

# 賽馬會安寧頌



Jockey Club End-of-Life Community Care Project

## Evaluation on Interdisciplinary Complex Intervention: Effectiveness, Efficiency and Continuous Improvement

### 賽馬會安寧頌計劃：跨學科複雜干預的 評估和持續改進



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The Hong Kong Jockey Club Charities Trust  
同心 同步 同進 RIDING HIGH TOGETHER

合作夥伴 Project Partner:



# 1. Background of the project



# JCECC Project Framework

In 2015, the JC Trust approved 255 million to launch the 6-year Jockey Club End-of-Life Community Care Project (“JCECC”), aimed at **improving the quality of end-of-life (EoL) care, enhancing the capacity of service providers**, as well as **raising public awareness**. It is a multi-disciplinary, multi-institutional and cross-sectoral collaboration, with special emphasis on the interface between social and health care systems.

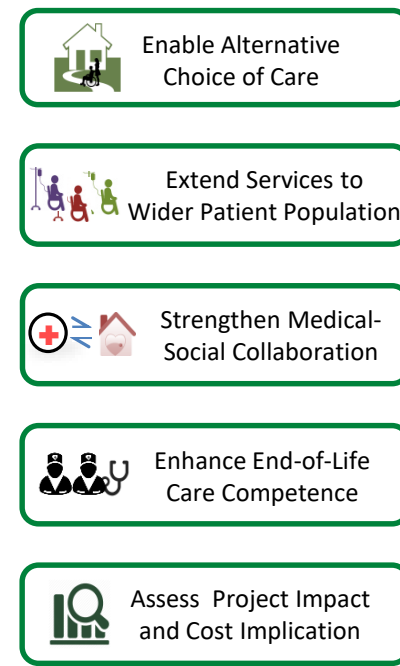
## Stakeholders and System





## Project Components



## Project Objectives



# Features of Community EoLC Models (2016-2018)

<b>NGOs</b> 	Enhanced community health care model	Family capacity building model	Non-cancer patient capacity building model	Community volunteer capacity building model	Residential care staff capacity building model
<b>Patients</b>	Cancer & non-cancer	Cancer & non-cancer	Non-cancer	Cancer & non-cancer	Cancer & non-cancer
<b>Interventions</b>	Holistic care with emphasis on home care nursing support  Strong ACP facilitating team Respite	Holistic care with cheer-up activities to bring happiness and joy Caregiver stress relieve interventions	Holistic care with emphasis on equipping patient's symptom management skills	Holistic care assisted by volunteer intensive support	Training for RCHEs staff  EoLC protocol in RCHEs and AD education
<b>Community Partners</b> 	Medical Professionals	EHCCS + Family	Patient Groups + Professional Volunteers	Church Groups	Long-term Care + RCHEs

# Unfamiliarity with Familiar Terms



HKU  
SWSA

Department of Social Work and Social Administration  
The University of Hong Kong  
香港大學社會工作及社會行政學系

Evidence Based Clinical Social Work Research Cluster  
循證社會工作教研中心

情緒取向家長小組：經驗分享與成效研究

## Emotionally-focused Group Therapy for Parents with Children at Preadolescence: Impact and Challenges

賽馬會安寧頌計劃：跨學科複雜干預的評估和持續改進

## Evaluation on Interdisciplinary Complex Intervention; Effectiveness, Efficiency and Continuous Improvement



Abstract,  
rundown &  
registration

This webinar will be conducted in Cantonese.  
此講座以粵語講解及分享。

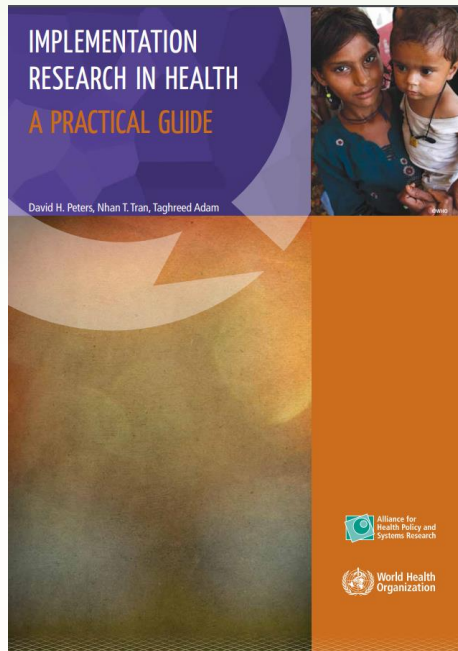
WEBINAR ON  
IMPLEMENTATION  
SCIENCE:  
Evidence-Based  
Clinical Social  
Work Practice  
Research in  
Hong Kong

DEC 14  
MONDAY  
2:00-4:00PM



## 2. Implementation Sciences





“Neglecting implementation challenges costs lives and money” (p.13)

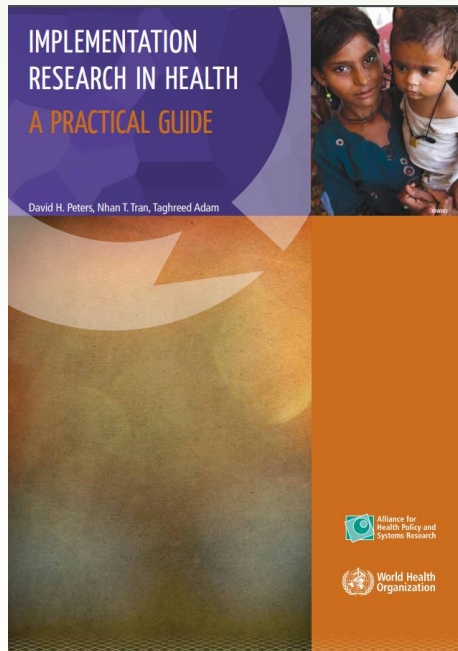
“implementation research takes what we know and turn it into what we do.” (p.19)

“The basic intent of implementation research is to understanding not only what is and isn’t working, but how and why implementation is going right or wrong, and testing approaches to improve it.” (p.27)





# How is implementation research used? (WHO, 2013)

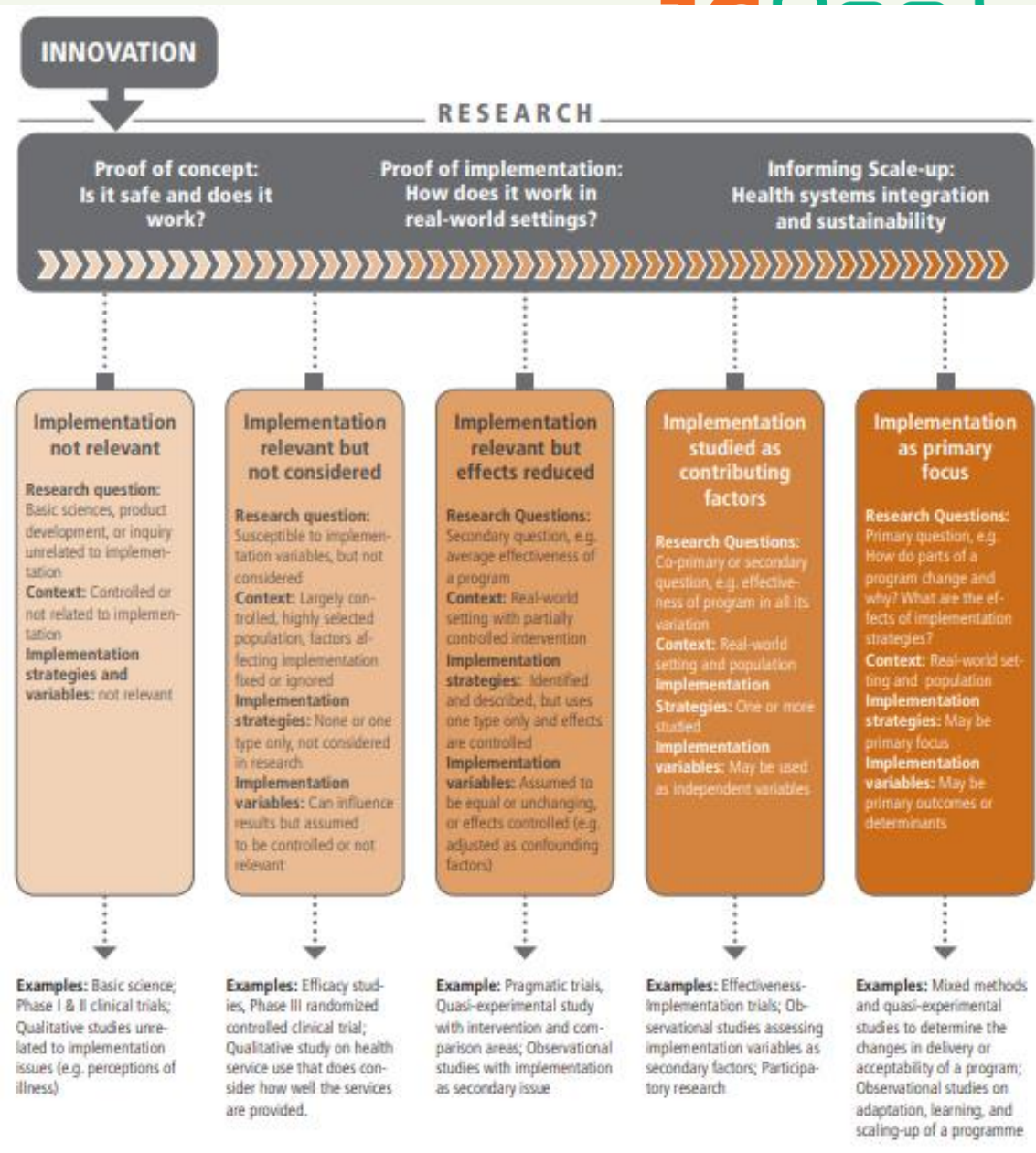


- Understanding context
- Assessing performance
- Supporting and informing scale-up
- Supporting quality improvement and health system strengthening





# Implementation Sciences (WHO, 2013, p.31)



## 3. Evidence-based Practice



## Two different approaches (Spensberger et al., 2020)

- The process of Evidence-based practice
- The empirically supported practices or intervention

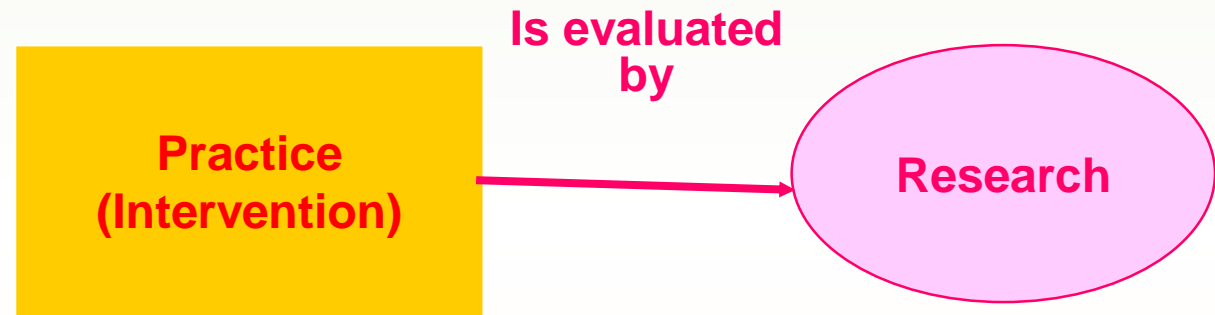


# Practice

**Practice  
(Intervention)**



# Practice Research



# Practice Research





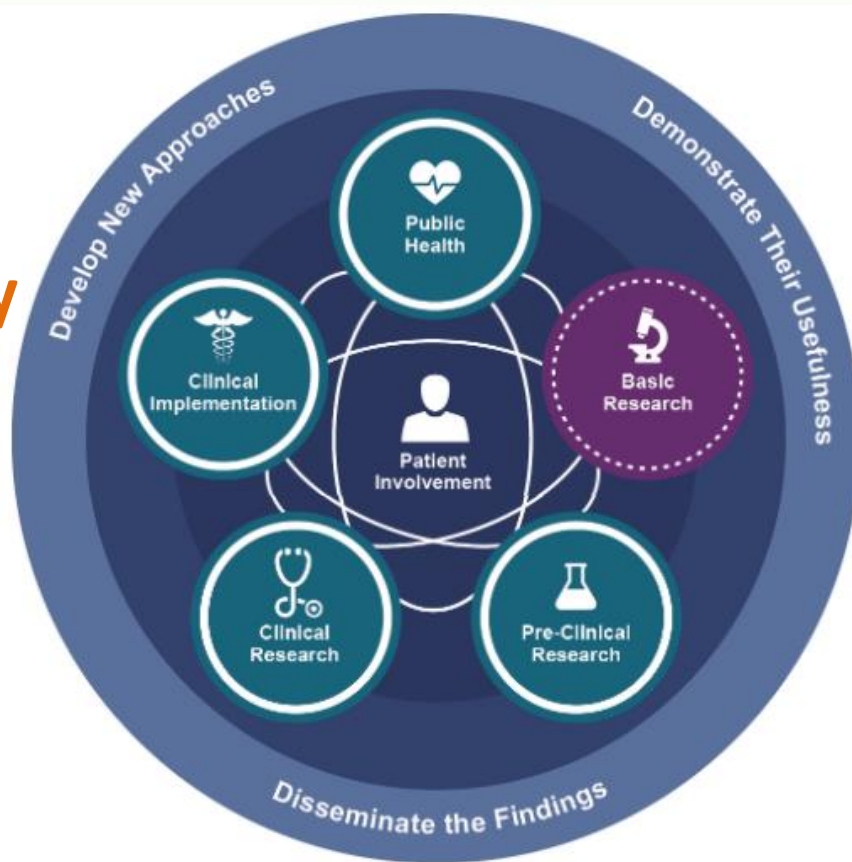
# Implementation Sciences



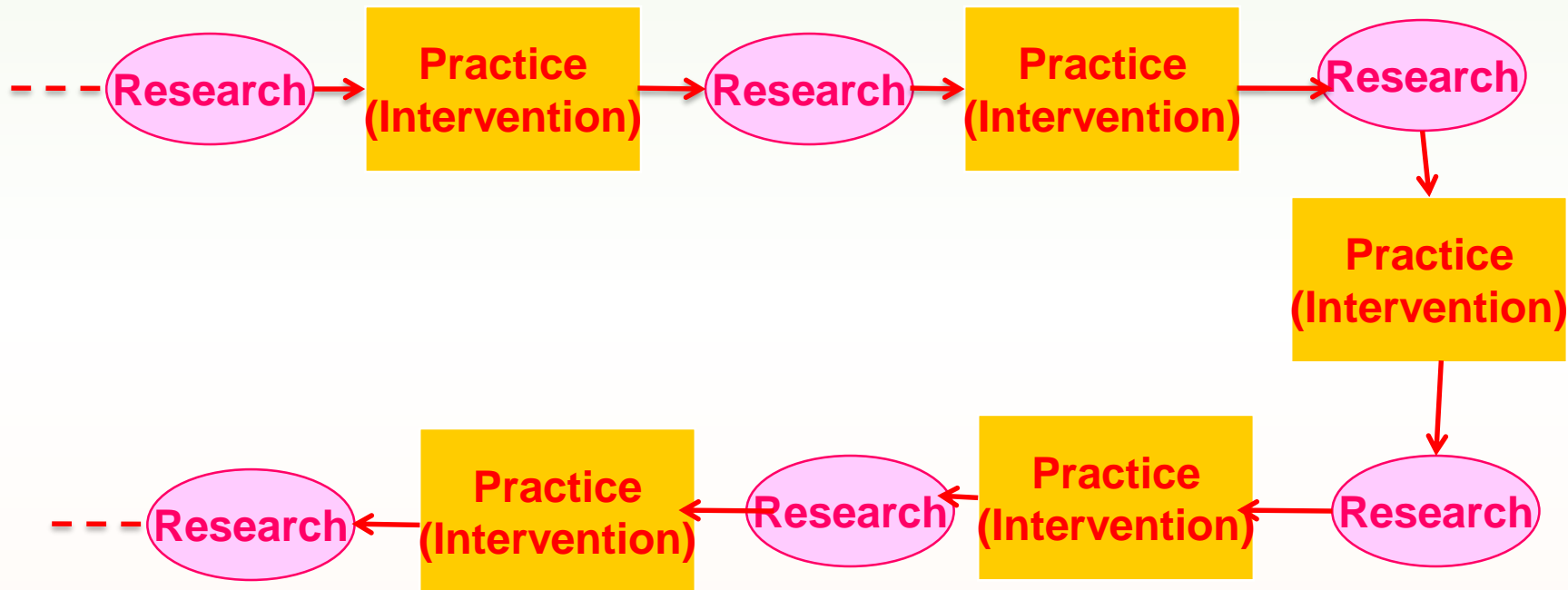
## Translation:

“The process of turning observations in the laboratory, clinic and community into interventions”

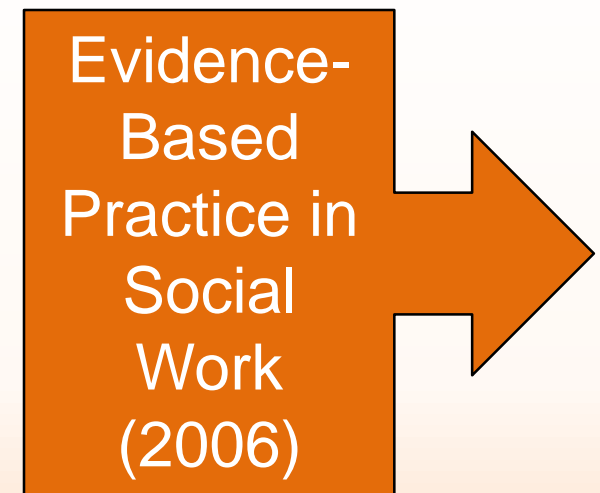
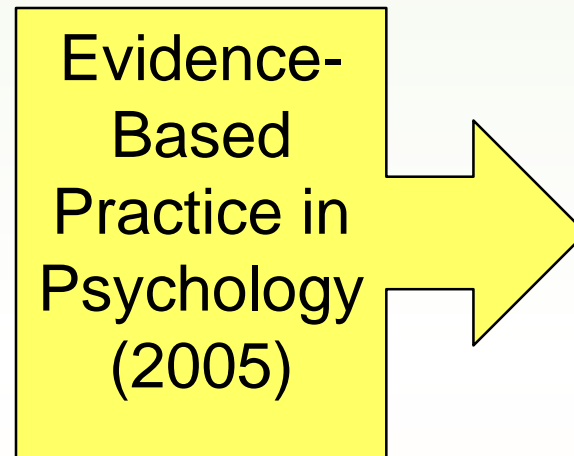
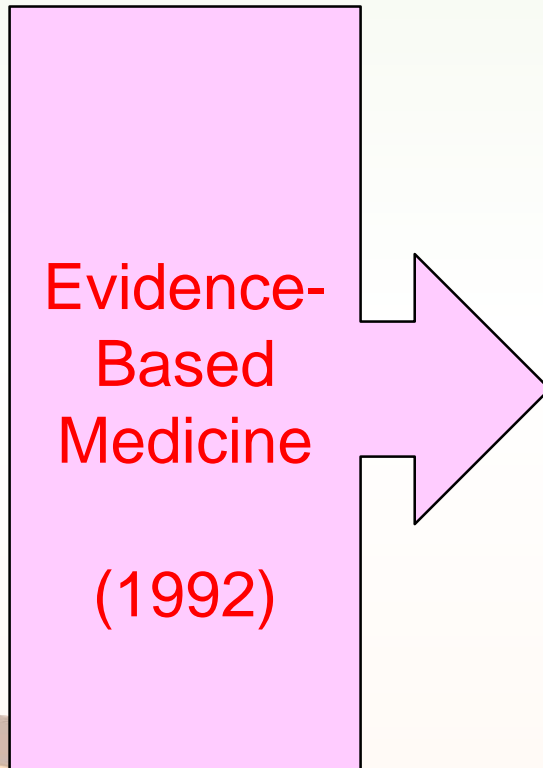
**Basic research:** scientific exploration that can reveal fundamental mechanisms of biology, disease or behavior. Every stage of the translational research spectrum builds upon and informs basic research.



# Practice Research



# Development of Evidence-based Practice



## The Rational Clinical Examination

## Evidence-Based Medicine

### A New Approach to Teaching the Practice of Medicine

Evidence-Based Medicine Working Group

A NEW paradigm for medical practice is emerging. Evidence-based medicine de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision making and stresses the examination of evidence from clinical research. Evidence-based medicine requires new skills of the physician, including efficient literature searching and the application of formal rules of evidence evaluating the clinical literature.

An important goal of our medical residency program is to educate physicians in the practice of evidence-based medicine. Strategies include a weekly, formal academic half-day for residents, devoted to learning the necessary skills; recruitment into teaching roles of physicians who practice evidence-based medicine; sharing among faculty of approaches to teaching evidence-based medicine; and providing faculty with feedback on their performance as role models and teachers of evidence-based medicine. The influence of evidence-based medicine on clinical practice and medical education is increasing.

#### CLINICAL SCENARIO

A junior medical resident working in a teaching hospital admits a 43-year-old previously well man who experienced a witnessed grand mal seizure. He had never had a seizure before and had not had any recent head trauma. He drank alcohol once or twice a week and had not had alcohol on the day of the seizure. Findings on physical examination are normal. The patient is given a loading

dose of phenytoin intravenously and the drug is continued orally. A computed tomographic head scan is completely normal, and an electroencephalogram shows only nonspecific findings. The patient is very concerned about his risk of seizure recurrence. How might the resident proceed?

#### The Way of the Past

Faced with this situation as a clinical clerk, the resident was told by her senior resident (who was supported in his view by the attending physician) that the risk of seizure recurrence is high (though he could not put an exact number on it) and that was the information that should be conveyed to the patient. She now follows this path, emphasizing to the patient not to drive, to continue his medication, and to see his family physician in follow-up. The patient leaves in a state of vague trepidation about his risk of subsequent seizure.

#### The Way of the Future

The resident asks herself whether she knows the prognosis of a first seizure and realizes she does not. She proceeds to the library and, using the Grateful Med program,<sup>1</sup> conducts a computerized literature search. She enters the Medical Subject Headings terms *epilepsy*, *prognosis*, and *recurrence*, and the program retrieves 25 relevant articles. Surveying the titles, one<sup>2</sup> appears directly relevant. She reviews the paper, finds that it meets criteria she has previously learned for a valid investigation of prognosis,<sup>3</sup> and determines that the results are applicable to her patient. The search costs the resident \$2.68, and the entire process (including the trip to the library and the time to make a photocopy of the article) took half an hour. The results of the relevant study show that the patient risk of recurrence at 1

year is between 43% and 51%, and at 3 years the risk is between 51% and 60%. After a seizure-free period of 18 months his risk of recurrence would likely be less than 20%. She conveys this information to the patient, along with a recommendation that he take his medication, see his family doctor regularly, and have a review of his need for medication if he remains seizure-free for 18 months. The patient leaves with a clear idea of his likely prognosis.

#### A PARADIGM SHIFT

Thomas Kuhn has described scientific paradigms as ways of looking at the world that define both the problems that can legitimately be addressed and the range of admissible evidence that may bear on their solution.<sup>4</sup> When defects in an existing paradigm accumulate to the extent that the paradigm is no longer tenable, the paradigm is challenged and replaced by a new way of looking at the world. Medical practice is changing, and the change, which involves using the medical literature more effectively in guiding medical practice, is profound enough that it can appropriately be called a paradigm shift.

The foundations of the paradigm shift lie in developments in clinical research over the last 30 years. In 1960, the randomized clinical trial was an oddity. It is now accepted that virtually no drug can enter clinical practice without a demonstration of its efficacy in clinical trials. Moreover, the same randomized trial method increasingly is being applied to surgical therapies<sup>5</sup> and diagnostic tests.<sup>6</sup> Meta-analysis is gaining increasing acceptance as a method of summarizing the results of a number of randomized trials, and ultimately may have as profound an effect on setting treatment policy as have randomized trials themselves.<sup>7</sup> While less dramatic, crucial methodological ad-

- EBM ... de-emphasizes intuition, unsystematic clinical experience, and pathophysiologic rationale as sufficient grounds for clinical decision making and stresses the examination of evidence from clinical research
- (Evidence-Based Medicine Working Group, 1992)

A complete list of members of the Evidence-Based Medicine Working Group appears at the end of this article. Reprint requests to McMaster University Health Sciences Centre, Room 2001, 1200 Main St W, Hamilton, Ontario, Canada L8N 3Z5 (Gordon Guyatt, MD).

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- The aim of EBM is to integrate the experience of the clinician, the values of the patient, and the best available scientific information to guide decision-making about clinical management.
- (Meta-evidence-Based Medicine Working Group, 1992)

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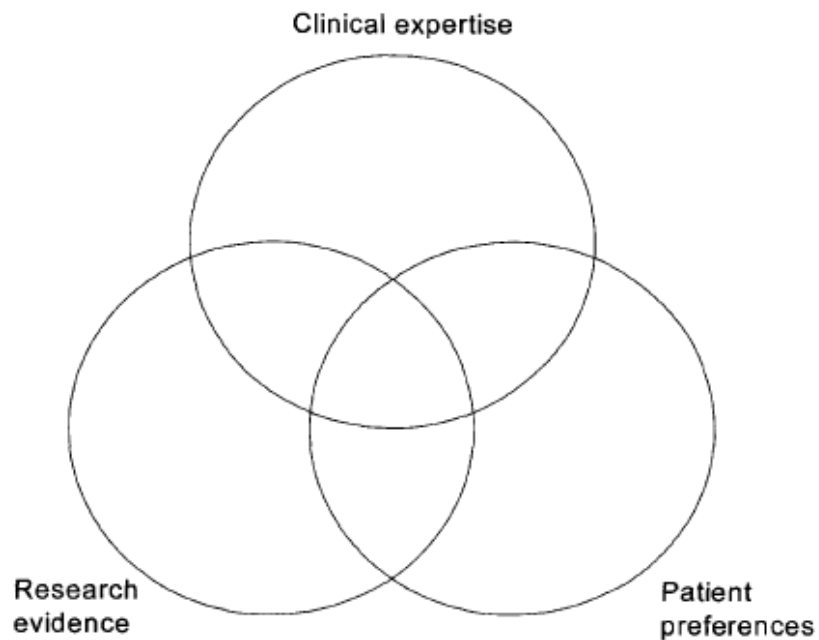


Figure 2.1. Early model of the key elements for evidence-based clinical decisions. From *Evidence-Based Medicine Notebook, Vol. 7* (p. 36), by R. B. Haynes, P. J. Devereaux, and G. H. Guyatt, 2002, London: BMJ Publishing Group. Copyright 2002 by the BMJ Publishing Group. Reprinted with permission.



Figure 2.2. An updated model for evidence-based clinical decisions. From *Evidence-Based Medicine Notebook, Vol. 7* (p. 37), by R. B. Haynes, P. J. Devereaux, and G. H. Guyatt, 2002, London: BMJ Publishing Group. Copyright 2002 by the BMJ Publishing Group. Reprinted with permission.



# Evidence-Based Practice in Psychology (EBPP)

## Evidence-Based Practice in Psychology

APA Presidential Task Force on Evidence-Based Practice

*The evidence-based practice movement has become an important feature of health care systems and health care policy. Within this context, the APA 2005 Presidential Task Force on Evidence-Based Practice defines and discusses evidence-based practice in psychology (EBPP). In an integration of science and practice, the Task Force's report describes psychology's fundamental commitment to sophisticated EBPP and takes into account the full range of evidence psychologists and policymakers must consider. Research, clinical expertise, and patient characteristics are all supported as relevant to good outcomes. EBPP promotes effective psychological practice and enhances public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention. The report provides a rationale for and expanded discussion of the EBPP policy statement that was developed by the Task Force and adopted as association policy by the APA Council of Representatives in August 2005.*

**Keywords:** evidence-based practice; best available research evidence; clinical expertise; patient characteristics, culture, and preferences

From the very first conceptions of applied psychology as articulated by Lightner Witmer, who formed the first psychological clinic in 1896 (McKeynolds, 1997), psychologists have been deeply and uniquely associated with an evidence-based approach to patient care. As Witmer (1907/1996) pointed out, "the pure and the applied sciences advance in a single front. What retards the progress of one, retards the progress of the other; what fosters one, fosters the other" (p. 249). As early as 1947, the idea that doctoral psychologists should be trained as both scientists and practitioners became American Psychological Association (APA) policy (Slakow et al., 1947). Early practitioners such as Frederick C. Thorne (1947) articulated the methods by which psychological practitioners integrate science into their practice by "increasing application of the experimental approach to the individual case and to the clinician's own 'experience'" (p. 159). Thus, psychologists have been on the forefront of the development of evidence-based practice for decades.

Evidence-based practice in psychology is therefore consistent with the past 20 years of work in evidence-based medicine, which advocated for improved patient outcomes by informing clinical practice with relevant research (Sox & Woolf, 1993; Woolf & Atkins, 2001). Sackett, Rosenbarg, Gray, Haynes, and Richardson (1996) described evidence-based medicine as "the conscientious, explicit, and judicious use of current best evidence in making deci-

sions about the care of individual patients" (pp. 71-72). The use and misuse of evidence-based principles in the practice of health care has affected the dissemination of health care funds, but not always to the benefit of the patient. Therefore, psychologists, whose training is grounded in empirical methods, have an important role to play in the continuing development of evidence-based practice and its focus on improving patient care.

One approach to implementing evidence-based practice in health care systems has been through the development of guidelines for best practice. During the early part of the evidence-based practice movement, APA recognized the importance of a comprehensive approach to the conceptualization of guidelines. APA also recognized the risk that guidelines might be used inappropriately by commercial health care organizations not intimately familiar with the scientific basis of practice to dictate specific forms of treatment and restrict patient access to care. In 1992, APA formed a joint task force of the Board of Scientific Affairs, the Board of Professional Affairs, and the Committee for

The Task Force members were Carol D. Goodheart, EdD (Chair, Independent Practice, Princeton, NJ); Ronald F. Levant, EdD (ex-officio, University of Akron); David H. Barlow, PhD (Boston University); Jean Carter, PhD (Independent Practice, Washington, DC); Karan W. Davidson, PhD (Columbia University); Kristofer J. Haggblad, PhD (University of Missouri—Columbia); Steven D. Hollon, PhD (Vanderbilt University); Josephine D. Johnson, PhD (Independent Practice, Livonia, MI); Laran C. Leviton, PhD (Robert Wood Johnson Foundation, Princeton, NJ); Alvan R. Maher, PhD (Emory University of Ottawa); Frederick L. Newman, PhD (Florida International University); John C. Norcross, PhD (University of Scranton); Denis K. Silverman, PhD (New York University); Brian D. Smedley, PhD (The Opportunity Agenda, Washington, DC); Bruce E. Wampold, PhD (University of Wisconsin); Drew I. Westen, PhD (Emory University); Brian T. Yates, PhD (American University); Nolan W. Zane, PhD (University of California, Davis). Professional American Psychological Association (APA) staff included Geoffrey M. Reed, PhD, and Lynn F. Budka, PhD (Practice Directorate); Paul D. Nelson, PhD, and Cynthia D. Belar, PhD (Education Directorate); and Merry Bullock, PhD (Science Directorate).

The Task Force wishes to thank John Weisz, PhD, for his assistance in drafting portions of the report related to children and adolescents; James Mitchell and Omar Rahman, APA Professional Development Interns, for their assistance throughout the work of the Task Force; and Ernestine Penman for administrative support.

In August 2005, the APA Council of Representatives approved the policy statement on evidence-based practice in psychology developed by the Task Force and received a version of this report. The report contains an expanded discussion of the issues raised in the policy statement, including the rationale and references supporting it. The policy statement is available online at <http://www.apa.org/practice/ebpstatement.pdf> and as the Appendix of this article.

Correspondence concerning this article should be addressed to the Practice Directorate, American Psychological Association, 750 First Street NE, Washington, DC 20002-4242.

- APA Presidential Task Force on Evidence-Based Practice in 2005
  - EBPP is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences.”
  - the purpose ...to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention
- (APA, 2006, p. 273)

# Evidence-Based Practice in Psychology (EBPP)



## Evidence-Based Practice and Policy: Choices Ahead

Eileen Gambrill  
University of California, Berkeley

*Choices about how to view evidence-based practice (EBP) are being made by educators, practitioners, agency administrators, and staff in a variety of organizations designed to promote integration of research and practice such as clearinghouses on EBP. Choices range from narrow views of EBP such as use of empirically based guidelines and treatment manuals to the broad philosophy and evolving process of EBP, envisioned by its originators, that addresses evidentiary, ethical, and application issues in a transparent context. Current views of EBP and policy are reviewed, and choices that reflect the adopted vision and related indicators are described. Examples include who will select the questions on which research efforts are focused, what outcomes will be focused on, who will select them and on what basis, how transparent to be regarding the evidentiary status of services, how clients will be involved, and whether to implement needed organizational changes. A key choice is whether to place ethical issues front and center.*

**Keywords:** evidence-based practice; choices; ethics; transparency

Choices about how to view evidence-based practice (EBP) are being made not only by educators, practitioners, and agency administrators but also by staff in a wide variety of organizations designed to promote the integration of research and practice. There are many such organizations including the Millbank Memorial Fund, which recently published *Evidence-Based Mental Health Treatments and Services* (Lehman, Goldman, Dixon, & Churchill, 2004), the Urban Institute, and the Rand Corporation. Regional organizations include the Bay Area Social Services Consortium (BASSC) and the recently formed California Child Welfare Clearinghouse for Evidence-Based Practice. The latter "exists to promote a quality practices framework for California's child welfare service system to ensure that children are safe and stable in families that can nurture them and assure their well being" (California Child Welfare Clearinghouse for Evidence-Based Practice, 2005). Such an organization may influence how educators, administrators, clients, and practitioners view EBP. What view of EBP will staff in

such organizations embrace? Will they define this narrowly as basing decisions on practice-related research or using practice guidelines? Will they use the name but not the substance—continue business as usual? These questions are of vital importance because these organizations have an impact on the decisions made by educators and agency administrators, which in turn influence the decisions of practitioners and clients. Indeed, the very purpose of some is to advise administrators what services should be used. Consider the following:

The Clearinghouse will provide guidance on selected evidence based practices to statewide agencies, counties, public and private organizations, and individuals in simple straightforward formats reducing the "consumers" need to conduct literature searches, review extensive literature, or understand and critique research methodology. The Clearinghouse, using both a state advisory committee and a national panel of scientific advisors, will identify areas of priority interest and establish a set of criteria to select highly relevant evidence based practices to be included in the Clearinghouse database for dissemination. (California Child Welfare Clearinghouse for Evidence-Based Practice, 2005, n.p.)

**Author's Note:** Portions of this article were presented as a keynote address at the Leadership Symposium on Evidence-based Practice in the Human Services, sponsored by the California Social Work Education Center and the Child and Family Institute of California, Sacramento, California, July 14th, 2005. This article was invited by the editor. Correspondence concerning this article should be addressed to Eileen Gambrill, PhD, School of Social Welfare, Haviland Hall, University of California, Berkeley, Berkeley, CA 94720-7400; e-mail: gambrill@berkeley.edu.

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What criteria will be used to identify "highly relevant evidence based practices"? The report from the Millbank Memorial Fund (Lehman et al., 2004) lists multisystemic therapy (MST) as an EBP, as does the aforementioned clearinghouse. Is there evidence that it is effective? Choices made reflect different views of EBP and policy that have been evident in the professional literature for some time. Choices and indicators that can be used to reveal them are described in this article.

- The process and policy of Evidence-based practice in social work as a decision-making process designed to help social workers to integrate ethical, evidentiary, and application concerns

(Gambrill, 2006)

# Evidence-Based Practice in Social Work (EBPSW)



## 4. Inter-disciplinarity





# Growing trend of Interdisciplinary Collaboration

- Health X Social Work
- Education X Social Work
- Law X Social Work
- Art X Social Work
- Business X Social Work
- Housing X Social Work
- Combinations of above



# Three types of professional competencies

FIGURE 4: Barr's (1998) three types of professional competencies

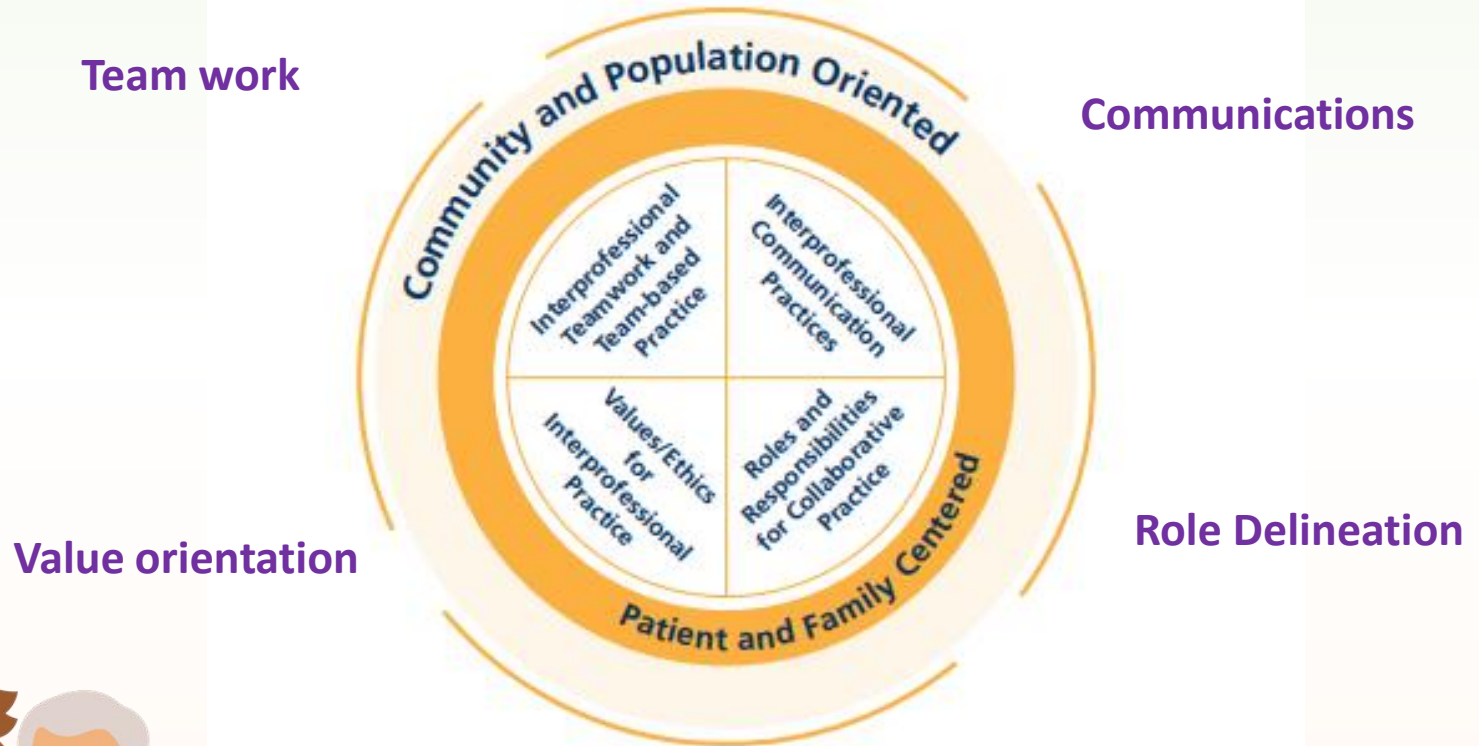


(Interprofessional Educational Collaborative Expert Panel, 2011, P.13)



# Interprofessional Collaborative Practice Domains

FIGURE 6: Interprofessional Collaborative Practice Domains



  
The Learning Continuum pre-licensure through practice trajectory

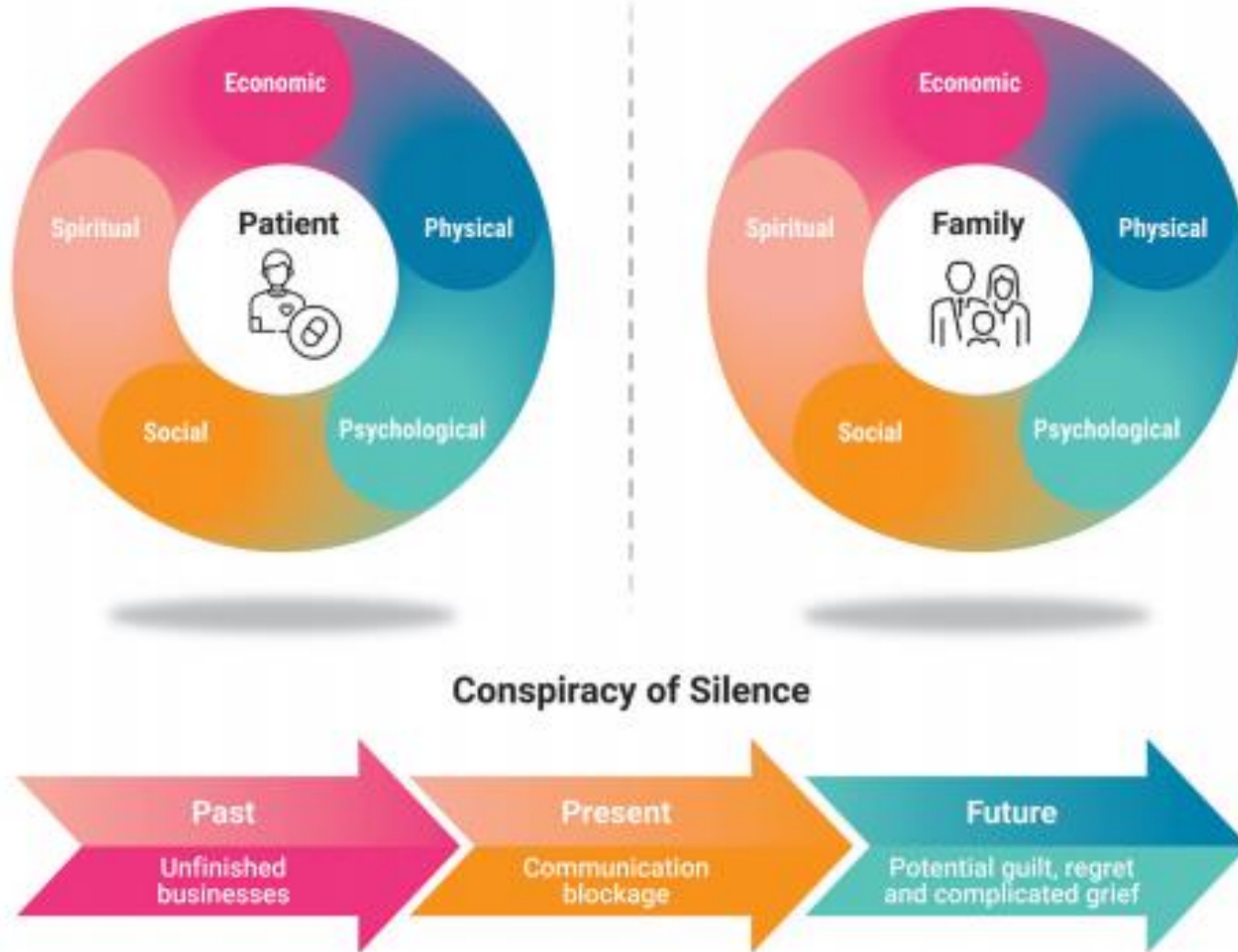
(Interprofessional Educational Collaborative Expert Panel, 2011, P.15)



## 5. Evaluation of Complex Intervention



# Complex Needs of Patients and Family Members





## Developing and evaluating complex interventions:

Following considerable development in the field since 2006, MRC and NIHR have jointly commissioned an update of this guidance to be published in 2019.

Prepared on behalf of the Medical Research Council by:

Peter Craig, MRC Population Health Sciences Research Network  
Paul Dieppe, Nuffield Department of Orthopaedic Surgery, University of Oxford  
Sally Macintyre, MRC Social and Public Health Sciences Unit  
Susan Michie, Centre for Outcomes Research and Effectiveness, University College London  
Irwin Nazareth, MRC General Practice Research Framework  
Mark Petticrew, Department of Public Health and Policy, London School of Hygiene and Tropical Medicine

[www.mrc.ac.uk/complexinterventionsguidance](http://www.mrc.ac.uk/complexinterventionsguidance)

## Box 2 What makes an intervention complex?

Some dimensions of complexity

- Number of and interactions between components within the experimental and control interventions
- Number and difficulty of behaviours required by those delivering or receiving the intervention
- Number of groups or organisational levels targeted by the intervention
- Number and variability of outcomes
- Degree of flexibility or tailoring of the intervention permitted

Implications for development and evaluation

- A good theoretical understanding is needed of how the intervention causes change, so that weak links in the causal chain can be identified and strengthened
- Lack of impact may reflect implementation failure (or teething problems) rather than genuine ineffectiveness; a thorough process evaluation is needed to identify implementation problems.
- Variability in individual level outcomes may reflect higher level processes; sample sizes may need to be larger to take account of the extra variability, and cluster- rather than individually-randomized designs considered.
- Identifying a single primary outcome may not make best use of the data; a range of measures will be needed, and unintended consequences picked up where possible.
- Ensuring strict fidelity to a protocol may be inappropriate; the intervention may work better if adaptation to local setting is allowed.

(MRC, 2018, P.7)

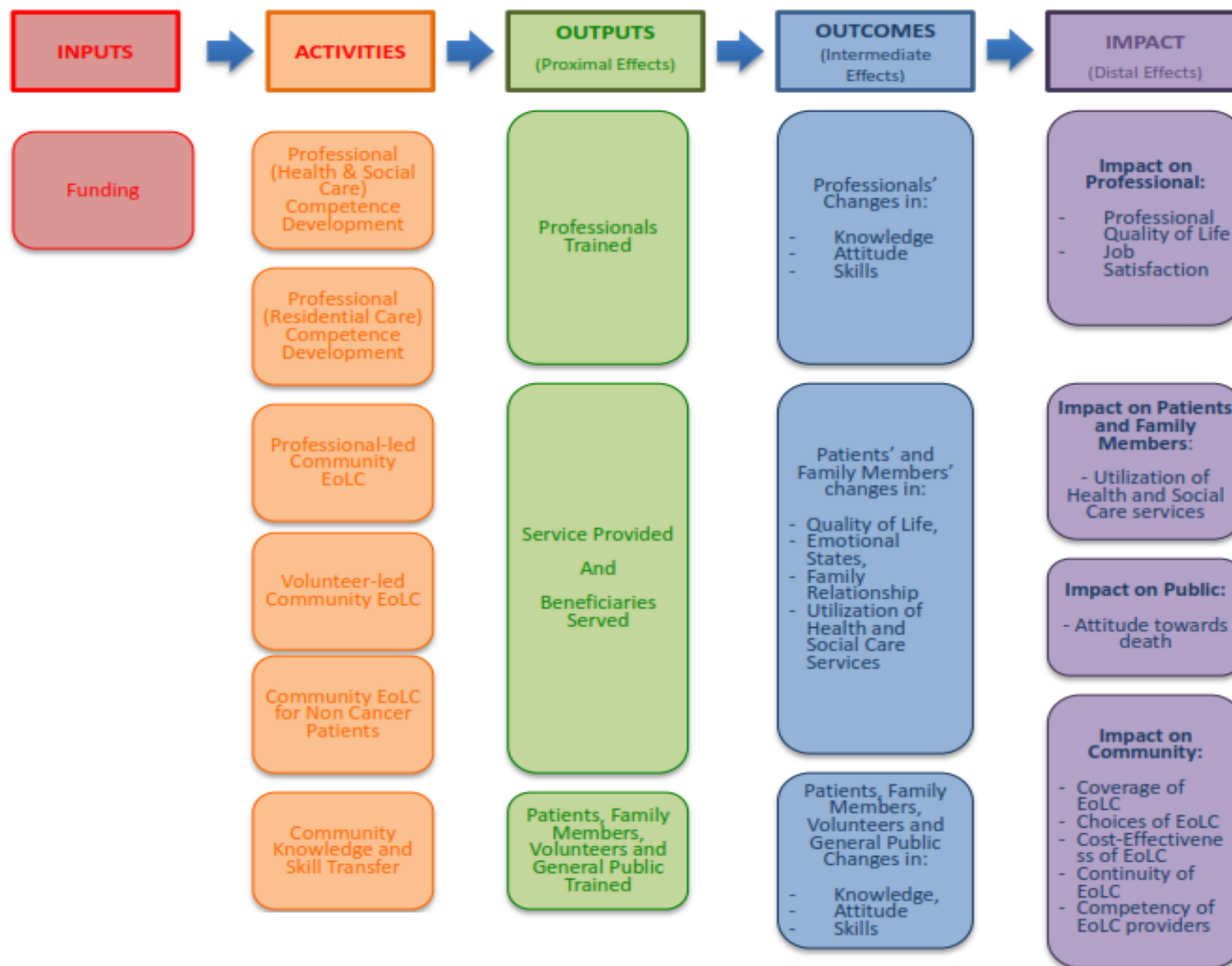


# Evaluation Framework (IOM, 2014)

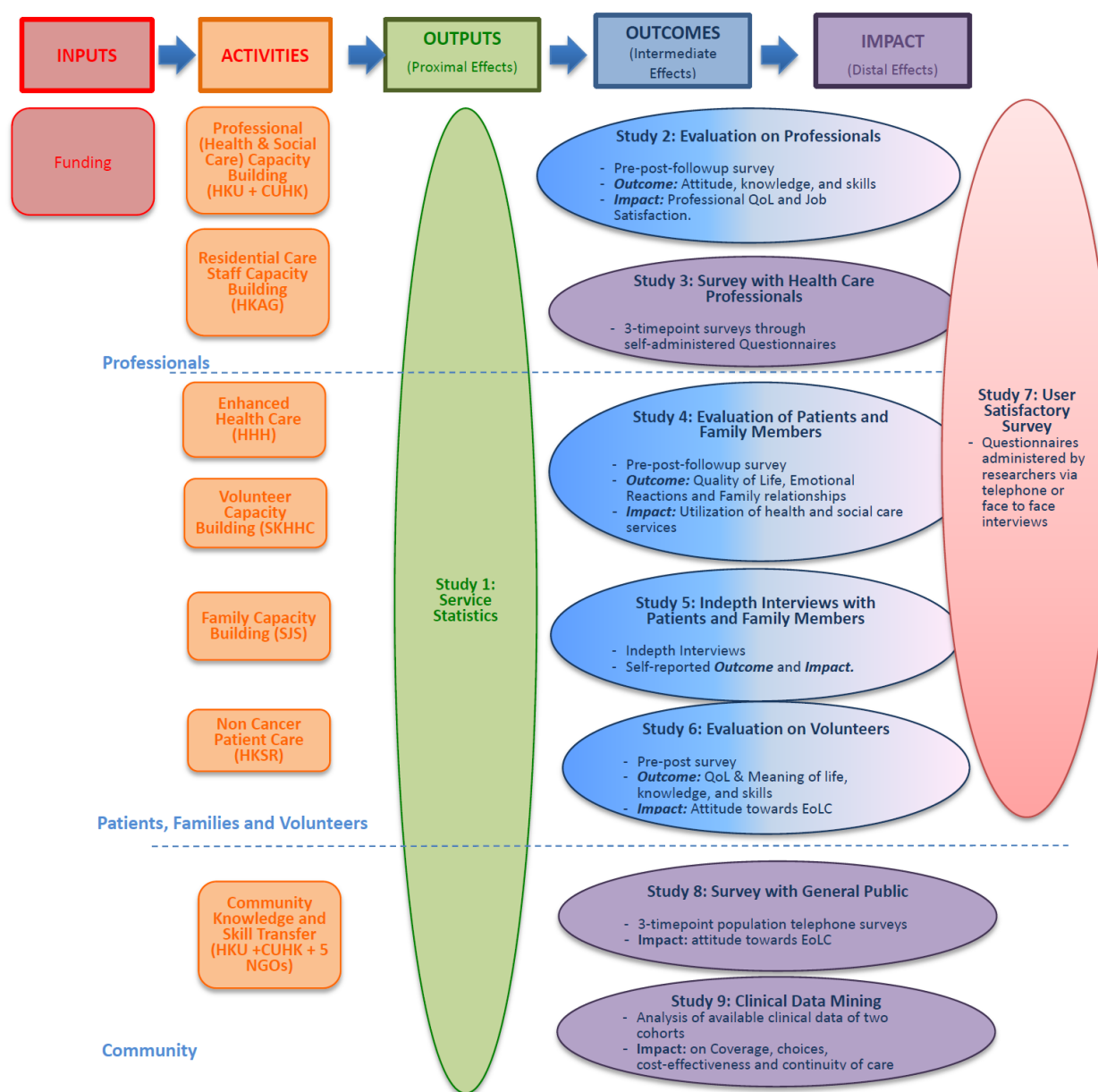
賽馬會安寧頌



Community Care Project



# Evaluation Component



## Challenges

- Inform consent
- Respect autonomy to participation
- Random assignment of intervention
- Participants' induced distress
- Validated measurement
- Recalled biases
- Small n
- Attrition



# Process Evaluation of Complex Intervention (Moore et al., 2019)

## Process evaluation of complex interventions

### UK Medical Research Council (MRC) guidance

Prepared on behalf of the MRC Population Health Science Research Network by:

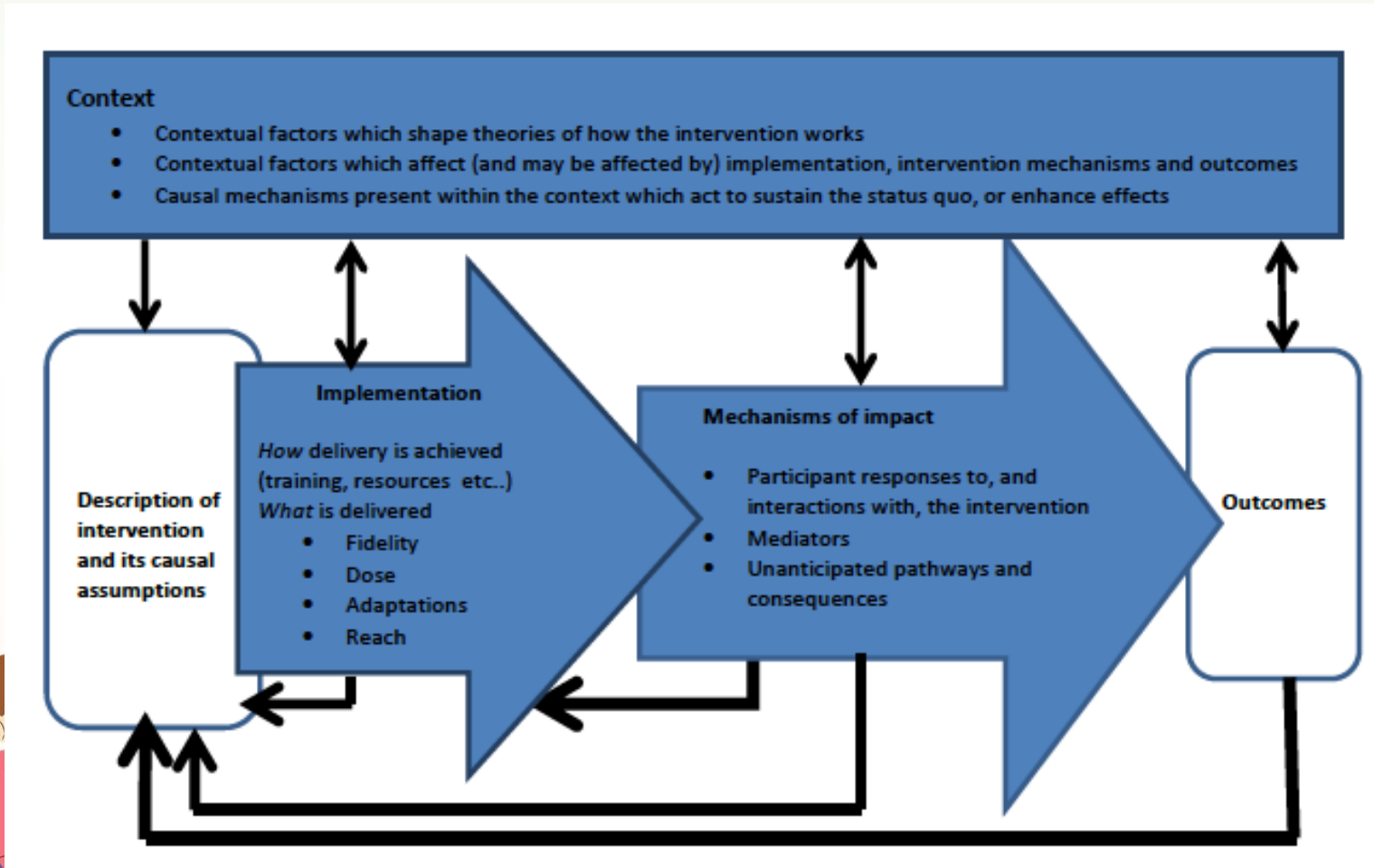
Graham Moore<sup>1,2</sup>, Suzanne Audrey<sup>1,3</sup>, Mary Barker<sup>4</sup>, Lyndal Bond<sup>5</sup>, Chris Bonell<sup>6</sup>, Wendy Hardeman<sup>7</sup>, Laurence Moore<sup>8</sup>, Alicia O’Cathain<sup>9</sup>, Tannaze Tinati<sup>4</sup>, Danny Wight<sup>8</sup>, Janis Baird<sup>3</sup>

*1 Centre for the Development and Evaluation of Complex Interventions for Public Health Improvement (DECIPHER), 2 Cardiff School of Social Sciences, Cardiff University. 3 School of Social and Community Medicine, University of Bristol. 4 MRC Lifecourse Epidemiology Unit (LEU), University of Southampton. 5 Centre of Excellence in Intervention and Prevention Science, Melbourne. 6 Institute of Education, University of London. 7 Primary Care Unit, University of Cambridge. 8 MRC/CSO Social & Public Health Sciences Unit (SPHSU), University of Glasgow. 9 School of Health and Related Research (SchARR), University of Sheffield.*

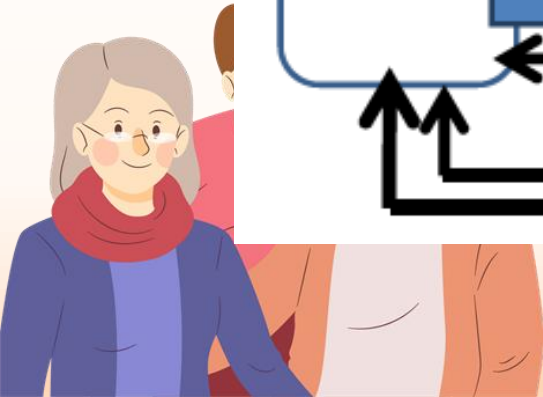
- Evaluation of Process:
  - The importance of theory: mechanism of change of the intervention
  - The importance of Context
  - Description of intervention: how and what has been delivered
  - Sampling: all for important data and purposive sampling for indepth analysis

# Process Evaluation of Complex Intervention (Moore et al., 2019)

## • Framework of Evaluation of Process



• (Moore et al., 2019, p. 24)

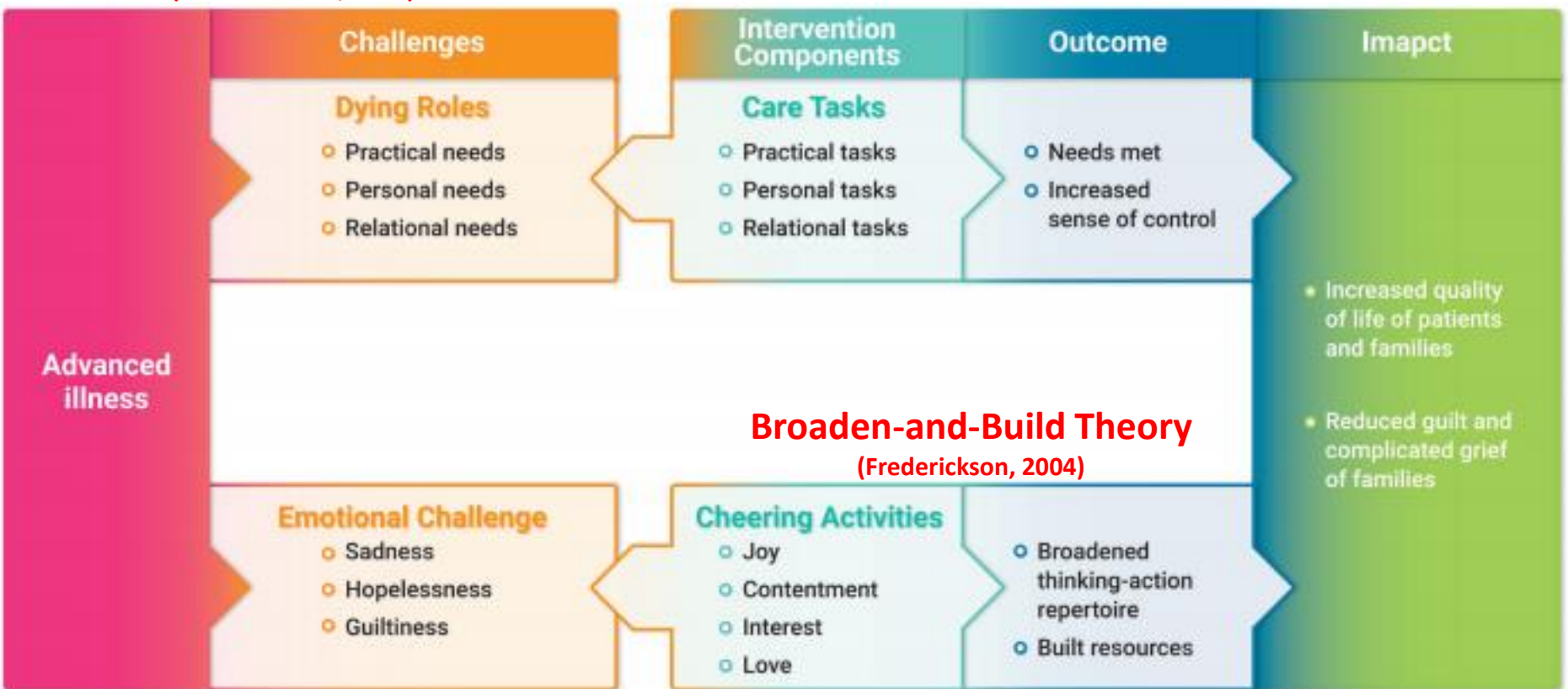


# St. James' Settlement Cheering@Home Project

## • The Mechanism of Change of the Intervention

### Dying Role Theory

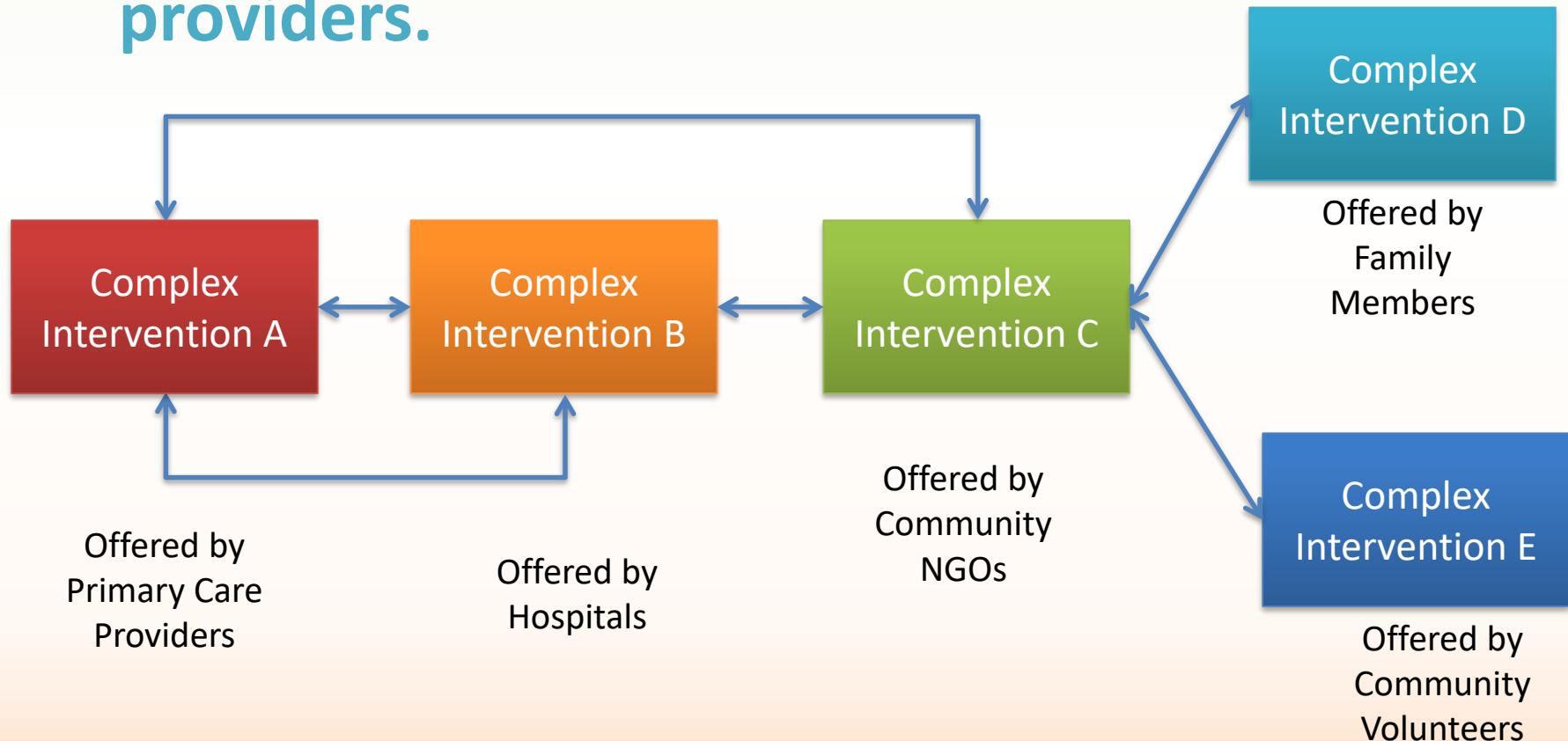
(Emanuel et al., 2007)



(Chow, Chau, Yu and Mak, 2019, p.139)

# Complex Intervention in a Complex Condition

- Complex intervention as part of Complex intervention offered by a system of care providers.





- While intervention is complex, evaluation is even more complex
  - The purpose of evaluation: what works the best for patient and family?
  - The process of evaluation: what reduces the induced distress of evaluation? (shared record and relevant data collection only)
  - The use of findings: how can we improve the care?



- **Time Efficiency**
  - shorter duration
  - Better expectation communication
  - Better engagement skills to reduce testing out period
  - reduction of components which are not leading to outcome



- **Resource Efficiency**
  - Higher ratio of Useful Output / Total Input
  - Conservation of energy by reduction of unnecessary input such as filling form & statistics



## 6. Evaluation of the Project



# Overview of Project Output

*\*As at 31 December 2018*



**5,002**

Patients and  
family members  
served

**586**

volunteers  
engaged and  
trained

**36**

elderly homes  
participated



**8,192**

health and social  
care professionals

**2,256**

professional and  
frontline staff of  
elderly homes



**29,025**

participants attended  
1,377 community  
education  
programmes and  
events

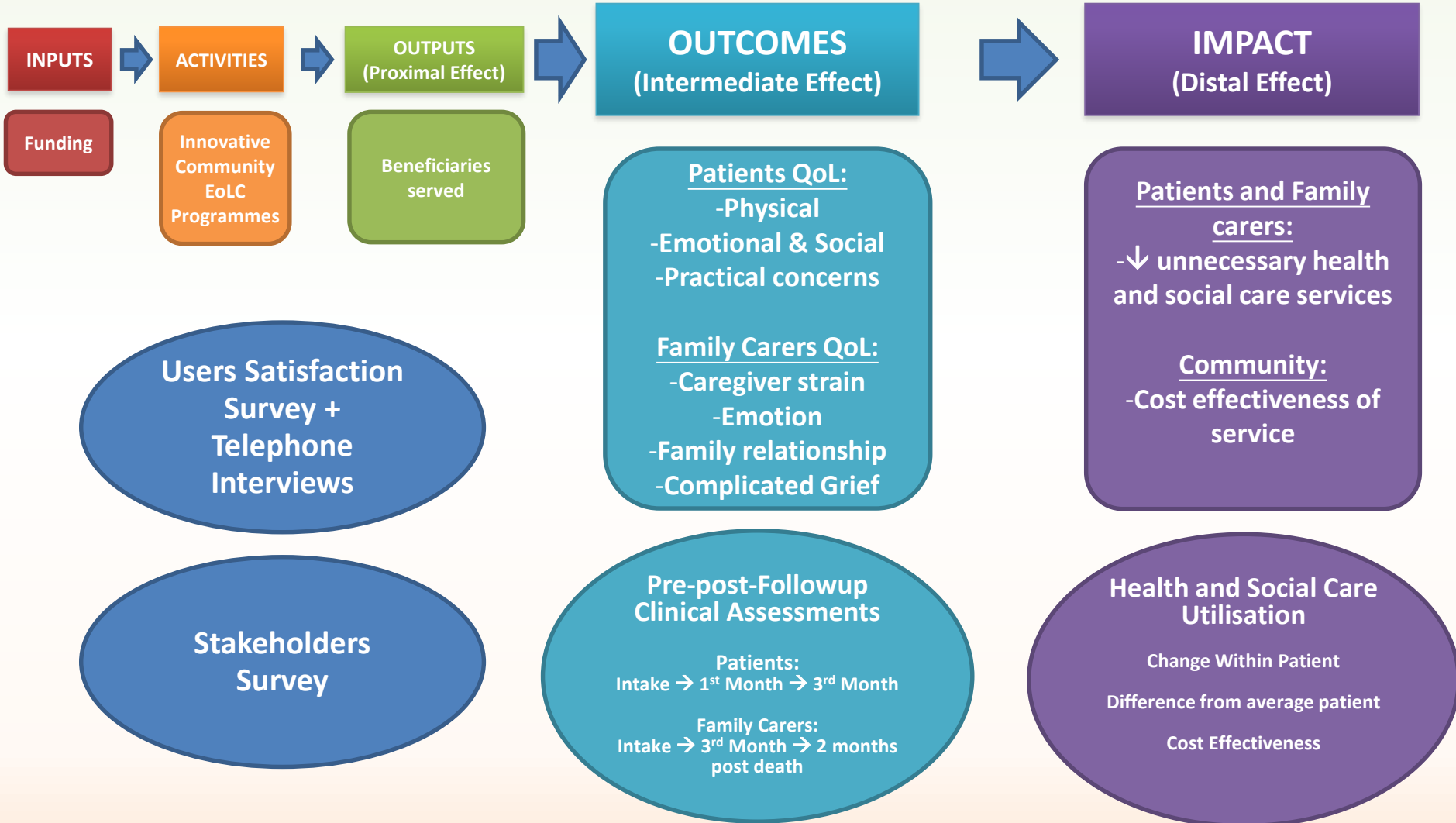
**350,000+**

views through  
multi-media channels  
(i.e. project website,  
mini-movie and case  
videos)

**5,600,000**

readership of  
43 Newspaper reports  
(i.e. press conference and  
regular newspaper  
columns)

# Evaluation Framework and Methods



# Standardized Assessment tools

Patients



- Integrated Palliative Care Outcome Scale (IPOS)
- Medical service utilization in the last 6 months of life



Family carers



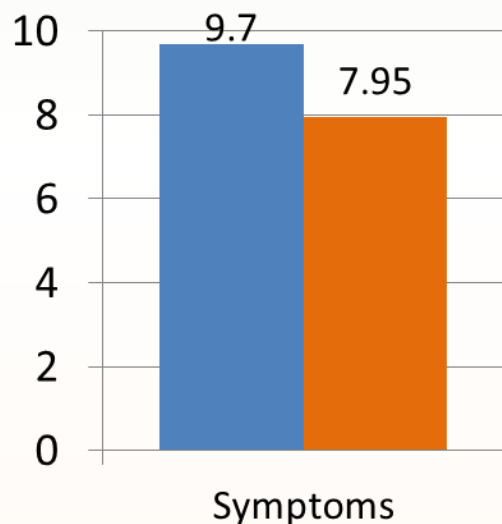
- 13-item Chinese version Modified-Caregiver Strain Index (C-M-CSI) (*Chan, Chan, & Suen, 2013; Onega, 2008*)
- Level of intimacy with patient
- Family anxiety (IPOS)
- 19-item Chinese inventory of complicated grief (*Prigerson et al, 1995; Tang & Chow, 2017*)



# Outcomes of the Project

## Physical Symptoms (N=266)

\*↓ 18%

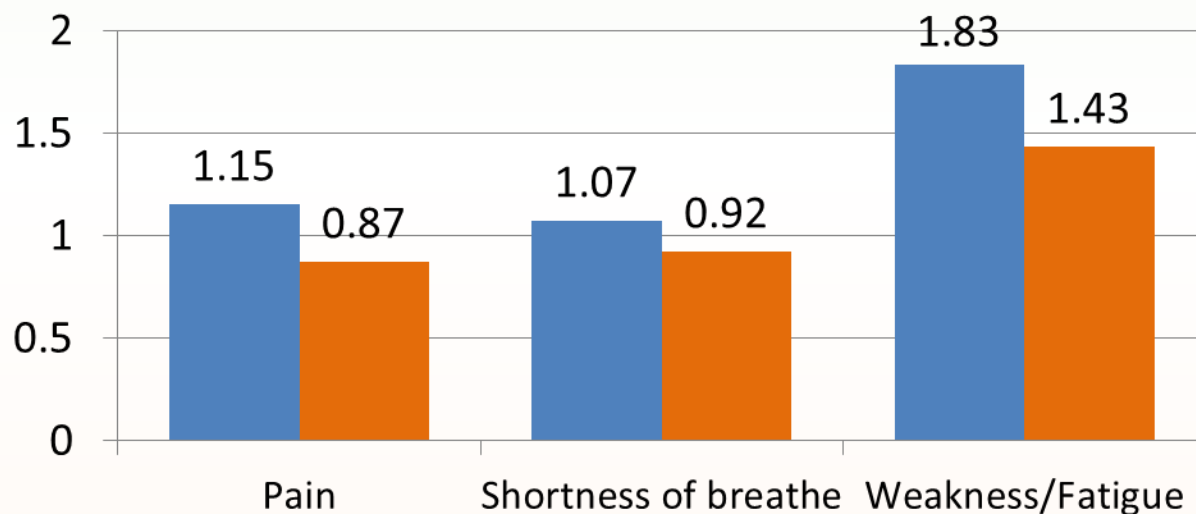


## Specific Physical Symptoms (N=277-282)

\*↓ 24%

\*↓ 14%

\*↓ 22%



■ Intake ■ After 3 months

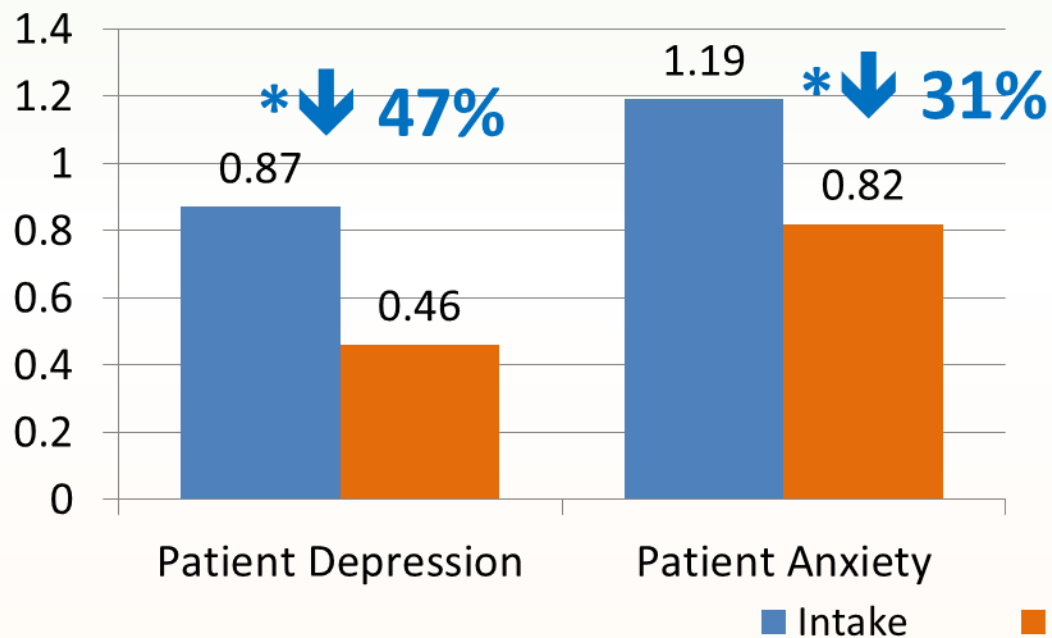
As measured by Integrated Palliative Care Outcome Scale (IPOS) of King's College

These analysis was based on 283 Patients have been assessed at intake and 3<sup>rd</sup> month

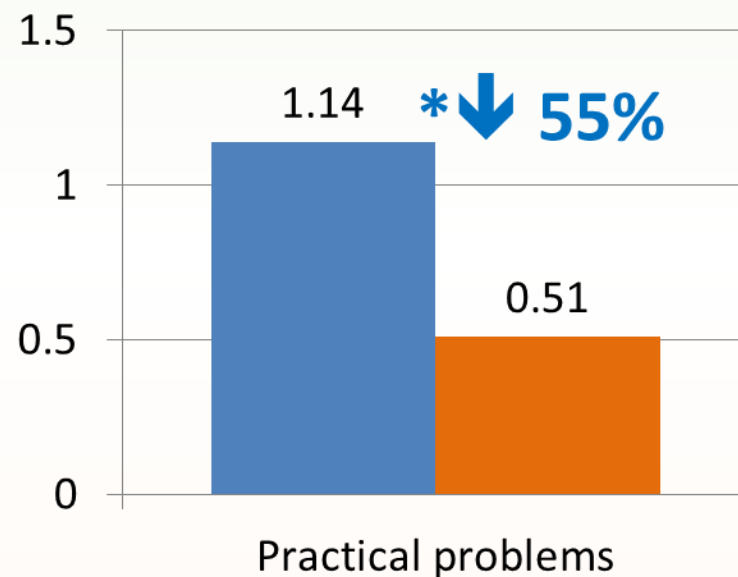
\* $p < .05$  for paired t-test; The percentages represent the % of changes of mean score between intake and after 3 months

# Outcomes of the Project

## Patients' Emotional Symptoms (N=263-271)



## Patients' Practical Problems (N=276)



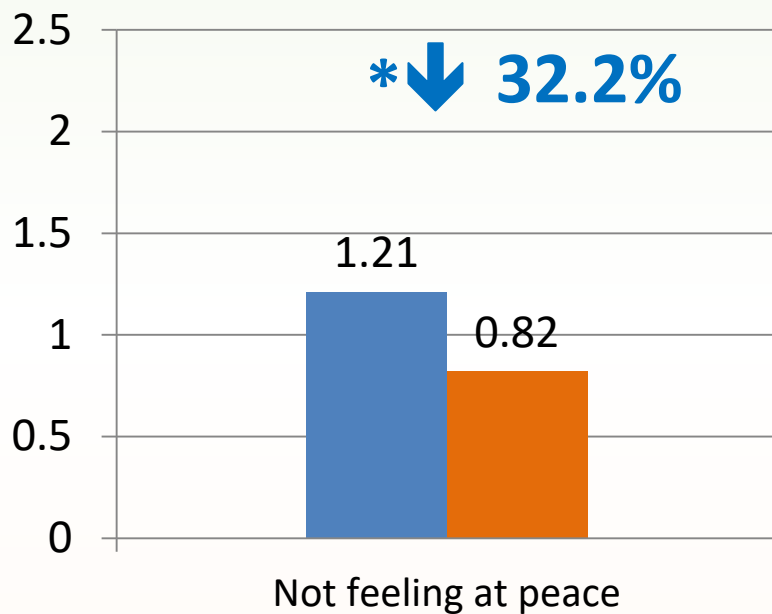
*As measured by Integrated Palliative Care Outcome Scale (IPOS) of King's College*

*These analysis was based on 283 Patients have been assessed at intake and 3<sup>rd</sup> month*

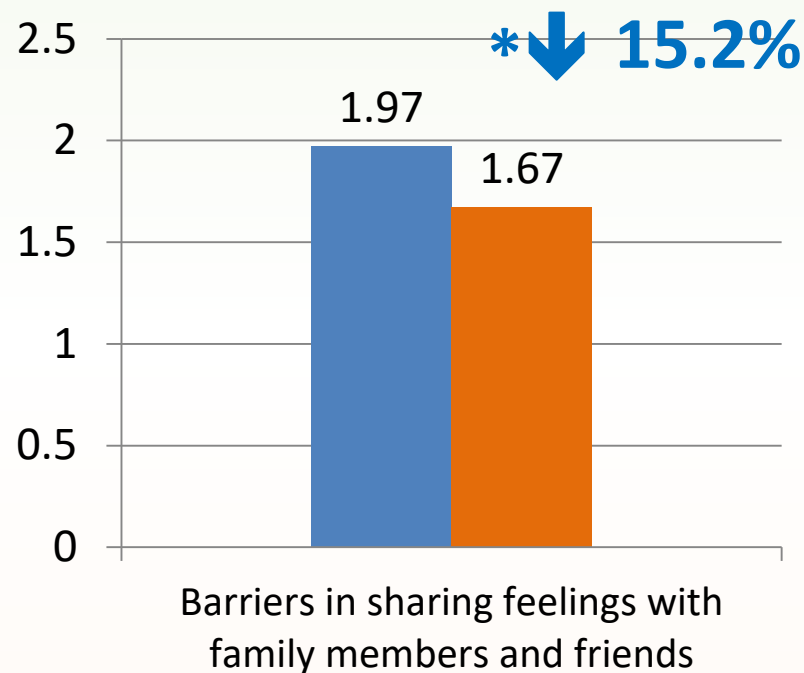
*\*p<.05 for paired t-test; The percentages represent the % of changes of mean score between intake and after 3 months*

# Outcomes of the Project

## Spiritual distress (N=263)



## Social barrier (N=256)



■ Intake      ■ After 3 months

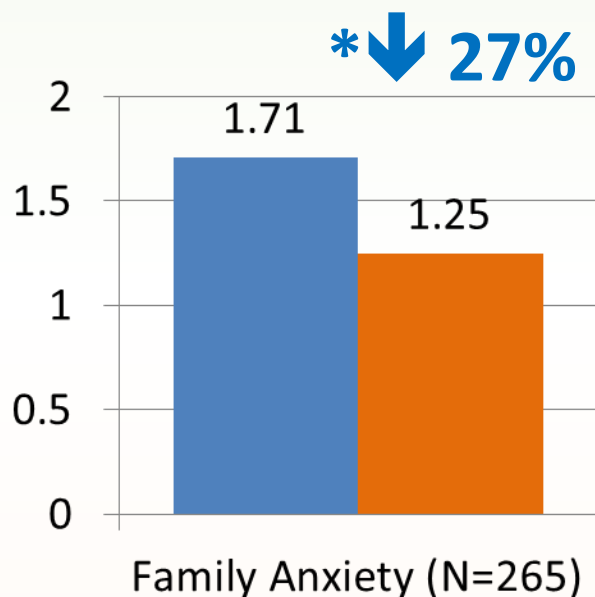
As measured by Integrated Palliative Care Outcome Scale (IPOS) of King's College

These analysis was based on 283 Patients have been assessed at intake and 3<sup>rd</sup> month

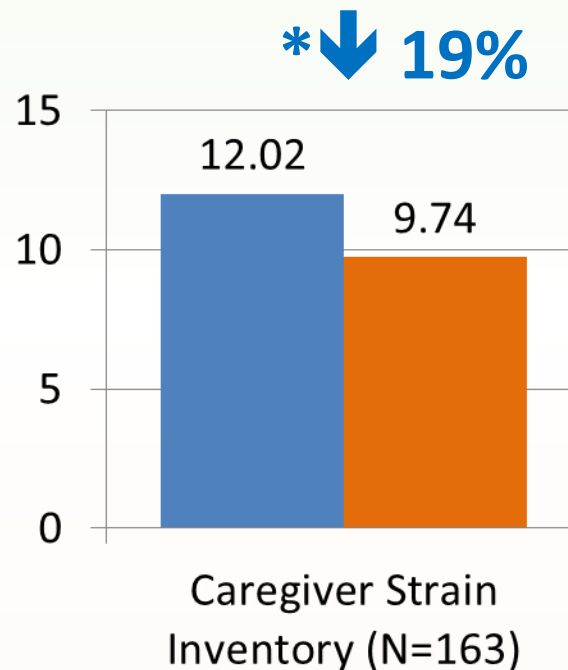
\* $p < .05$  for paired t-test; The percentages represent the % of changes of mean score between intake and after 3 months

# Outcomes of the Project

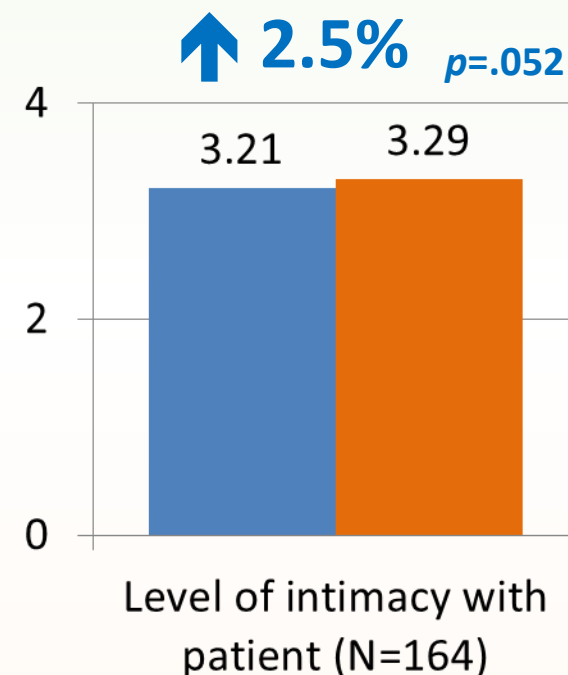
## Family Anxiety



## Caregiving burden



## Family relationship



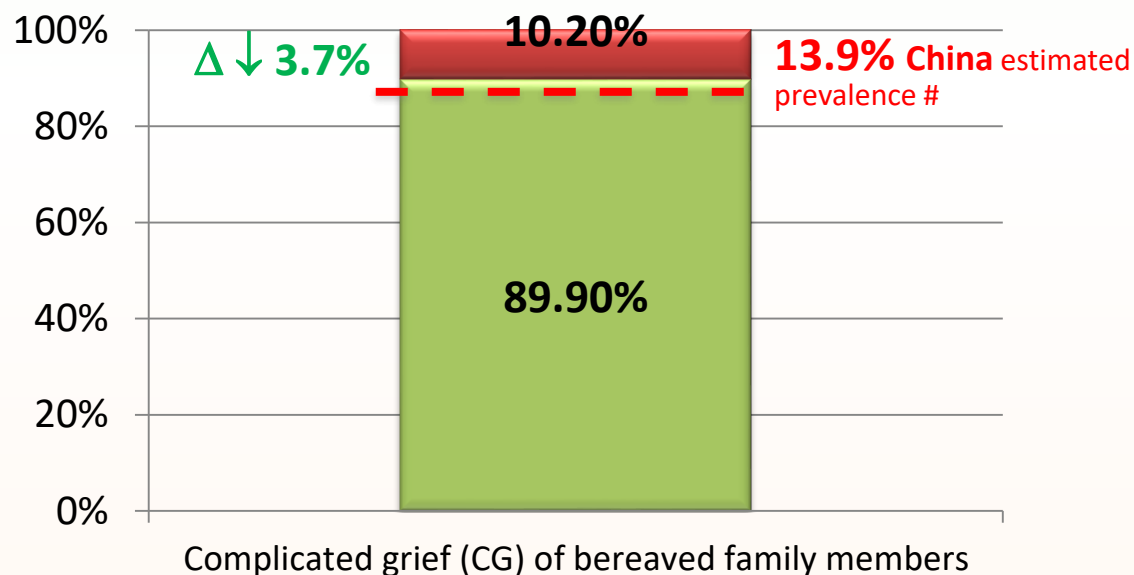
■ Intake ■ After 3 months

*"Family anxiety" was based on the response from 265 Patients have been assessed at intake and 3<sup>rd</sup> month; caregiver strain and family relationship were based on the response from 164 caregivers with intake and 3<sup>rd</sup> month assessments  
\*p<.05 for paired t-test; The percentages represent the % of changes of mean score between intake and after 3 months*

# Outcomes of the Project

## Bereavement outcomes of family members (N=166)

- High risk group (scored above 25 on the inventory of complicated grief)
- Low risk group (scored 25 or below on the inventory of complicated grief)



# Li, J., & Prigerson, H. G. (2016). Assessment and associated features of prolonged grief disorder among Chinese bereaved individuals. *Comprehensive Psychiatry*, 66, 9-16. doi:doi.org/10.1016/j.comppsy.2015.12.001

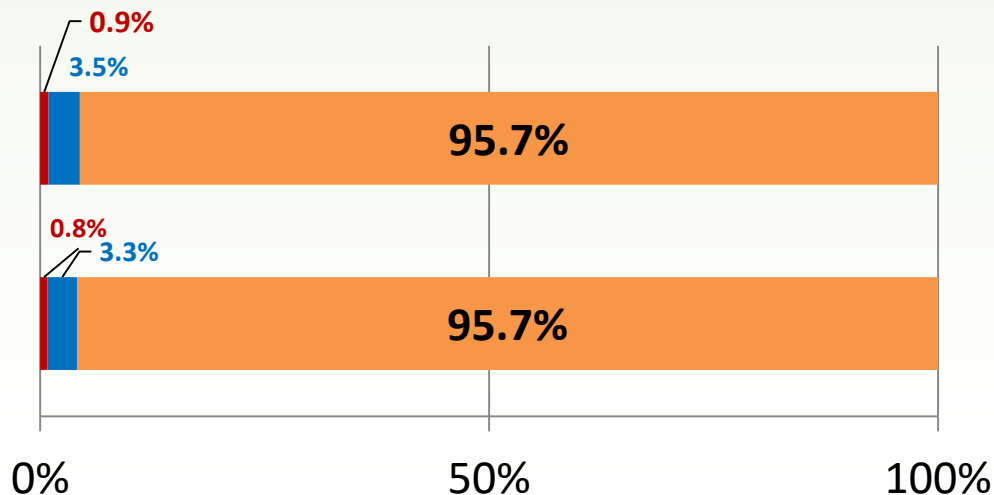
# Outcomes of the Project

## Patients (n=120)



Overall service satisfaction

Services met your needs

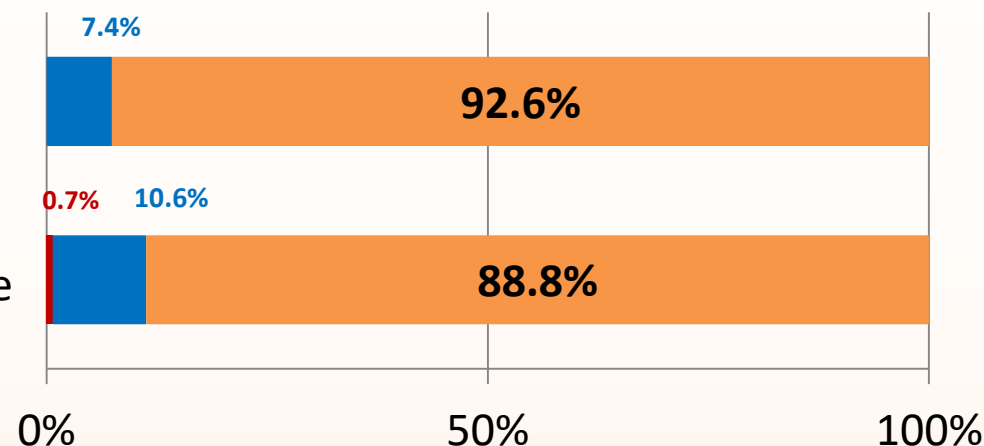


## Carers (n=148)



Overall service satisfaction

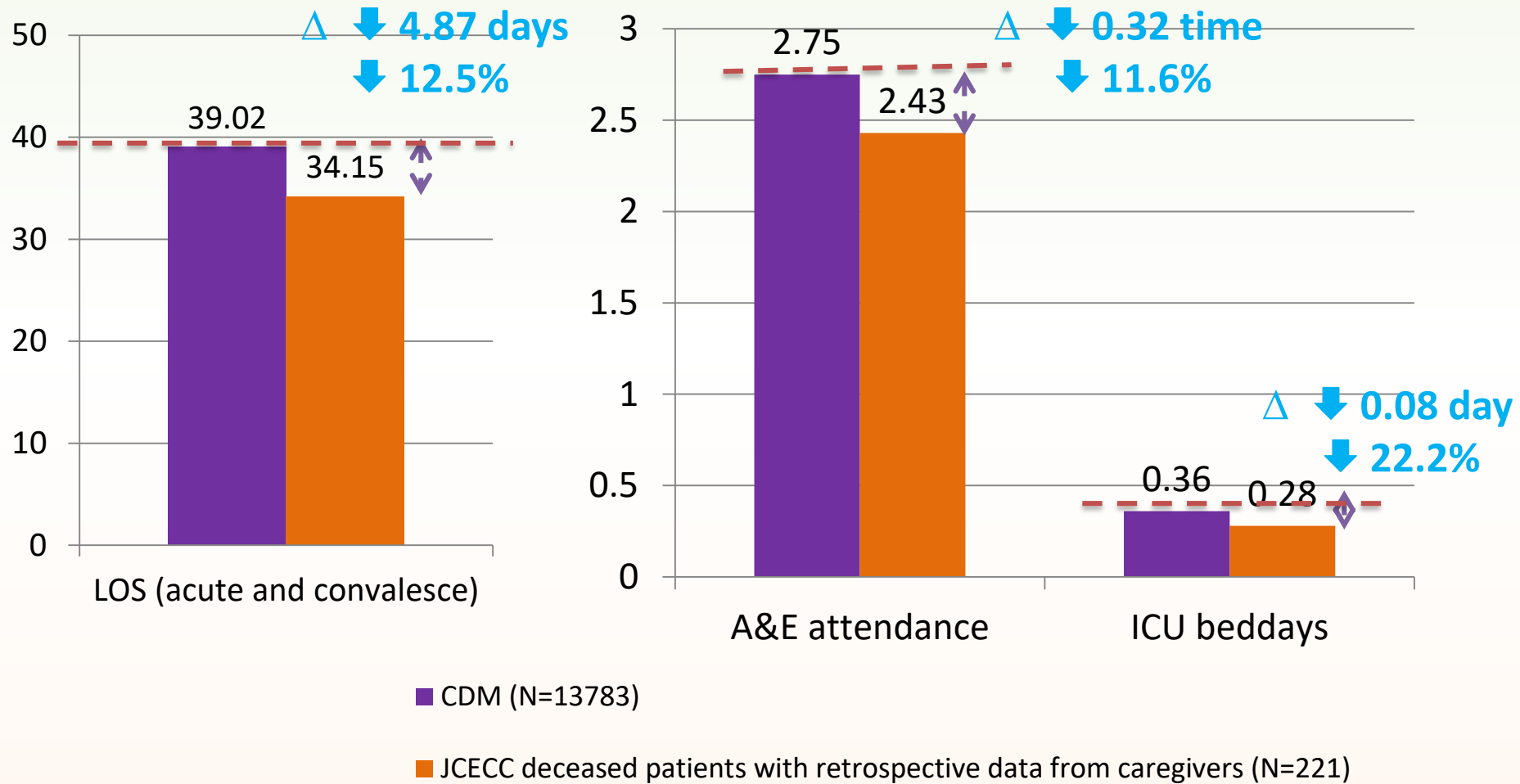
Services effectively helped you take care of patient at home



■ Unsatisfied (1-4)    ■ Satisfactory (5-6)    ■ Very satisfied (7 or above)

Note: Data collected between Jan 2016 and June 2020 is analysed

# Impact on Health Care Utilization of Patients





# Impact on Health Care Utilization of Patients

- Based on the calculation of the 777 patients served by our project from 2016 to 2018, JCECC...



Offered 3784 hospital bed days for other needy patients



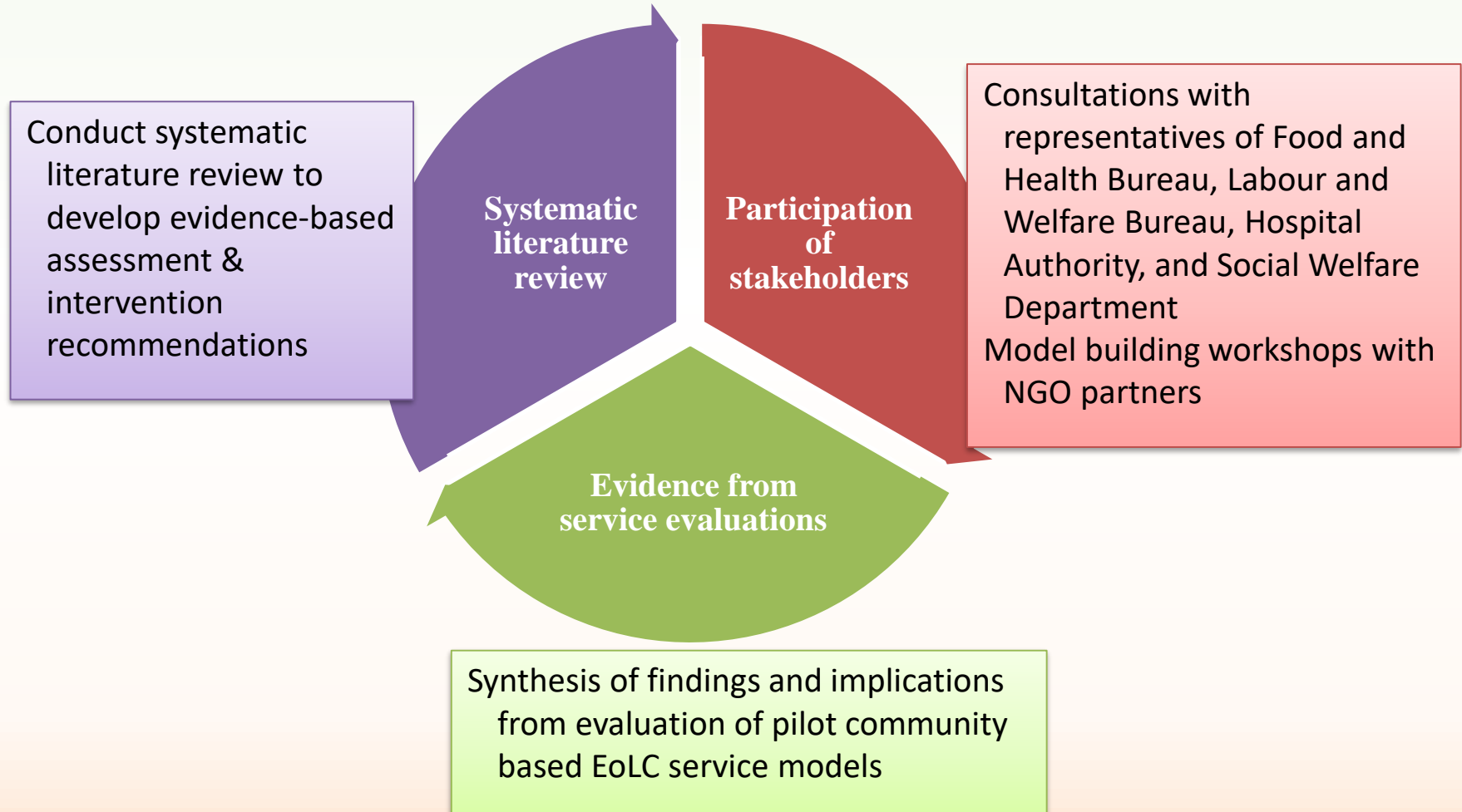
Offered 62 ICU bed days for other needy patients



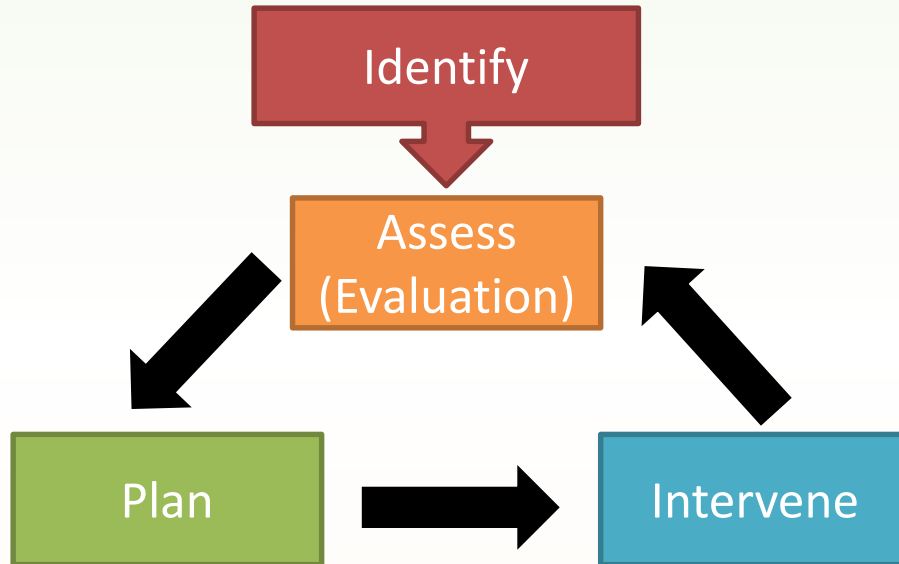
Reduced 249 A&E visits

# Integrated Community End-of-Life Care Support Team (ICEST) Model

- Evidence-driven, stakeholder participatory process



# Integrated Community End-of-Life Care Support Team (ICEST) Model



Developed in Jan 2019

# Standardised Assessment for Need Based Intervention

- Needs assessment: Multi-dimensional assessments on patients and caregivers' needs
- Clinical: 3-Ps (physical, psychosocial spiritual, practical) assessment composed of need-level-stratifying indicators for care planning
- Outcome evaluation: repeated assessments to evaluate outcomes

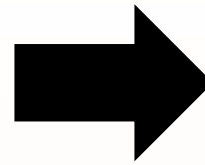


# Technology-facilitated Real Time Assessment

Online assessment platform will be handy for indicating need areas in real time



Use of tablet for assessment



Real-time summary/report on assessment

# Multi-dimensional need assessment results with need levels

賽馬會安寧頌



Jockey Club End-of-Life Community Care Project

病人定點評估結果

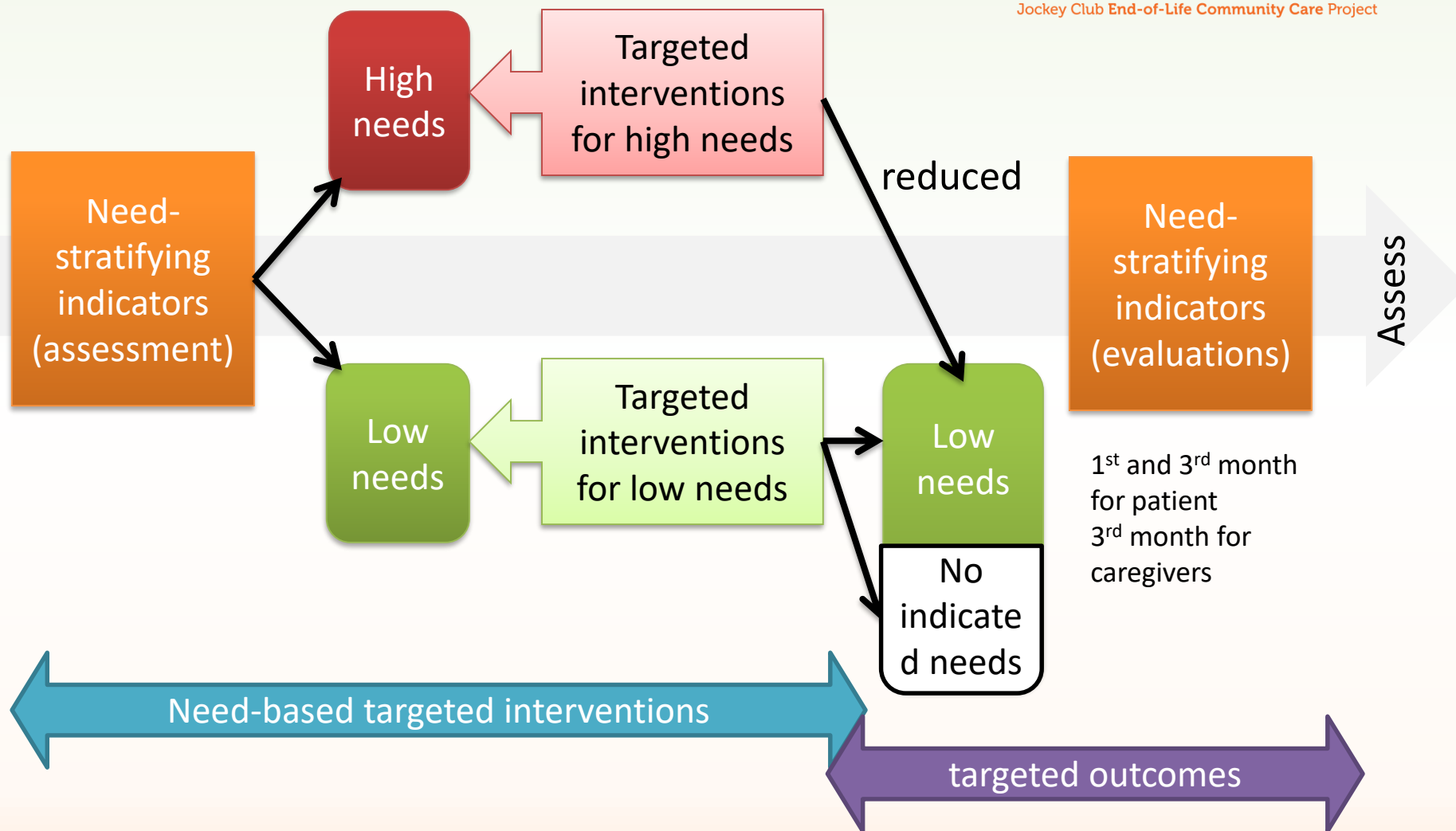
		PT0	PT1	PT2
評估日期		2019-03-28	2019-04-29	2019-07-02
Physical	患者身體症狀	H	H	H
	患者無慮情緒	L	L	L
Psychosocial	患者抑鬱情緒	L	L	L
	患者心靈支援	H	H	L
	患者社交需要	H	L	L
	患者家庭關係促進需要	H	NO	NO
	患者照顧計劃需要	H	H	NO
Practical	患者生活實際困難	H	L	L
	患者資訊需要	H	L	H

家屬定點評估結果

		第一次評估	第二次評估	第三次評估
		CG T0	CG T1	CG T2
評估日期		2019-03-28	2019-07-02	
Psychosocial	家屬抑鬱	H2	L	/
	家屬無慮	L	NO	/
	家屬照顧計劃需要	H	H	/
	家屬複雜性哀傷危機	L	L	/
	家屬複雜性哀傷	/	/	
Practical	家屬照顧壓力	H	NO	/
	家屬資訊需要	L	NO	

H1 High (top) need   H2 High (middle) need   L Low   No No indicated

# Need-based targeted intervention





# Development of Intervention Recommendations

- Literature search on evidence-based clinical practice in palliative and EoLC and relevant practice guidelines according to the search strategy in Clinical Decision Support Tool developed for the IPOS items

van Vliet et al. *BMC Medicine* (2015) 13:263  
DOI 10.1186/s12916-015-0449-6



## GUIDELINE

Open Access



How should we manage information needs, family anxiety, depression, and breathlessness for those affected by advanced disease: development of a Clinical Decision Support Tool using a Delphi design

Liesbeth M. van Vliet<sup>1\*</sup>, Richard Harding<sup>1</sup>, Claudia Bausewein<sup>2</sup>, Sheila Payne<sup>3</sup>, Irene J. Higginson<sup>1</sup>  
and on behalf of EUROIMPACT



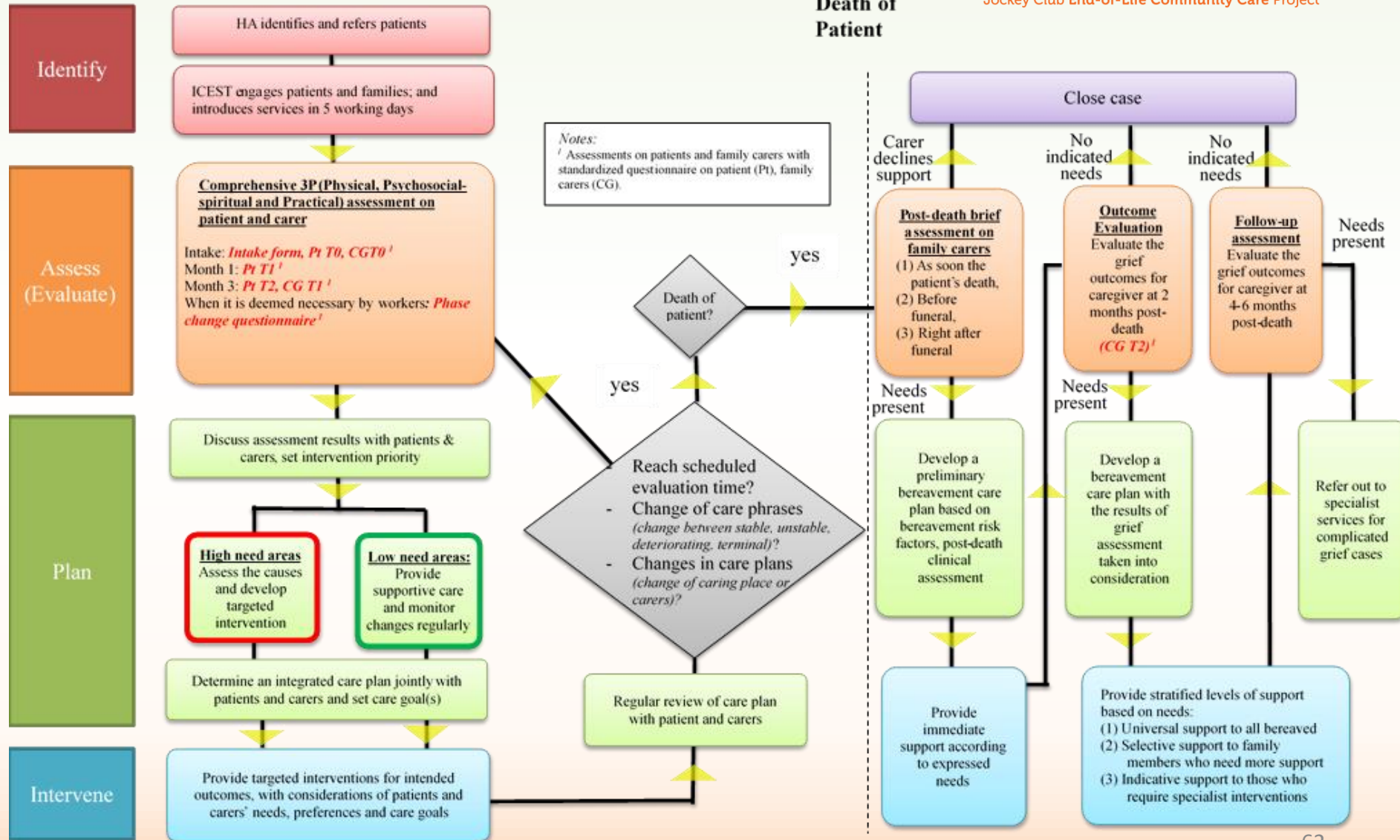
Full manual including references and evidence

Clinical Decision Support Tool for the interpretation of and response to Palliative care Outcome Scale (POS) scores for:

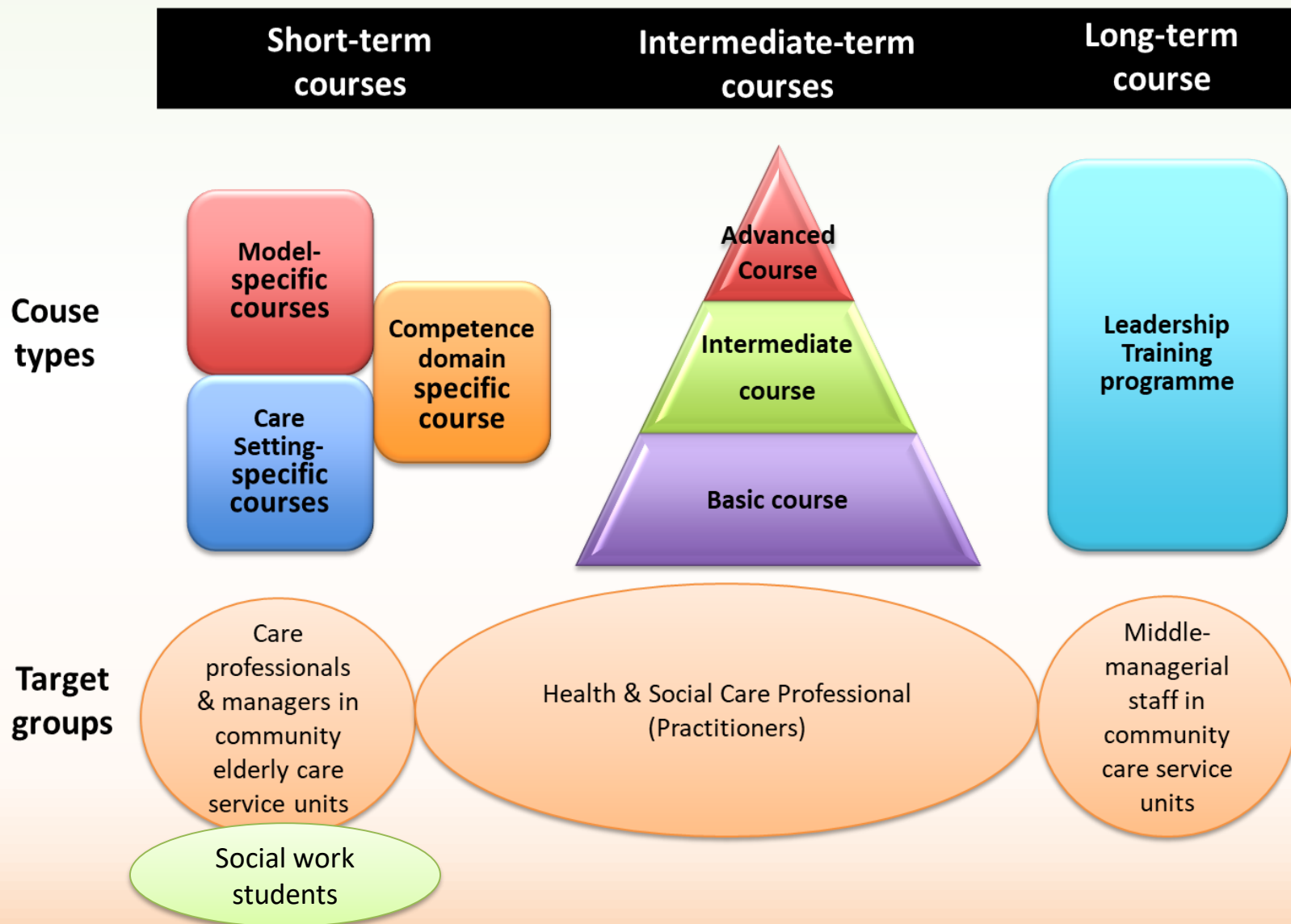
- information needs
- family anxiety
- depression
- breathlessness

(van Vliet, Harding, Bausewein, Payne, & Higginson, 2015)

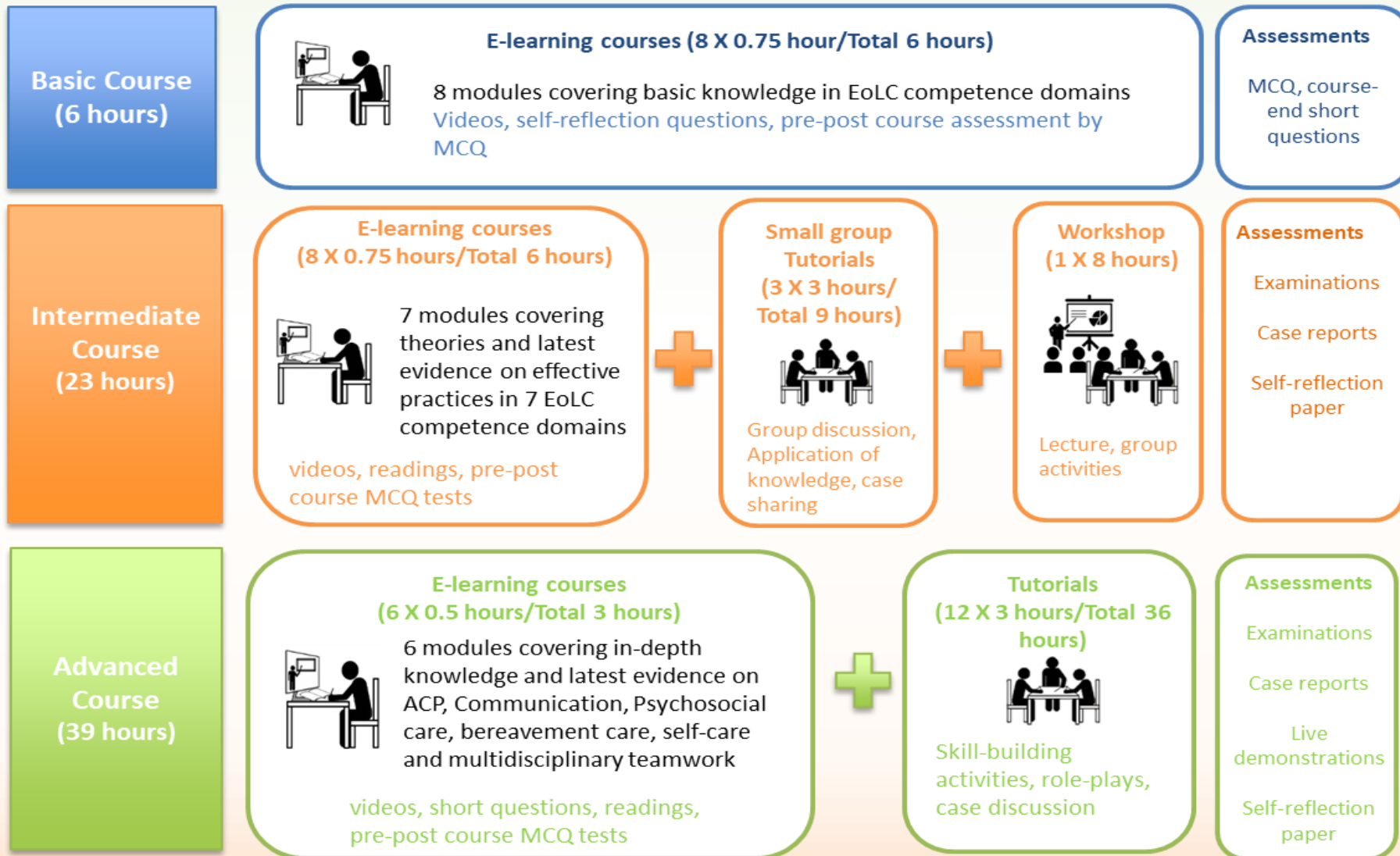
# ICEST Model



# Professional Capacity Building Programmes



# 3-tier course structure



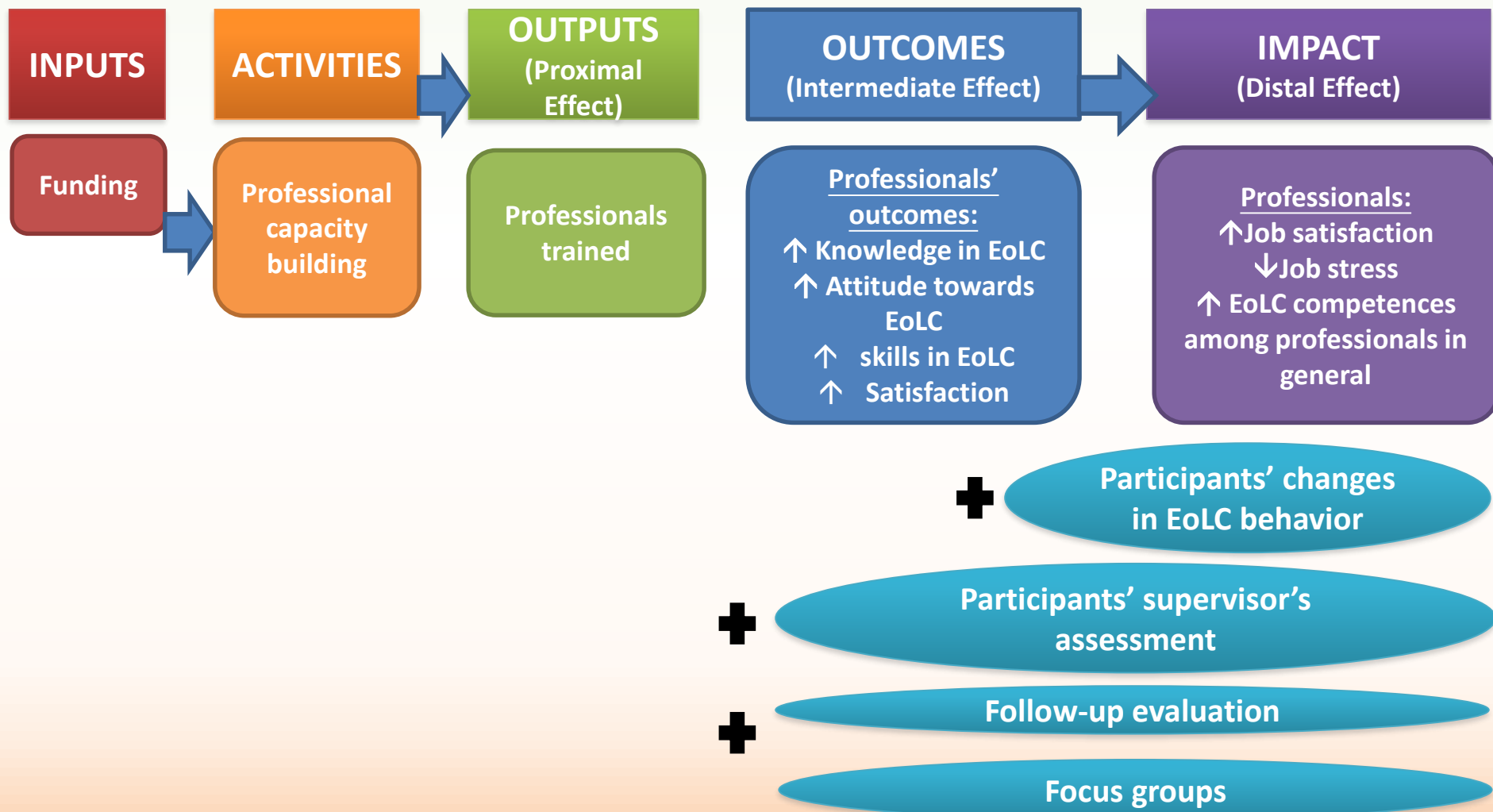
# EoLC Competency Framework

## 賽馬會安寧頌 安寧照顧多元效能框架



# Evaluation Framework

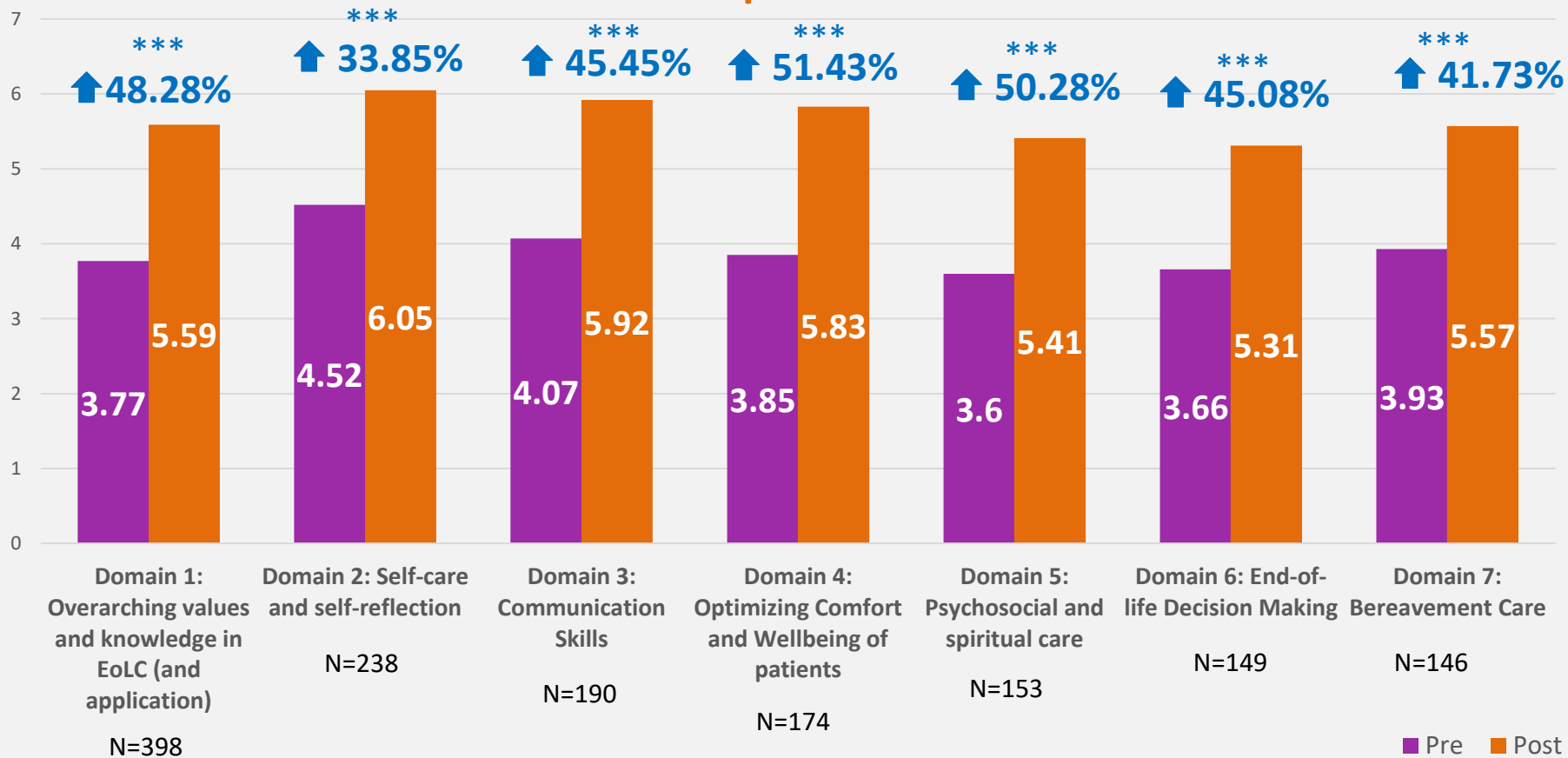
## Professional Capacity Building Evaluation





# Project Outcomes

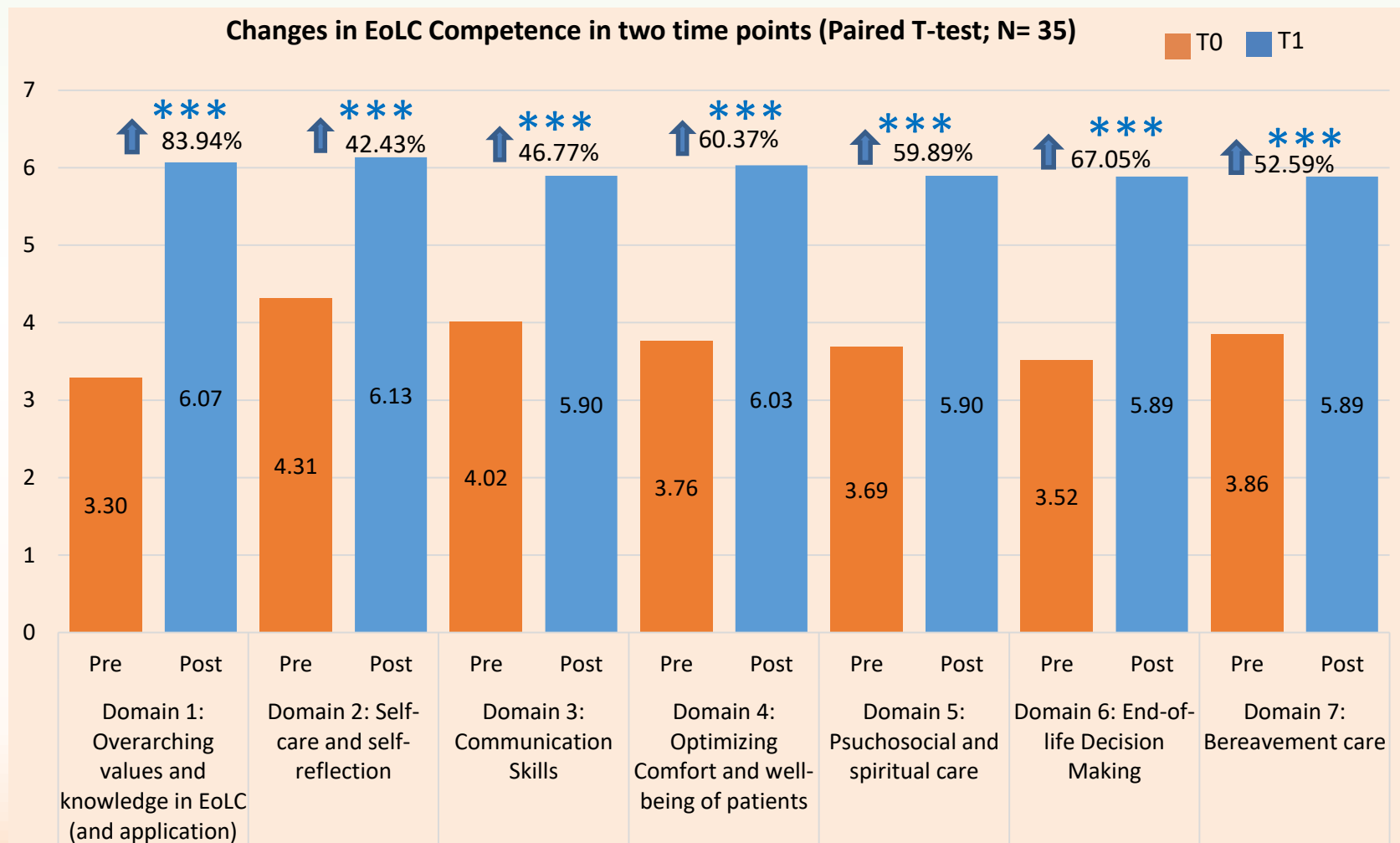
## Pre-post differences on basic online course participants' EoLC competences



Notes. Outcomes between Oct 1, 2019 – June 30, 2020; \*\*\* $p < .001$

# Project Outcomes

**35** students completed both pre- and post-evaluation



Notes. \*\*\*p<.001



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- Evidence-Based Medicine Working Group (November 1992). "Evidence-based medicine. A new approach to teaching the practice of medicine". *JAMA*. 268 (17): 2420–25
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- Interprofessional Educational Collaborative Expert Panel (2011). *Core-competencies for Interprofessional Collaborative Practice*. Washington, D.C.: Interprofessional Education Collaborative.
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van Vliet, L. M., Harding, R., Bausewein, C., Payne, S., & Higginson, I. (2015). How should we manage information needs, family anxiety, depression, and breathlessness for those affected by advanced disease: development of a Clinical Decision Support Tool using a Delphi design. *BMC Medicine*, 13.

# 「賽馬會安寧頌」 社區安寧全人照顧課程

現正接受報名

「賽馬會安寧頌」社區安寧全人照顧課程 - 基礎單元

內容簡介

「賽馬會安寧頌」社區安寧全人照顧課程 - 進階單元

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# Questions and Answers