



What is the Complexity Theory?

"Complexity theory is not a cohesive theory. It is not one equation. It is really a collection of ideas about the concept of change in complex adaptive systems."

(Sanders, 2002)

What are Complex Adaptive Systems?

Entity consisting of many diverse and autonomous components or parts (called agents) which are interrelated, interdependent, linked through many (dense) interconnections, and behave as a unified whole in learning from experience and in adjusting (not just reacting) to changes in the environment.

(complex adaptive system, 2015)

- They are self organizing
 - Adaptive
 - Dynamic
 - Co-evolving

Edge of Chaos

All Complex Adaptive Systems fall into one of three broad categories:

Order ----- Complex (Edge of Chaos) <----- Chaos

Order Chaos



Emergence

Exploitation

Equilibrium

Disequilibrium

Re-Integration/Disintegration

Why is the Complexity Theory Important to the CNL Role?

The CNL is a member and leader of health care teams that deliver treatment and services in an evolving health care system

• To lead

(CNL White Paper, 2007)

- To adapt
- To evolve

Promotion of Evolution through the CNL Role

Competencies and Expectation of the CNL Essential 3: Quality Improvement and Safety

Emergence: Use performance measures to assist and improve the delivery of EBP and promote outcomes

Exploitation: Use evidence to design and direct system improvements

Equilibrium: Implement quality improvement strategies

Disequilibrium: new problems arise

Re-integrate: Perform a comprehensive micro system assessment to provide the context for problem identification and action.

(Competencies and Expectations, 2013)

The Complexity Theory in the White Paper

Assumption 3:

Practice Guidelines are Based on Evidence

"The preparation of the CNL must include an unrelenting demand for evidence for every aspect of practice"

(CNL White Paper, 2007)