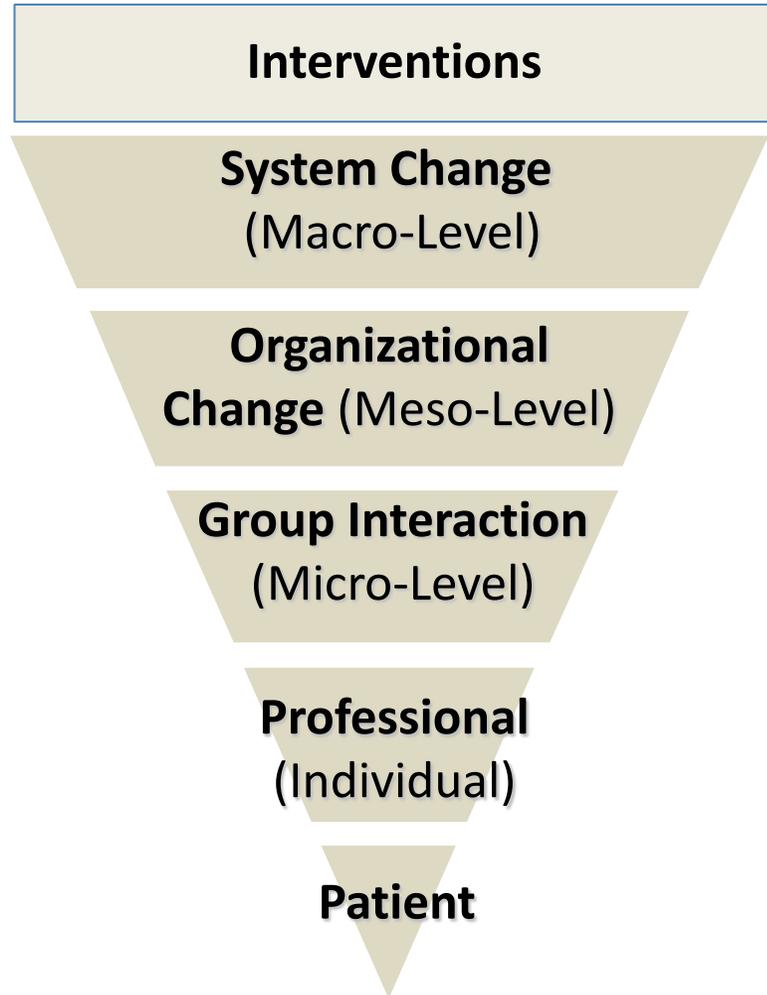
Movement Towards Multi-faceted Theories

*“Social/psychology and complex theory explain the influence of the dynamic and interaction of internal (cognitive) and external (environmental) factors”
(Sargeant, 2009)*

“Finally, after some neglect, the IPE field is moving towards inclusion of social-cultural and more macro theories to underpin practice” (Hean et al., 2012)

*“Suggest that the ‘toolbox’ be made of several paradigms”
(Hall, Weaver, Grassau, 2013)*

Consider Multi-level Interventions



*“There are micro level (individual level), meso (organizational level) and macro (socio-cultural and political level) that influence the success of IPE”
(Oandasan & Reeves, 2005)*

*“Successful IPE efforts need to address the relationship between individuals, lifelong learning and organizational changes to improve the care delivered”
(Owen & Schmitt, 2013)*

Consider Professional/Team Outcomes

*“More rigorous measurements of outcomes are needed”
(Reeves et al., 2011)*

*“Many of the IPE studies were evaluated with the use of
participant feedback about the program or changes in
participants knowledge and attitudes”*

*“Some also included self-reported impacts on practice or
anticipated changes” (Goldman et al., 2009)*

Outcomes		
Professional/Team		

Consider Clinical/Quality Outcomes

“A systemic approach is the crucial link between patient safety and interprofessional care”

“Sharing responsibility does not mean sharing the same functions or simply dividing the work; It means sharing of outcomes and specifying each of the actors’ contributions, individually and collectively, that together accounts for a patient safety result” (Infante, 2006)

“Require longer-term evaluation of IPE and its impact on practice, particularly on patient safety and satisfaction” (Thistlethwaite, 2012)

Outcomes		
	Clinical/Quality	

Consider Patient Outcomes

Patient



“Patients are recognized as the ultimate justification for providing collaborative care”

“The assumption that collaborative practice has an impact on patient outcomes has not been adequately demonstrated” (D’Amour et al., 2005)

“The interprofessional literature suggests that there is a lack of evidence of the effectiveness of IPE on patient outcomes” (Trojan, et al., 2009)

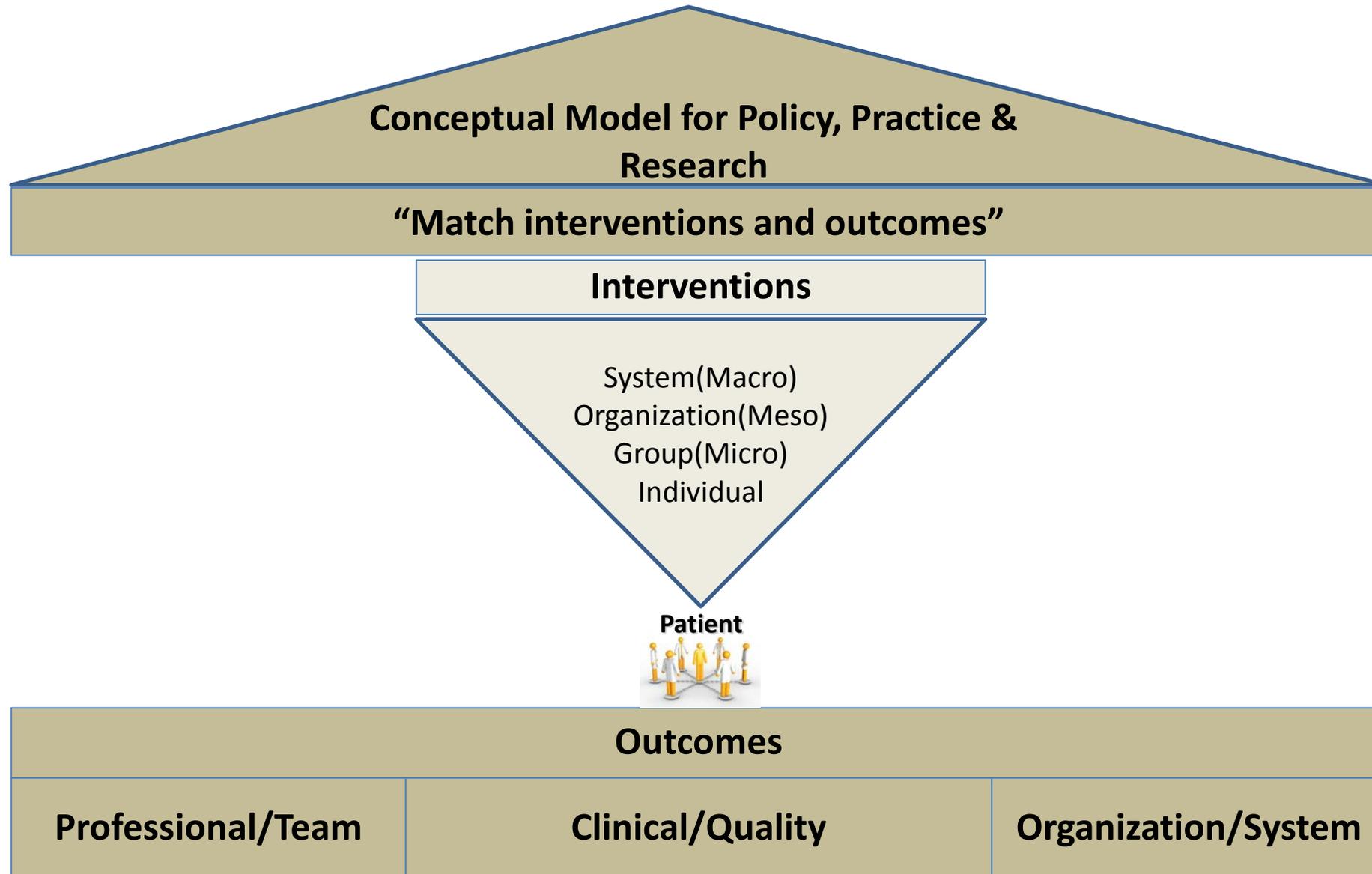
Consider Organizational/System Outcomes

“The literature reveals that very little of the empirical work has dealt with determinants of interprofessional in health, particularly its organizational and systematic determinants” (Martin-Rodriguez et al., 2005)

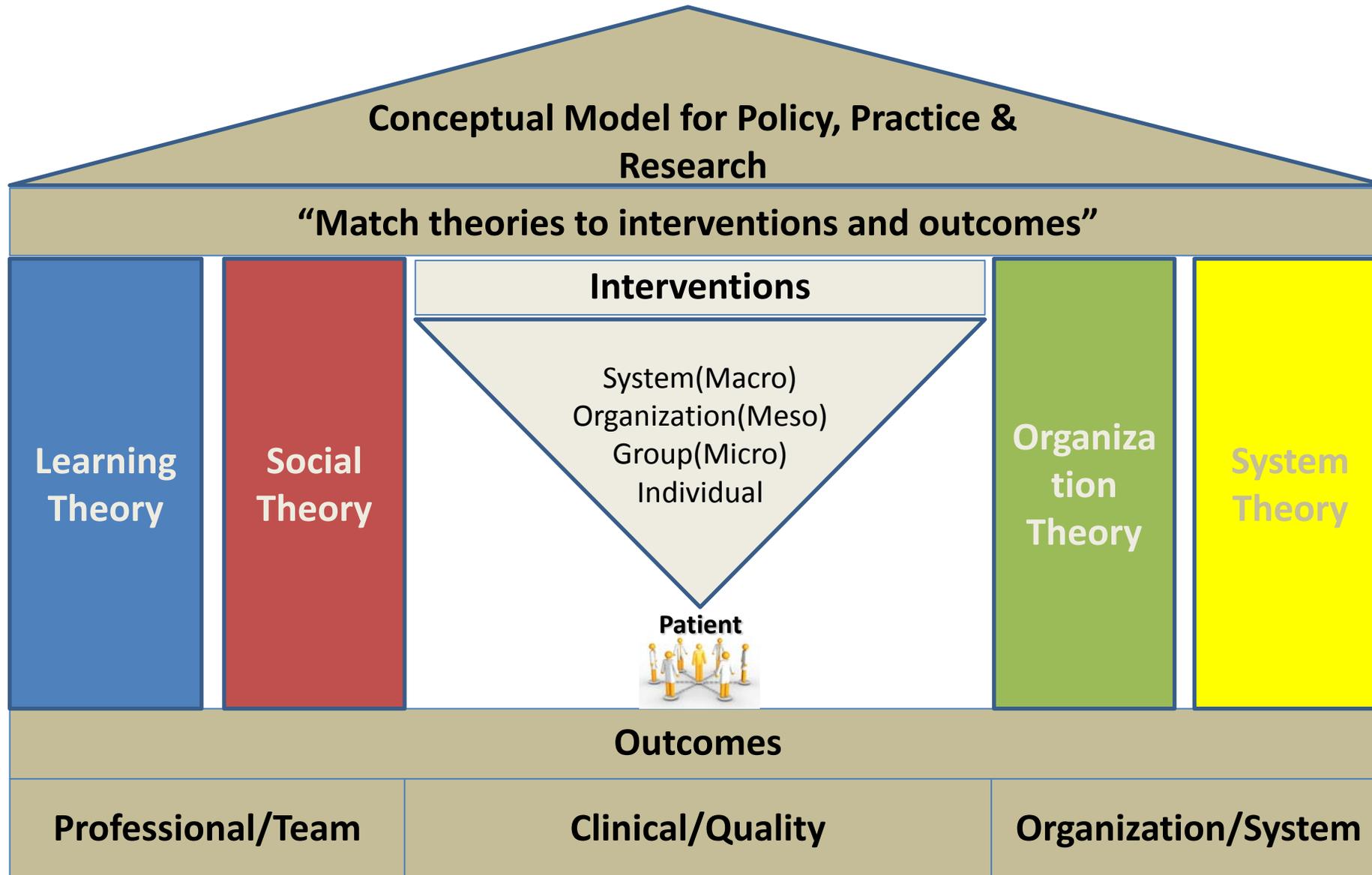
“A relative small number of studies reported final outcomes at the patient and system level. Furthermore, examination of how changes in attitudes and knowledge affect longer-term behavioural changes and ultimately patient and system outcomes are lacking” (Reeves et al., 2011)

Outcomes		
		Organization/System

Conceptual Model for Interprofessional Teamwork



Conceptual Model for Interprofessional Teamwork



Implications for Policy

“Systematic (macro level) factors play a crucial role”

“Government policies can drive the movement of IPE in ways which support health system reform requiring health professional to work effectively in team based collaborative practice” (Oandasan & Reeves, 2005)

“The policy documents on IPE are affecting changes at the educational, professional and organizational levels resulting in the incorporation of IPE into educational programs, professional requirements and organizational policies” (Reeves et al., 2012)

“Accreditation and registration bodies are now mandating objectives for teamwork or knowledge of professional roles” (Thistlethwaite, 2012)

Implications for Practice

“IPC requires a favourable organization setting” (Martin-Rodriguez et al., 2005)

*“IPE is arguable in urgent need for further conceptualization, evaluation and research if it is to achieve its potential and become truly an informed practice”
(Craddock et al., 2006)*

“To advance both practice and research in this field, IPE needs to develop theoretical frameworks” (Clark, 2006)

“It is clear that much more collaborative research work needs to be done with practitioners” (Bleakley, 2012)

Implications for Research

“It is encouraging that the evidence base of IPE is growing”

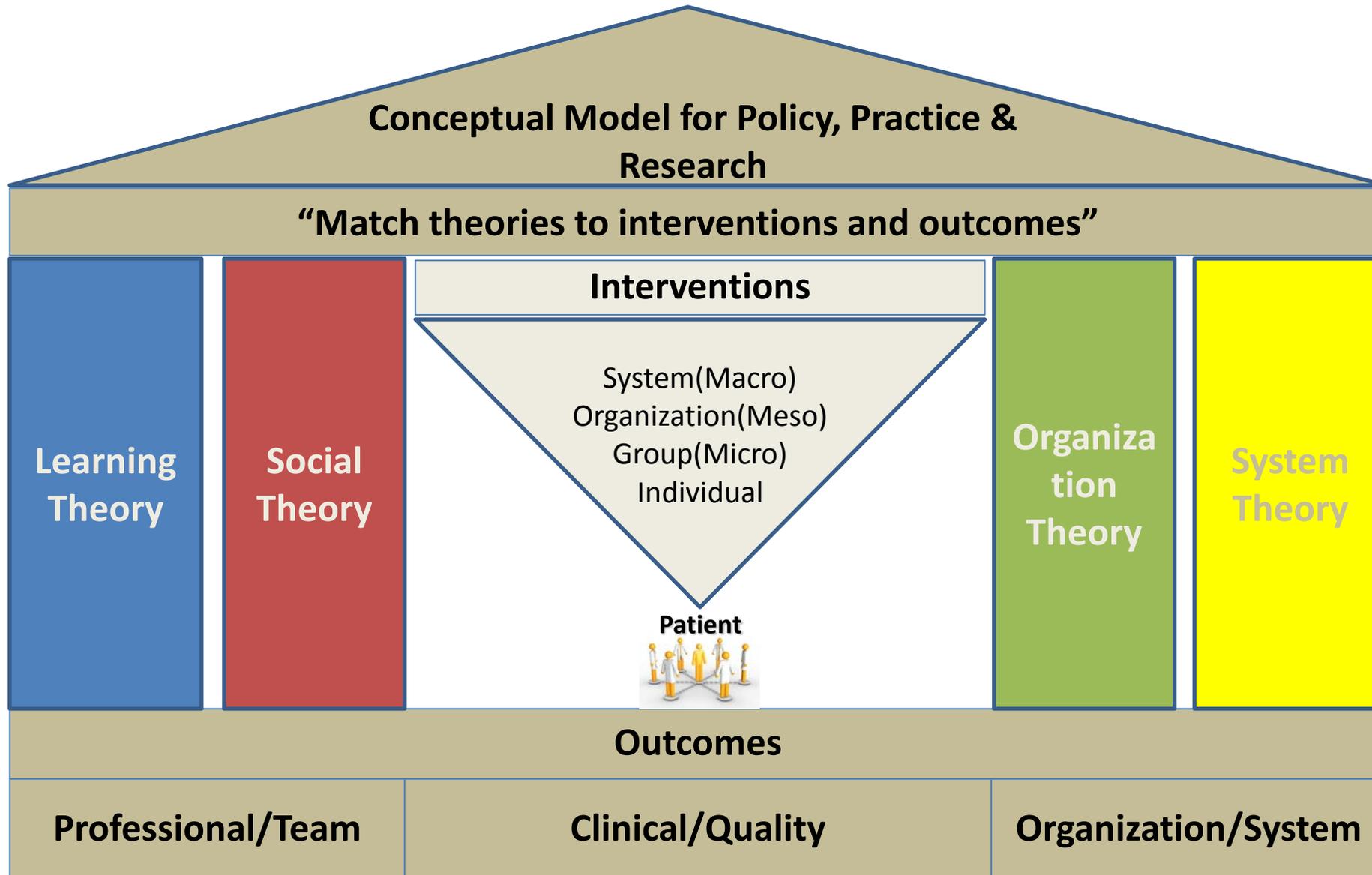
“With the expanding number of IPE studies, it is hopeful that evidence of this field will and over time also become increasingly more rigorous and show evidence of impact and sustainability”

(Reeves et al., 2012)

“There is a lack of longer-term evaluation of IPE”

(Thistlethwaite, 2012)

Conceptual Model for Interprofessional Teamwork



Looking back...

“Clearly the evidence base is weak, perhaps because this kind of research is difficult to do as it straddles disciplinary boundaries”

“Growing evidence from the USA suggest that team-based interventions in chronic disease are associated with better outcomes” (Ross & Harris, 2005)

“No reliable evidence on the effectiveness of IPE, this absence is not evidence that this type of intervention is ineffective; It may mean that it is difficult to evaluate”

“There is a growing body of evidence suggesting positive effects on the delivery of care” (Zwarenstein et al., 2005)

Looking into the future...

“If we are to advance interprofessionalism, there is a need for collaboration among educators, practitioners, researchers, policy-makers and the public”

(D’Amour et al., 2005)

“Health care systems around the world are under tremendous pressure to change their models of health care delivery to interprofessional collaborative care models with the ultimate goal of improving patient/client outcomes”

(Khalili et al., 2014)

Future Research Directions

“More rigorous measurements of outcomes are needed”

“Furthermore, examination of how changes in attitudes and knowledge affect longer-term behaviour changes and ultimately impact patient and system outcomes are lacking” (Reeves et al., 2011)

“Ethnographic methodologies, requiring time and funding, would be invaluable in investigating the nature of becoming and being interprofessional at work” (Thistlethwaite, 2012)

Institute for Healthcare Improvement

“It's a challenging landscape, and in order to succeed, teams need to implement high-leverage changes and strategies to fully realize the benefits of high-performing, team-based primary care for patients, their families, and staff”

“Research shows that team-based care in the primary care setting is associated with improved quality and safety of care, better health and functioning of individuals with chronic disease, higher patient and provider satisfaction, and lower per capita costs”

Source: Institute for Healthcare Improvement.

<http://www.ihp.org/education/InPersonTraining/Advancing-Team-Based-Primary-Care/Pages/default.aspx>

Summary

Japanese Proverb



*“Success will depend on cultures which reflect a readiness of change, continuous and collective learning, experimentation, and demonstration of the link between improved collaboration and enhanced patient outcomes”
(Ginsburg & Tregunno, 2005)*

Thank you

Scoping review of inter-professional teamwork theories in health care: Implications for policy, practice and research

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Abstract As theoretical underpinning is a priority for inter-professional teamwork, this scoping review examines theories for inter-professional teamwork in health care in the academic literature over the last ten years. The review found 56 papers from 4 databases (CINAHL, Medline, Scholar's Portal and Web of Science) published in English. A content strategy approach was used to categorise the theories, interventions and outcomes. The literature revealed a trend moving away from single theories, into multifaceted theories. There were more papers on inter-professional education interventions, compared to inter-professional practice or organisation interventions. Many papers reported the importance of patient outcomes as the driving force for teamwork; however, there is a lack of evidence to support this notion. Further research is suggested on teamwork effectiveness, including measurement and evaluation of patient and system outcomes. Based on the scoping literature review, a conceptual model is developed to align interventions with

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