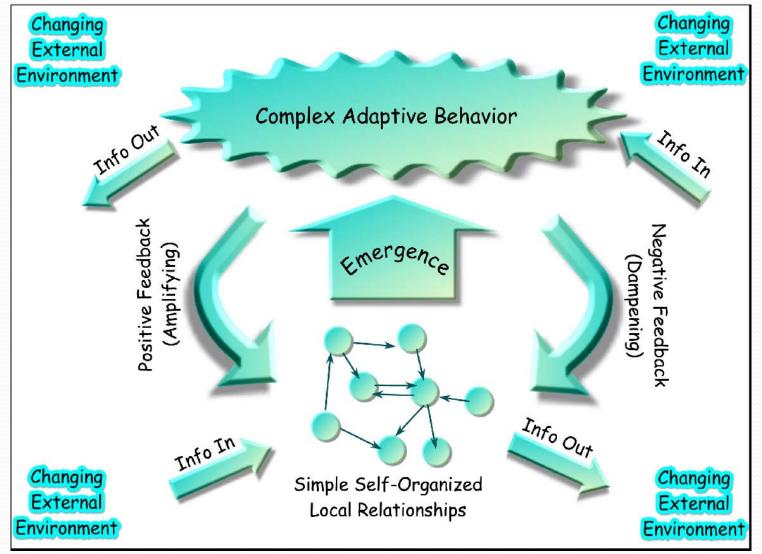
# Can complex health systems adapt for higher quality in the face of fiscal constraint?

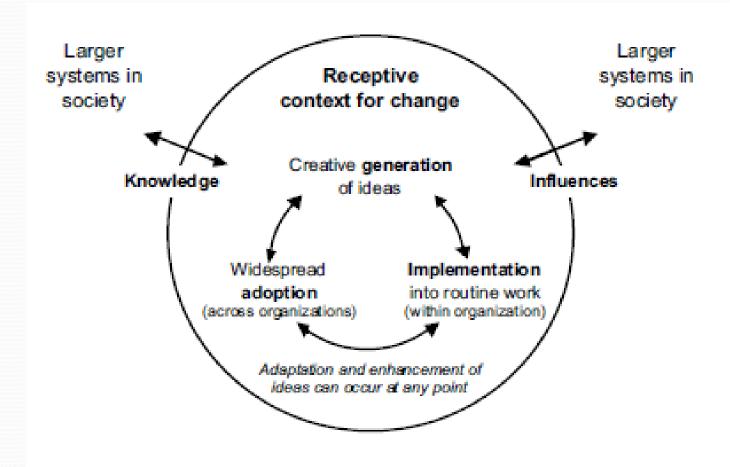
Heather Manson, MD MHSc FRCP Director Health Promotion, Chronic Disease and Injury prevention Ontario Agency for Health Protection and Promotion

#### Healthcare is a complex adaptive system



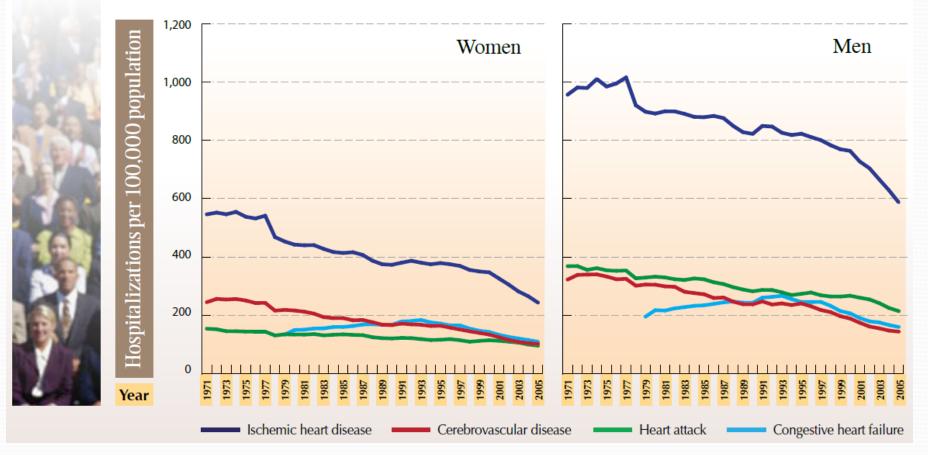
**Source:** http://upload.wikimedia.org/wikipedia/commons/o/oo/Complex-adaptive-system.jpg

## Complexity affects the generation and spread of innovation



#### Innovations are adopted...

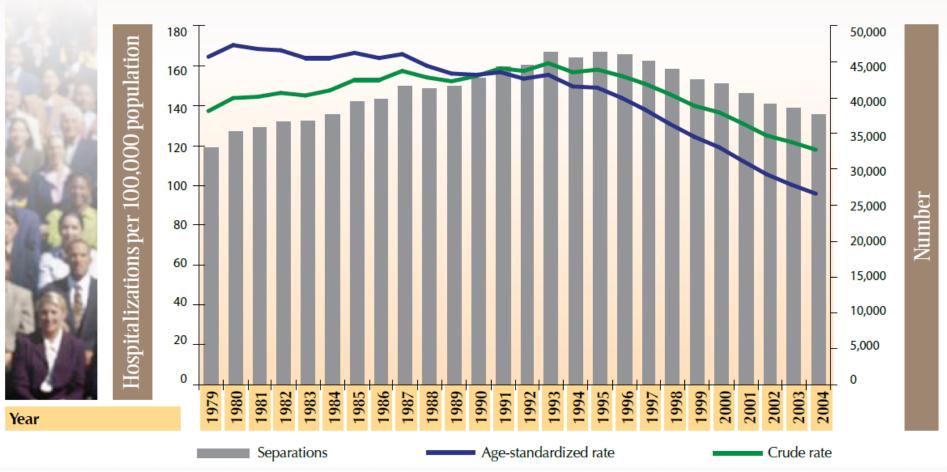
Figure 1-20 Rates of hospitalization due to selected CVD classifications\*, by sex and year, Canada, 1971/72-2005/06



Source: Tracking Heart Disease and Stroke in Canada, PHAC 2009

#### Outcomes can improve...

Figure 5-1 Number and rate of hospitalizations due to acute stroke\*, by year, Canada, 1979/80-2005/06



### Can we use our knowledge of complexity to design for sustainability?

	Traditional System	Complex Adaptive System
Roles	Management	Leadership
Methods	Command and control	Incentives and inhibitions
Measurement	Activities	Outcomes
Focus	Efficiency	Agility
Relationship	Contractual	Personal commitments
Network	Hierarchy	Heterarchy
Design	Organizational design	Self-organization