Foundation and Evidence for the

The P.I.E.C.E.S.™ Learning and Development Model

To better meet the needs of an increasing population of older adults at risk or living with complex and often persistent health care challenges including; neurocognitive disorders and other health and substance use needs, and associated behavioural changes, we must transform our health care system.

This document summarizes the key components of system transformation used in the P.I.E.C.E.S. ™ Learning and Development Model and identifies relevant literature, evidence and evaluation.

The Key Components include:

1. Person and Care Partner Directed Health and Health Care
2. Education – Adult Learning and Continuous Improvement
3. Accelerating Knowledge to Practice

1. Person and Care Partner Directed Health and Health Care

A person and care partner-directed approach to care informs and enables individuals and families to meaningfully engage in their health (self-management) and be active participants working in concert with their health care team. Within this framework, there is collaboration of skilled health care providers who are able to ensure active and ongoing involvement of the person and care partner. This approach focuses not on asking the question, "What Is the matter?", rather, "What matters in your life?", and respects the reality that each person and family is a universe of one.

Authentic and meaningful involvement in one's health and health care is central to improved outcomes, including:

1. Improvements in the health care experience
2. Enhancing acceptability access and engagement in improved health outcomes
3. Effective translation of knowledge to practice
4. Cost

A focus on person and care partner-directed health and health care is fundamental for successful transformation, with the outcome of better health, better care and better value.

This approach is particularly critical for those at risk or living with persistent or progressive health care challenges including neurocognitive disorders and other mental health needs and behavioural changes. It is the fundamental foundation and driver of health care transformation and is incorporated into the P.I.E.C.E.S. ™ Learning and Development Model.

References

1. Coulter A. & Ellins J. (2007). Effectiveness of Strategies For Informing, Educating and Involving Patients. *British Medical Journal 335*(7609) 24-27.
   This is an outcome of 129 systematic reviews which showed:
   a. Impact on patient's knowledge and understanding of condition.
   b. Impact on their experience in treatment
   c. Impact on health services and costs
   d. Impact on health, behaviour and health status.

2. Education

The P.I.E.C.E.S.™ Learning and Development Model takes a process-based and collaborative approach to learning and development. Program design, implementation, ongoing revision and enhancements are anchored in theoretical principles and best practices in adult learning. Building on the individual's motivation, previous experience and engagement in the learning process is essential for successful transfer of knowledge into practice. As the literature also demonstrates, knowledge delivery models are more successfully implemented in a culture of continuous performance improvement where there is a shared commitment to ongoing learning. The P.I.E.C.E.S.™ Learning and Development Model has been in practice and evolving since 1998. Ongoing learner and educator feedback, in addition to more formal evaluations, continue to inform the program design and delivery. The P.I.E.C.E.S.™ Learning and Development programs provide a dynamic, highly interactive learner focused experience designed to support the translation of knowledge into day-to-day practice. Delivery of the programs emphasize: enhancing learners' clinical skills and knowledge; practical application of core concepts in the workplace; consolidation of learning including feedback on practical application; and exploring the role of serving as a resource to others on the TEAM to support collaboration using a common language, common vision and common approach.

References

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3. Accelerating Knowledge to Practice

Enhancing and transforming the current healthcare system cannot be accomplished through education alone. Rather, it is dependent on the deliberate and supported mobilization of knowledge into practice. The three knowledge translation frameworks informing the P.I.E.C.E.S.™ Learning and Development Model include:

1. IHR Framework (Graham, 1)
2. The PARIHS Model (Kitson, 4)
3. The Knowledge Exchange Cycle (Sullivan, 11)

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Evidence for the P.I.E.C.E.S.™ Approach Influencing Practice

References below from both published as well as grey literature describe examples of when the P.I.E.C.E.S.™ Approach has either been directly involved or applied within the health care setting:

1. Hillier L. (2006). Putting the PIECES Together Learning Initiative: Evaluation of Putting the P.I.E.C.E.S. Together 2004-2005 Learning Initiative Continuing Care Partner. Province of Nova Scotia.
2. Hung L, Lee PA, Au-Yeung AT, Kucherova I & Harrigan M. (2016) Adopting a Clinical Assessment Framework in Older Adult Mental Health. Journal of Psychosocial Nursing and Mental Health Services. 54(7) 26-3 http://europepmc.org/abstract/med/27362382
3. McAiney CA, Stolee P, Hillier LM, Harris D, Hamilton P, Kessler L, Madsen V & Le Clair K. (2007) Evaluation of the Sustained Implementation of a Mental Health Learning Initiative in Long-Term Care. *International Psychogeriatrics*. *19*.
4. Ryan, D et al. (November 5 2009) P.I.E.C.E.S.™ and U-First! In Ontario: The Perceptions of Four Stakeholder Groups. Prepared for the Ontario Community Service Association.
5. Sinclair C & Puckniak J. Reduction of Antipsychotics Resulting in Savings of 400,000 in Six Months Using the P.I.E.C.E.S. Model and Quality Improvement. Winnipeg Regional Health Authority Briefing Note on CFHI Website. http://www.cfhi-fcass.ca/SearchResults/page/9?indexCatalogue=cfhi-site-search&searchQuery=reduction+in+use+of+antipsychotics&wordsMode=0
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7. Mental Health and Behavioural Capacity Survey – Long Term Care Home Branch. In consultation with the Ontario Long-Term Care Association and Association of Non-Profit
8. Housing and Services for Seniors. Government of Ontario. Slide deck and key findings found on www.longtermcarehomes.net.

Additional Resources and Tools

Over the past several years, Behavioural Supports Ontario (BSO) has implemented a multi-level strategy supporting a comprehensive system redesign to enhance health care for older adults living with complex behavioural health needs http://brainxchange.ca/Public/Resource-Centre-Topics-A-to-Z/Behavioural-Supports-Ontario/Behavioural-Supports-Ontario-Implementation.aspx. One of its major pillars is focused on capacity enhancement. In this context, a capacity enhancement suite has been developed which focuses on a number of critical elements and identifies the P.I.E.C.E.S.™ Learning and Development Model as a critical learning and development strategy for health care transformation. The BSO suite of tools includes:

1. **A Capacity Building Roadmap (2012)**, which identifies the core competencies for healthcare transformation for older individuals at risk, or with complex healthcare challenges with cognitive mental health neurological or responsive behaviours. http://brainxchange.ca/Public/Files/BSO/BSO-capacity-building-roadmap.aspx
2. **The Road Ahead; Supporting Sustainable Capacity Building (2012)**, which identifies critical knowledge exchange strategies to support individuals, teams and organizations to continue to build capacity across the 12 core competencies identified in the Capacity Building Roadmap. http://brainxchange.ca/Public/Files/BSO/The-Road-Ahead-Updated-191212.aspx
3. **Behavioural Education and Training Supports Inventory (BETSI) (2012)**. The BETSI comprehensive decision making framework and program inventory that will strengthen the capacity of planners to choose the most appropriate behavioural, health and safety education and training programs, thereby ensuring efficient use of their training resources, while notably enabling their teams to provide clients with the right care, at the right time and in the right place. http://brainxchange.ca/Public/Resource-Centre-Topics-A-to-Z/Education-and-training-/Behavioural-Education-and-Training-Supports-Invent.aspx

The final component of the suite, **The Person and Practice Based Learning Tool (2012)** http://brainxchange.ca/Public/Files/BSO/Person-and-Practice-Based-Learning-Updated-191212.aspx focuses on the use of service learning, quality improvement and adult learning, identifying a continuing development and capacity enhancement approach more suitable to the clinical setting. This strategy involves defining the desired future state

and from there identifies the educational needs required in supporting and learning through service learning approaches.

Acknowledgement:

Although the evolution of the P.I.E.C.E.S.™ Approach has been informed by the principles, foundation and literature/resources as described above, perhaps the most important evidence has emerged from the practical experiences and ongoing feedback from the many dedicated individuals and organizations across health care sectors and interprovincial jurisdictions who have integrated the P.I.E.C.E.S.™ Approach into their practices.

It is these many individuals and organizations we would like to thank and acknowledge for their contribution and commitment to the best possible care and support for those persons living with complex and often persistent disease including neurocognitive disorders and other mental health needs and physical illness, in collaboration with their family/care partners.