Healthcare Organizations as Complex Adaptive Systems

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Objectives

• Complexity thinking
• Complexity lens
• Metaphor
Importance

• Messy, living systems
• Relieved frustration
• Resonance with intuition

• Goals:
  – Curiosity
  – Principles
  – Engage
Agenda

1. Introduction – Termite Colony
2. Complex Adaptive Systems – the Conference
3. Guiding Principles from Complexity
4. Group Exercise – National Health Service Wait Times
5. Conclusion
Self-organization in every system
Police seize weapons cache after gunman charges CHEO

Ottawa museum worker in custody, undergoing psychiatric assessment

How the action unfolded

[Map and images of the scene]
Simple, Complicated and Complex Systems

- Simple - brewing coffee
- Complicated - conference preparation
- Complex - conference dialogue
Simple Systems

– the formula is essential
– a good formula produces nearly the same coffee every time

– good formulas note the quantity and nature of the ‘parts’ needed and specifies the order in which to combine them
Complicated Systems

– rigid formulas are needed
– high levels of expertise and training in a variety of fields are necessary for success

– high degree of certainty of outcome
– success needs a blueprint that directs both the development of separate parts and how to assemble them
– rigid protocols have a limited application or are counter-productive
– expertise helps but only when balanced with responsiveness to the people in the system
– every system is unique
– uncertainty of outcome remains
Complex Systems

The **global** behaviour of the system emerges from the dynamic **local** relationships between system participants

Cities, stock market, elections, consciousness, parties, termites
Complex Adaptive Systems

No central leader controlling global emergence
DECENTRALIZED CONTROL

The ‘life’ of the system emerges from within
SELF-ORGANIZATION

Small changes can have large impacts
NON-LINEAR
Conference as a Complex Adaptive System

- What emerges globally depends on how individual people are interacting
  - Past history
  - Norms, rules, values for relating
  - Degrees of freedom and constraint
  - Interconnected systems
Resiliency

• The capacity to undergo change and still maintain organization and order.
So what?

How does complexity help us be managers?
Guiding Principles

• Build a good enough vision
• Encourage diversity of connections
• Listen to the shadows
Leading a CAS

- Already doing it
- Knowing when Simple, Complicated, Complex
- Work productively with the tension between:
  - people interacting within their defined ‘roles’
  - people interacting as individual persons with freedom and flexibility
Instructions

• 15 minutes
• Form small groups of 4-5
• Read the vignette and start dialogue

LAW OF TWO FEET
If you’re not engaged, use your two feet and move somewhere else
“We can’t control people, but we can control the **conditions** that control people”
Feel free to contact us

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