Introduction

- **A framework for understanding the complex nature of health, hospitals and health care systems**

- **Some Failed Solutions**

- **Structures and Relationships**

- **Five dimensions of Relationships**

- **Conclusion**

Simple	*Complicated*	*Complex*
Following a Recipe	A Rocket to the Moon	Raising a Child

Simple

- The recipe is essential
- **Recipes are tested to assure replicability of later efforts**
- No particular expertise; knowing how to cook increases success
- **Recipes produce standard products**
- Certainty of same results every time
- Optimism re results

Complicated

- Formulae are critical and necessary
- **Sending one rocket increases assurance that next will be ok**
- High level of expertise in many specialized fields + coordination
- **Rockets similar in critical ways**
- High degree of certainty of outcome
- Optimism re results

Complex

- Formulae have only a limited application
- **Raising one child gives no assurance of success with the next**
- Expertise can help but is not sufficient
- **Every child is unique**
- Uncertainty of outcome remains
- Optimism re results

Complicated   *Complex*
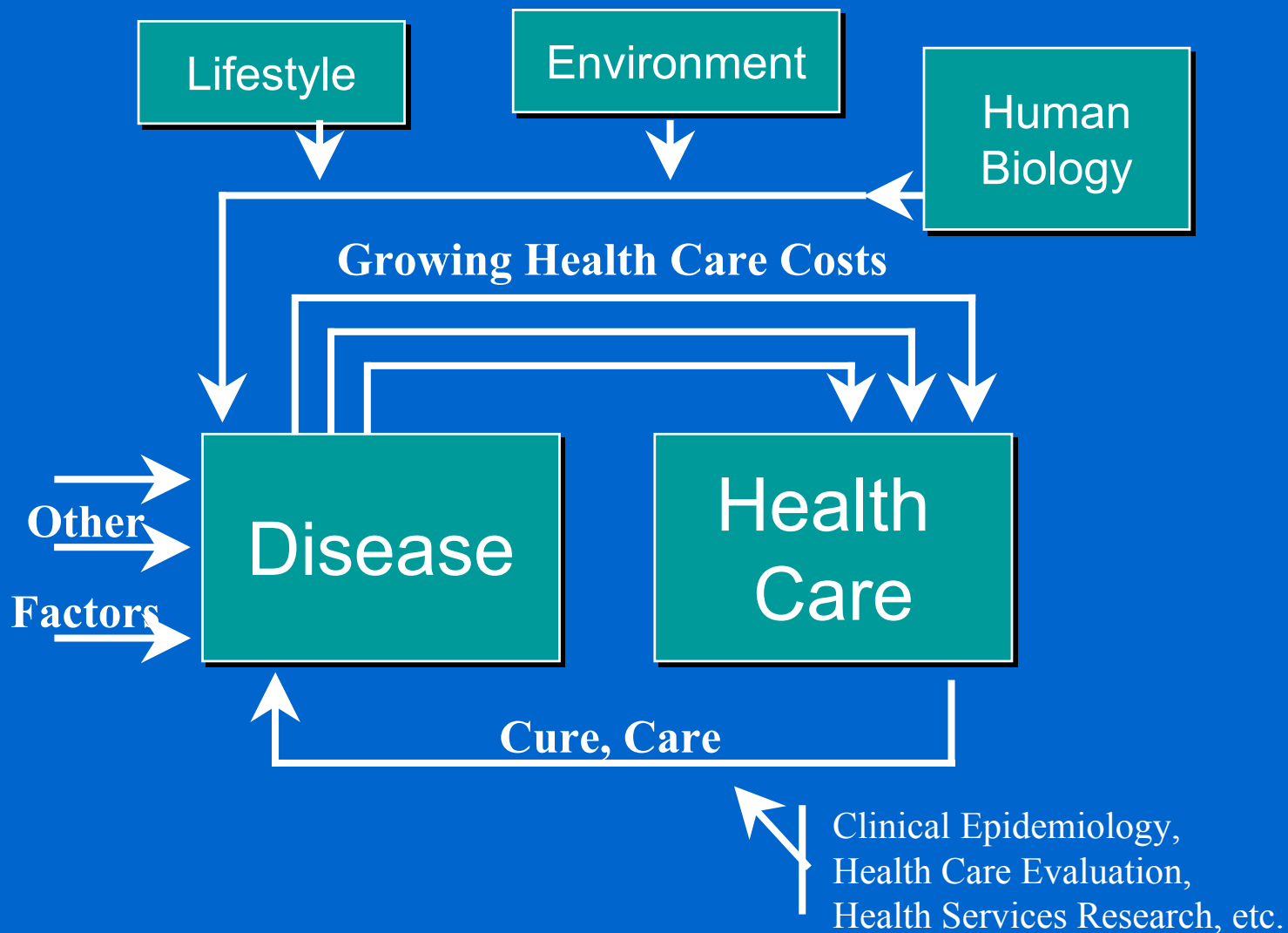
Acute Diseases   Chronic Diseases

- Abrupt onset
- **Often all causes can be identified and measured**
- Diagnosis and prognosis are often accurate
- **Specific therapy or treatment is often available**
- Technological intervention is usually effective: cure is likely with return to normal health

- **Profession is knowledgeable while laity is inexperienced**

- Gradual onset over time
- **Multivariate cause, changing over time**
- Diagnosis is uncertain and prognosis obscure
- **Indecisive technologies & therapies with adversities**
- No cure, pervasive uncertainty: management, coaching & self care over time is needed to improve health
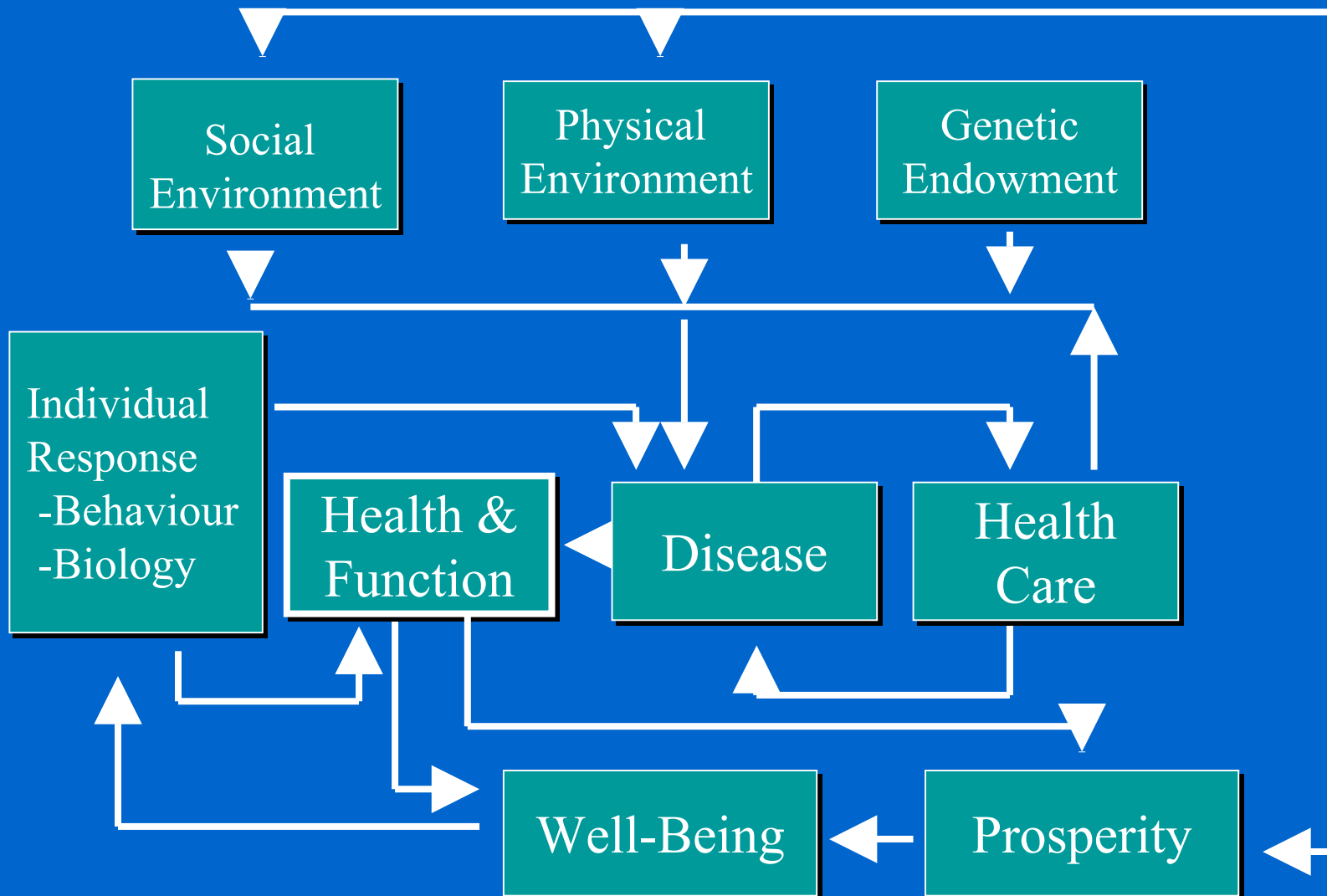- **Profession & laity must be reciprocally knowledgeable to improve health**
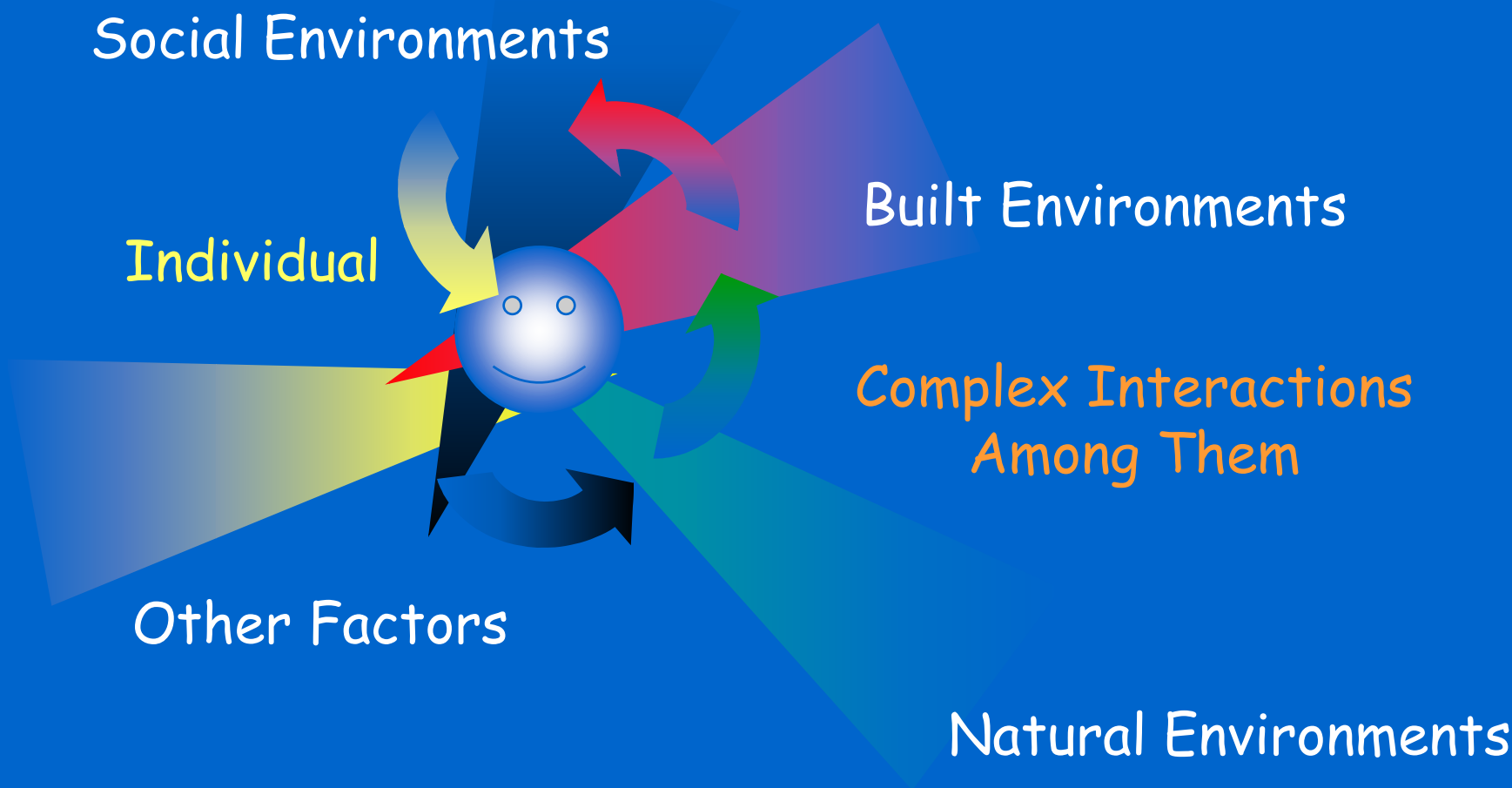
Adapted from: Halstead Holman, MD (Stanford)

Complicated View of Health (1)

Complicated View of Health (2)

Thinking Outside the Box

Social Environments

Built Environments

Individual

Complex Interactions
Among Them

Other Factors

Natural Environments

Graphic Representation of Health

Externalities

Externalities

Hospitals are Complex

Inside/Outside Divide

Clinical Divide

Hospital: Trustees

Community

UP

Hospital: Managers

Control

OUT

IN

Cure

DOWN

Care

Hospital: Doctors

Hospital: Nurses and other health workers

Health Care Professionals at Baycrest

1. Arts and Crafts Specialist
2. Audiologist
3. Behavioural Neurologist
4. Chaplain (Rabbi)
5. Chiropodist
6. Client Financial Services Accountant
7. Clinical Nurse Specialist
8. Competency Assessor
9. Cultural and Heritage Specialist
10. Dance Movement Therapist
11. Day Care Specialist
12. Dentist
13. Diagnostic Imaging
14. Therapeutic Dietician
15. Ethicist
16. Family Medicine Practitioner
17. Fitness and Health Promotion
18. Greenhouse Programe
19. Laboratory Services
20. Legal Counsel (Competency)
21. Physician
22. Music Therapist
23. Nurse Educator
24. Nurse Clinician
25. Nurse
26. Occupational Therapist
27. Pharmacist
28. Physiotherapist
29. Psychiatrist
30. Psychologist
31. Research Scientist
32. Social, Cultural and Educational
33. Social Worker
34. Speech Pathologist
35. Therapeutic Recreationist
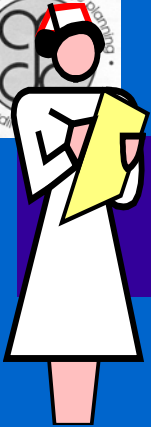
Hospital Nurses

Career path	Up or out
Jobs in career	Two
Organisational type	Military
Value base	Professionalism
Status	Staff Size
Currency	Hours of Nursing
Job Security	Job Market
Metaphor	Scissors, Cotton Wool, Hands
Work Activity	Process: Touching Medicating Talking

The Nursing Struggle

"For the last Hundred years the general hospital has been the key battleground for the various forces arrayed in the division of labour in health care. There seems no reason why this should change now."

A Social History of Nursing
Dingwall, Rafferty, et al.
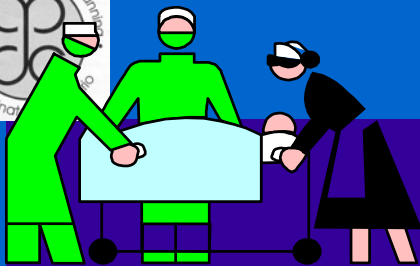
Hospital Doctors

Career path	Steady State
Jobs in career	One
Organisational type	Practice in Chimney
Value base	Proficiency
Status	Specialty, Rank, Empire
Currency	Time
Job Security	Virtual Tenure
Metaphor	Scalpel
Work Activity	Intervention: Cutting, Medicating Talking

Hospital Managers

|	
Career path	Spiral
Jobs in career	Five to Seven
Organisational type	Corporate Hierarchy
Value base	Efficiency
Status	Title, Budget, Span of Control
Currency	Money
Job Security	Contractual
Metaphor	Axe
Work Activity	Allocation: Talking
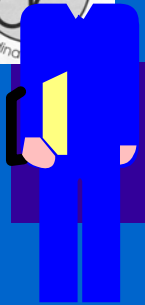
Hospital Trustees

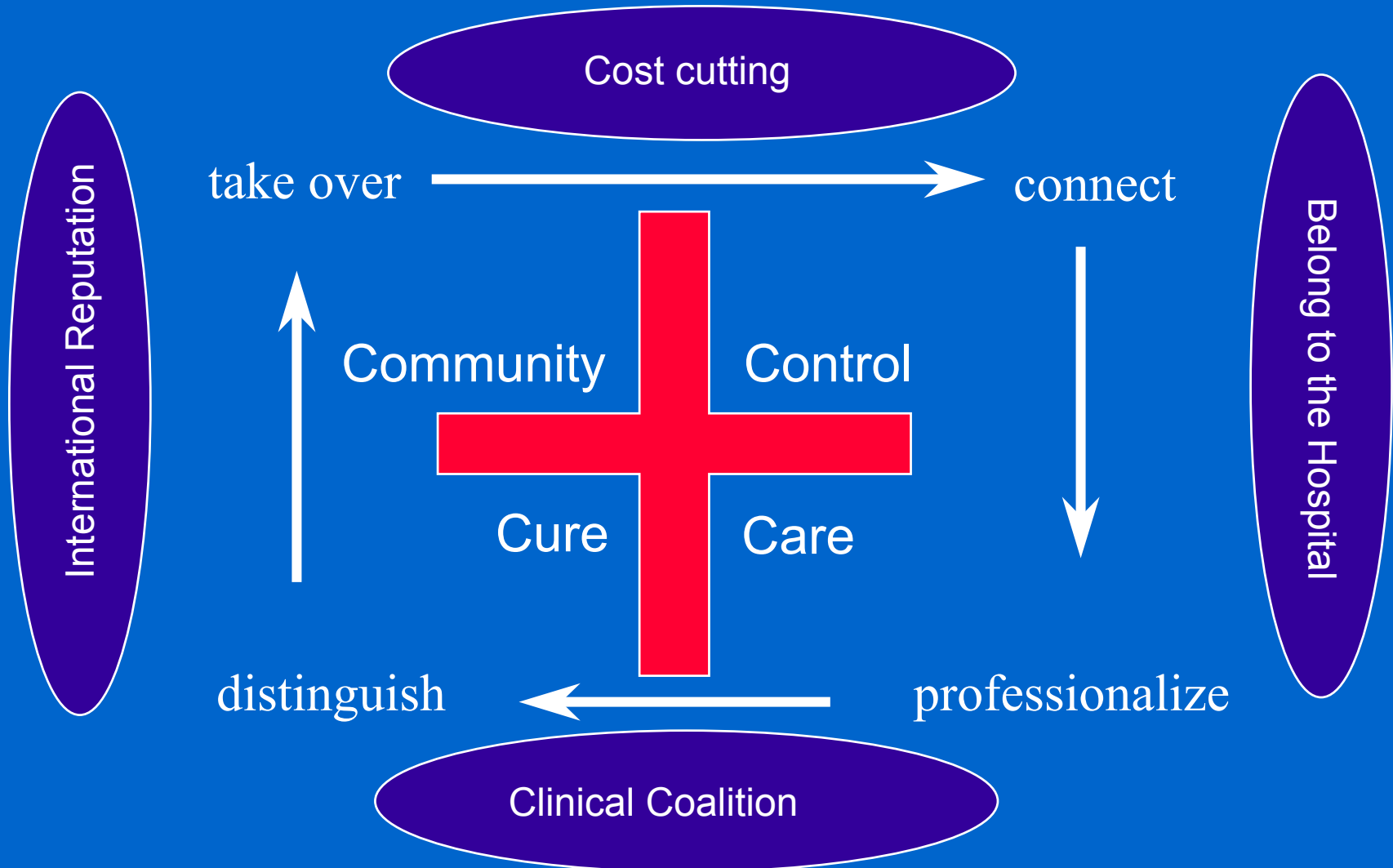|	
Career path	Transitory
Jobs in career	Many
Organisational type	Committee
Value base	Access to the Best Fiscal Responsibility
Status	Role in the *Real* World
Currency	Quality and Money
Job Security	Time Limited
Metaphor	Gavel
Work Activity	Meeting: Talking

Complexity Arises from Simple Sources

- **Interaction of Multiple Perspectives**
- **Few Generalized Circumstances**
- **Structures alone are not enough**
- **Processes alone are not enough**
- **Data alone won't give a complete picture**
- **Narrative alone is similarly incomplete**
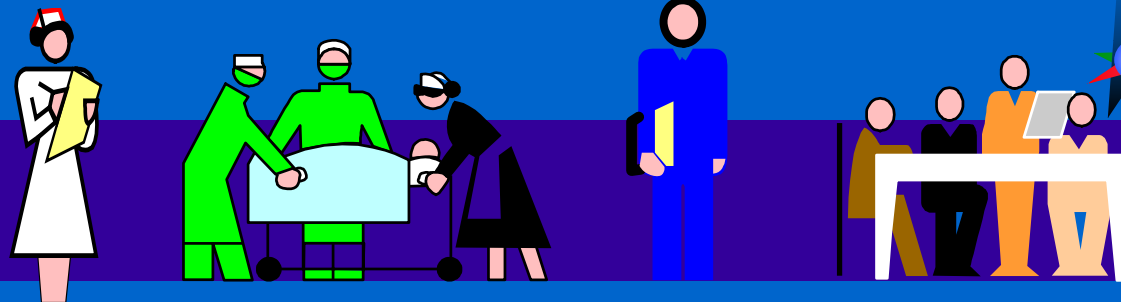
	Nurses	Doctors	Managers	Boards
Career path	Up or Out	Steady State	Spiral	Transitory
Jobs in Career	Two	One	Five – Seven	Many
Organisational Type	Military	Practice in Chimney	Corporate Hierarchy	Committee
Value Base	Professional	Proficiency	Efficiency	Access to the Best, Fiscal Responsibility
Status	Staff Size	Specialty, Rank, Empire	Title, Budget, Span of Control	Role in the *Real* World
Currency	Hours of Nursing	Time	Money	Quality and Money
Job Security	Job Market	Virtual Tenure	Contractual	Time Limited
Metaphor	Scissors Cotton wool Hands	Scalpel	Axe	Gavel
Work Activity	Process	Intervention	Allocation	Meeting

Some interactions of Quadrants

Cost cutting

International Reputation

Belong to the Hospital

take over → connect

Community   Control

Cure   Care

distinguish ← professionalize

Clinical Coalition

Health Care Systems are Complex

Inside/Outside Divide

Clinical Divide

System: Politicians and Advocacy groups

Hospital: Trustees

Community

UP

System: Regulatory Agencies

Hospital: Managers

Control

OUT

IN

Cure

Hospital: Doctors

System: Acute Hospitals

Care

Hospital: Nurses and other health workers
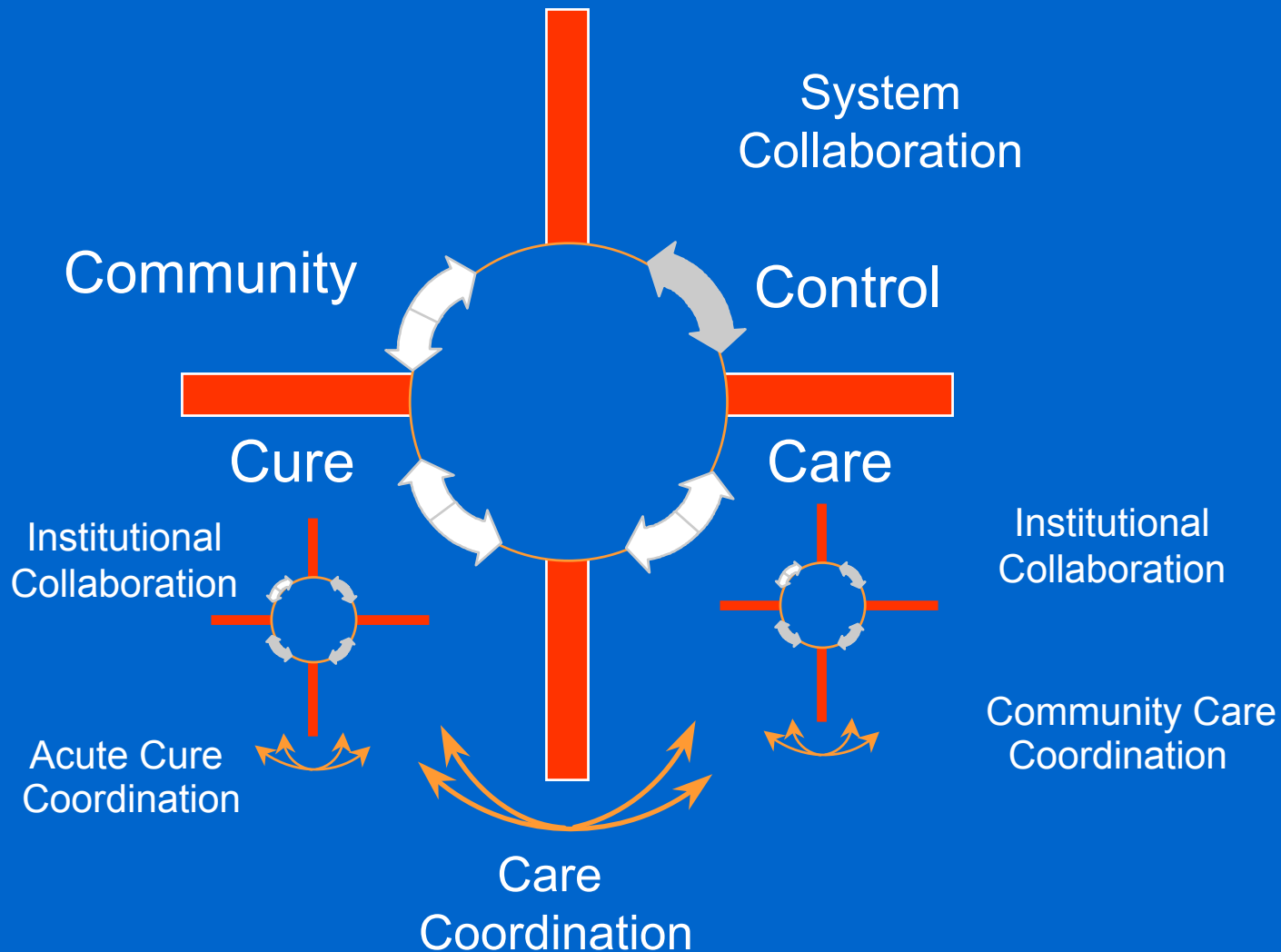
System: Primary, Community and Home Care

DOWN

Framework helps clarify problems

- **Simple sources of complexity**
- **Simple descriptions of intractable (complex) problems**
- **Simple solutions to complex problems are possible**

The Four Major Issues

1. How can we improve the coordination of patient flow inside institutions?

2. How can we improve collaboration among the four Cs inside institutions?

3. How can we improve the coordination of patient flow between parts of the system?

4. How can we improve collaboration among the four Cs throughout the system?

Fixes-That-Fail

- **How various attempts to resolve the four issues have failed**
  - **Information**
  - **Shared Missions**
  - **Clinical Directorates**
  - **Program Management**
  - **Integrated Delivery Systems**

Differentiation: Integration or Fragmentation

"The greater the differentiation between different components of the work, the more need there is for the integration of the entire process. Without such integration work becomes fragmented with increased risks of gaps, duplications and mistakes."

Sholom Glouberman

Differentiation

Fragmentation	Differentiation	Integration
Distinct records Data disagreements Cost duplication	Information Systems	Shared records Agreed data Cost savings
Hidden agendas Disagreements Disguised activities	Mission	Agreement about agenda Identify similarities and differences
Fragmented management	Clinical Directorates	Devolve responsibility
Sewer pipes for chimneys	Program Planning	Responsiveness to clinical needs
No room for the sick	Integrated Delivery Systems	Promote good health

Information is the Answer

- (Outcome Analysis)
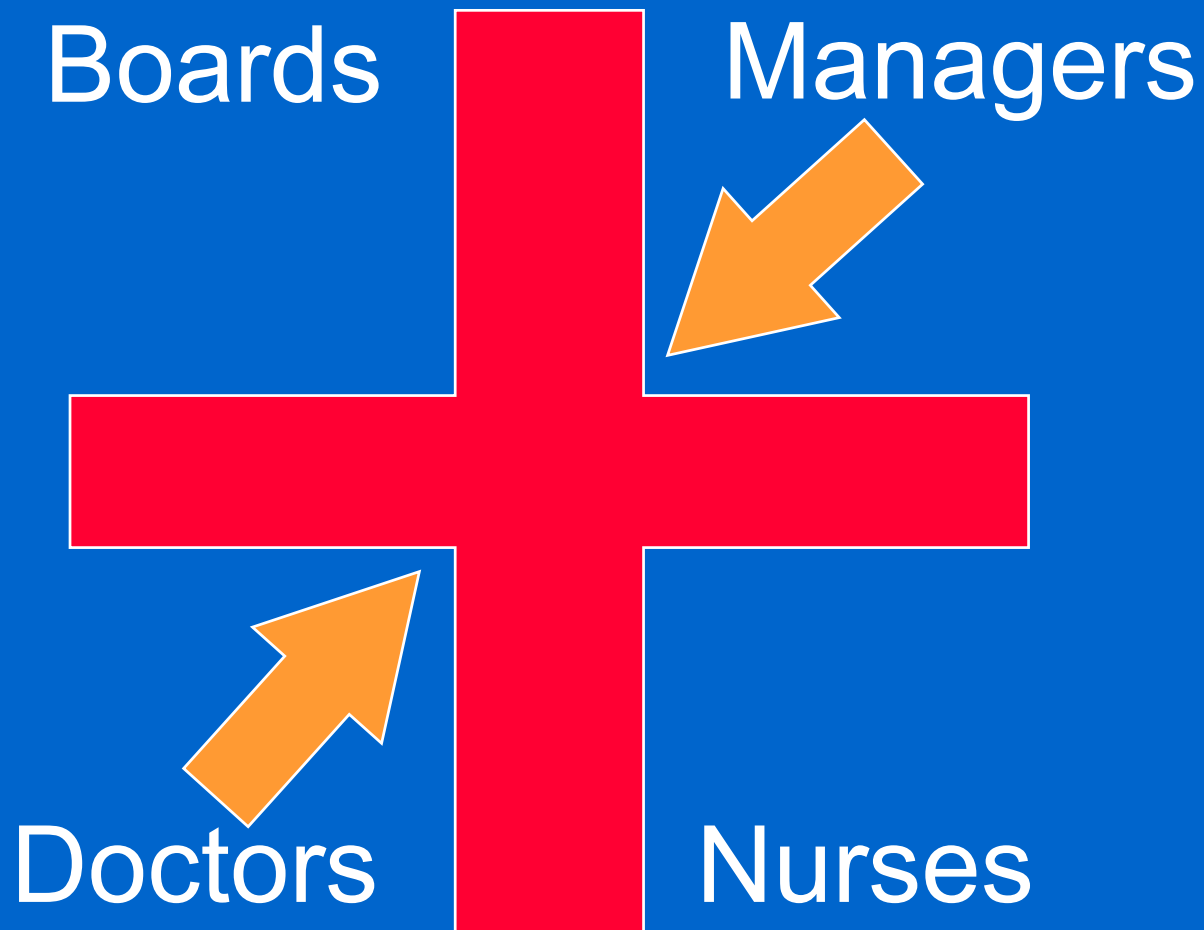- Surgeon   80%
- Immunologist   70%
- Manager   60%
- Nurse   30%
- Surgeon (2)   82%
- **Patient**   **100%**

McDonald's Mission

- **Environmental concern**
- **Nutritional responsibility**
- **Freedom for working families**
- **Development and experience for young entrepreneurs**

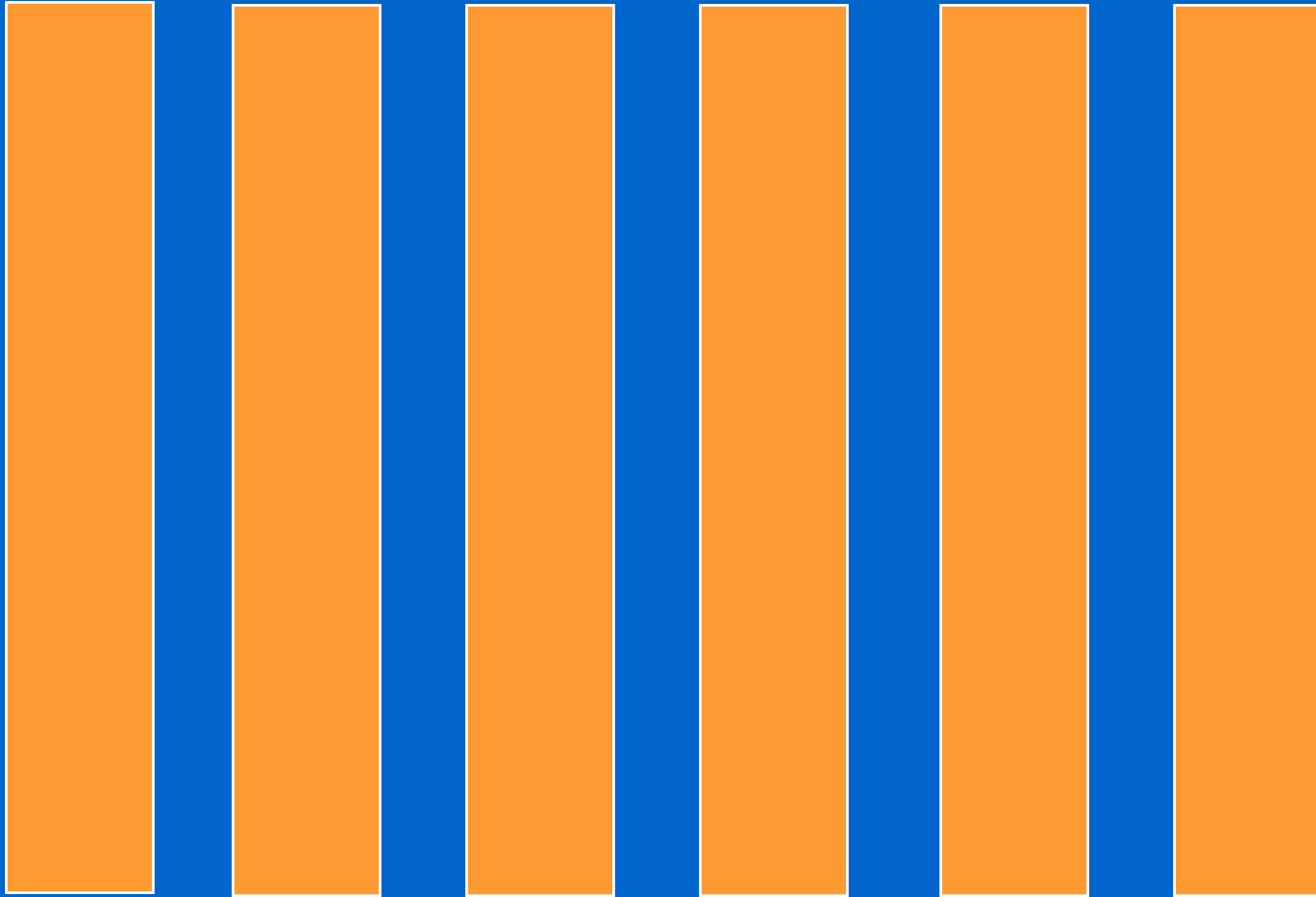# Clinical Directorates

Boards   Managers

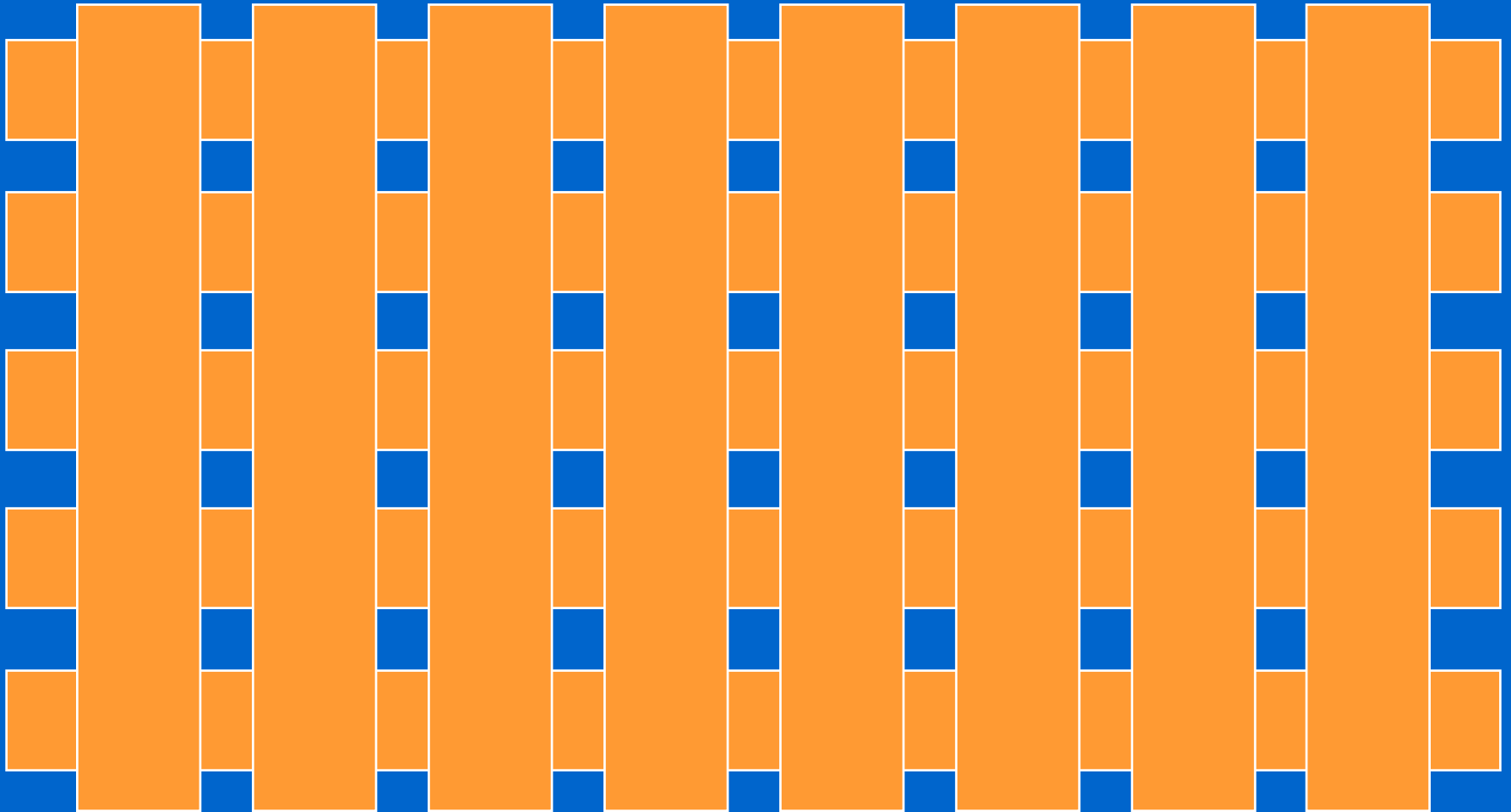Doctors   Nurses

Functional Chimneys

Programmatic Sewer Pipes

When you try to change

# Vertically Integrated Systems

- Vertically integrated structure
- One stop access
- Single Mission
- Eliminate boundaries

- Reduction of choice

- Selection of clients
- Less agreement about what the mission means
- Boundaries become internal

Myths about Structure

- If we get it right everything will be OK
- Managing structural change as a defense against the primary task
- All conflicts are caused by structural dysfunction
- We must keep adjusting it until we get it right
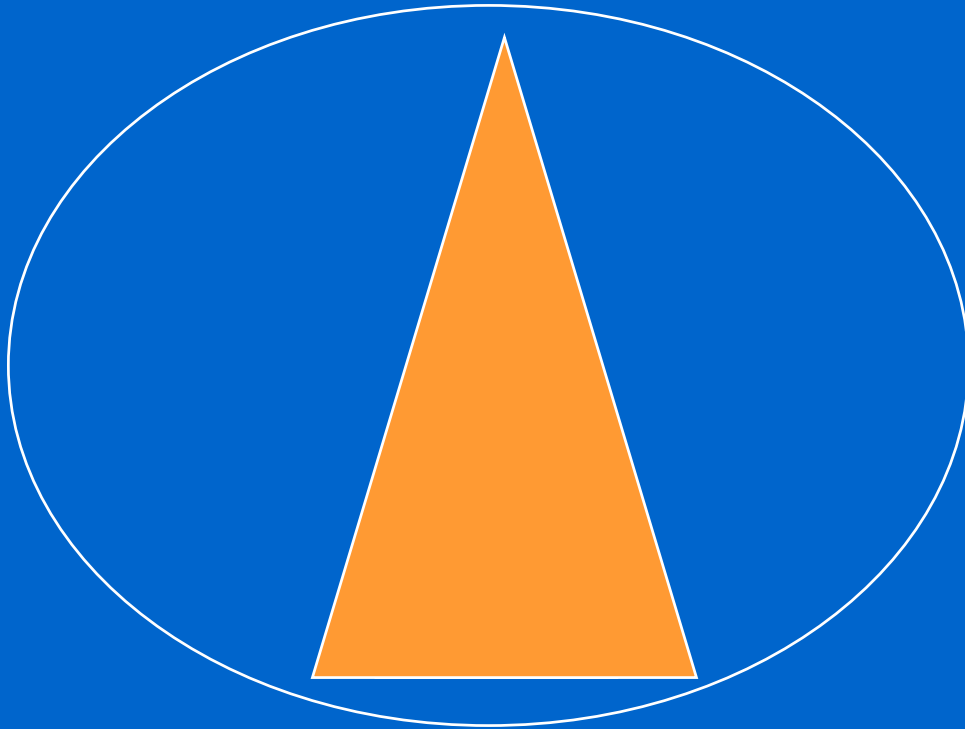
How systems are seen
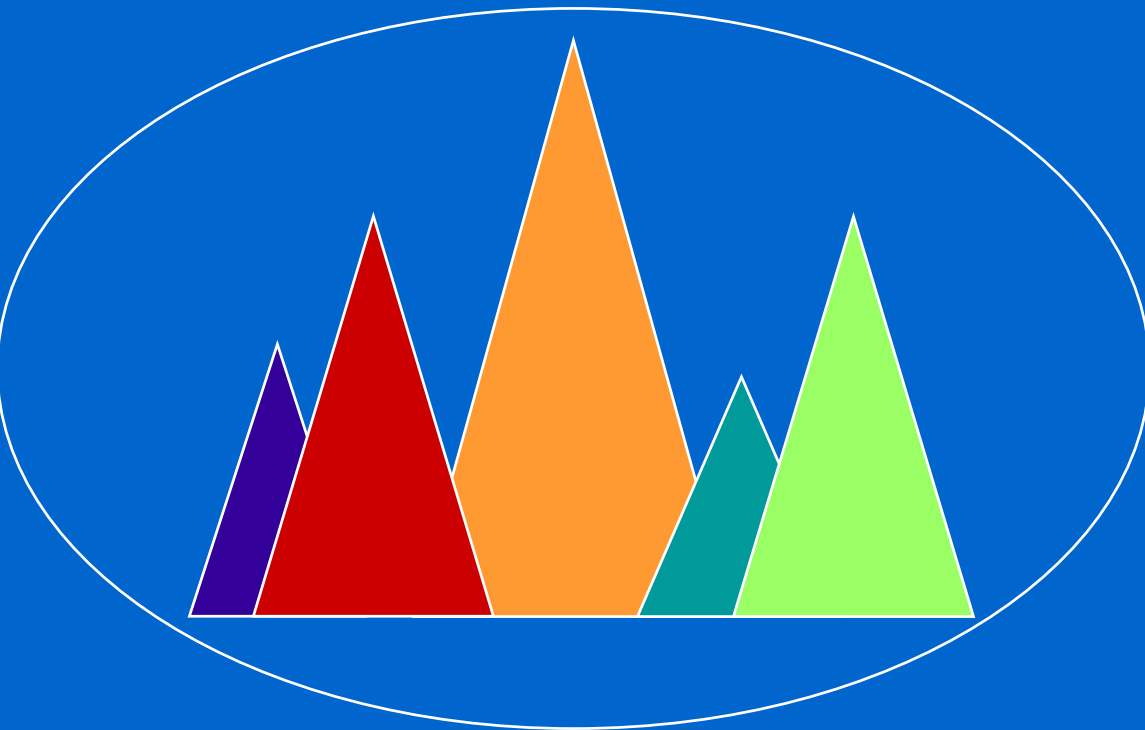
Acute Care
Community Care
Long Term Care

Group Practice
Informal Community
Union Shop

Public Sector
Private Sector
Voluntary Sector

The Solution

Acute Care
Community Care
Long Term Care
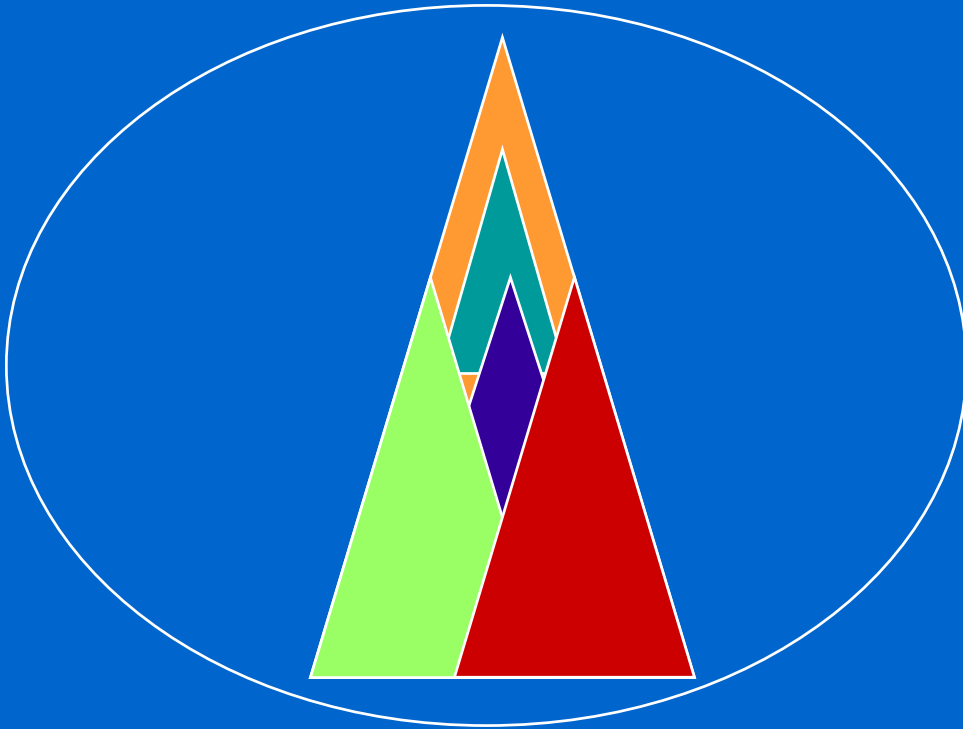
Group Practice
Informal Community
Union Shop

Public Sector
Private Sector
Voluntary Sector

Integration vs Coordination

- Structural integration and service coordination are not identical
- Integrating structures do not necessarily result in coordinated service
- Large hospitals have one structure but their services can still be poorly coordinated and fragmented.
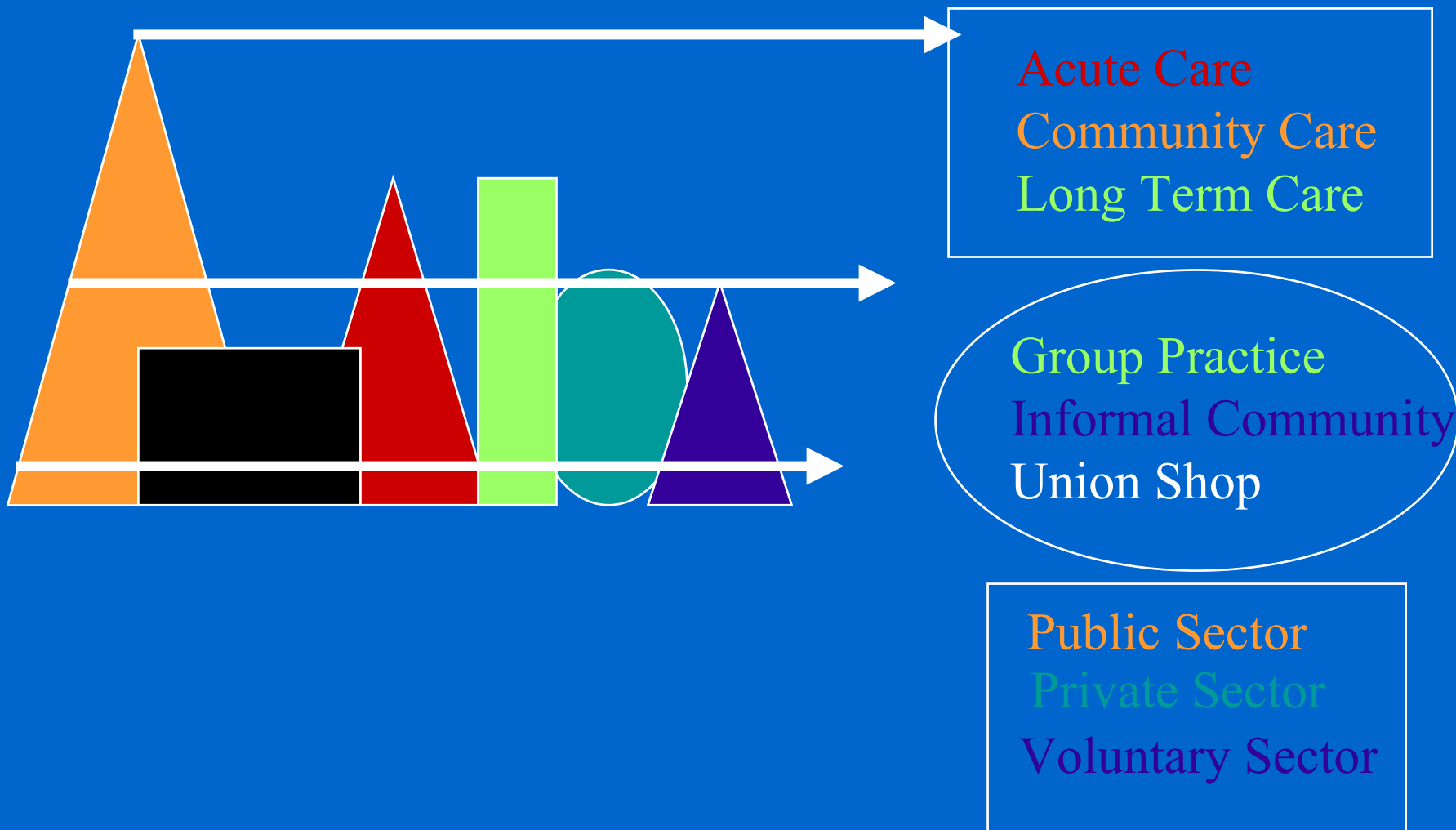
Boundroids

- **Mind the Gaps**
- **Respect differences**
- **Seek horizontal & vertical knowledge**
- **Appreciate others' contributions**
- **Develop existing relationships**
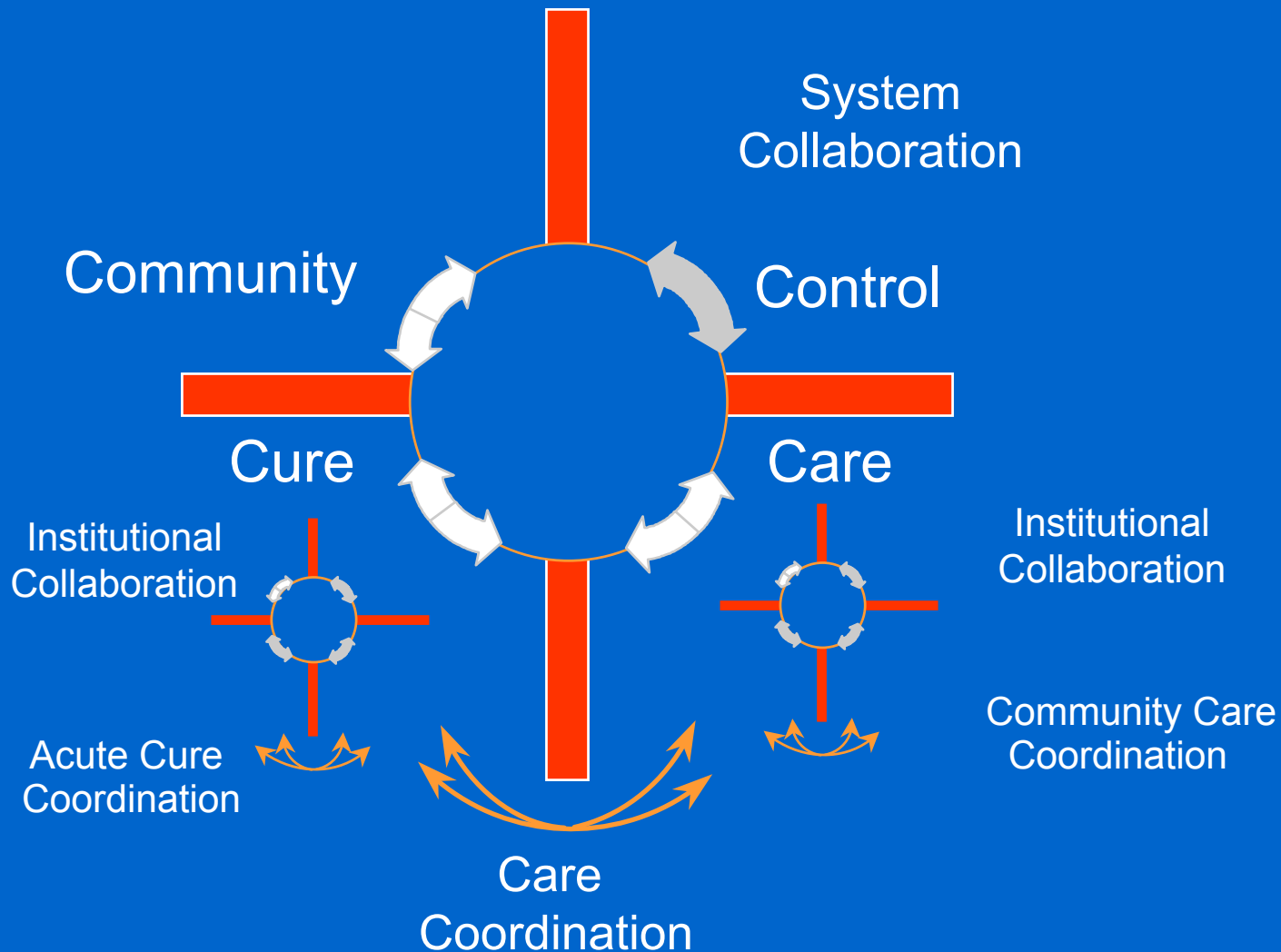- **Identify new partners**

Bridge Building in Health Care

- "A good seam is a joy to behold" Itzchak Gordon

- Some boundaries are useful

- Not all boundaries are structural.

- Boundary conditions are highly differentiated.

- Boundaries can only be dealt with individually.

- Some must be eliminated others crossed

The Four Major Issues

System
Collaboration

Community

Control

Cure

Care

Institutional
Collaboration

Institutional
Collaboration

Acute Cure
Coordination

Community Care
Coordination

Care
Coordination

5 Dimensions of Relationships

- Amount of direct contact
- Continuity
- Well rounded acquaintance
- Together as equals
- Common purpose

Amount of Direct Contact

- Method of communication
  - Experience on ward
- Amount of face to face contact
- Contact without intermediaries
- Contact through personal rather than impersonal media

Continuity

- Frequency of contact
- Regularity of contact
- Period of time over which contact is maintained
- Reliability and predictability of relationship
- Capacity to build mutual trust and respect

Well Rounded Acquaintance

- Roles and contexts in which experience is shared

- Extent to which there is a rounded picture of each other

- Develop appreciation of other dimensions of a persons life, experience and feelings

Together as Equals

- Extent to which people meet as equals
- Not in terms of role or status but of respect
- Degree of power relationship
- Capacity to share equally in decision making

Common Purpose

- Extent of sharing a common purpose or agenda

- Degree of agreement and clarity about what they are doing together

- Conditions which facilitate mutual understanding and trust

Change in Complex Systems

- **Local Conditions are paramount**
  - There are no recipes to solve complex problems
  - Local conditions provide special opportunities
- **Change requires a degree of stability**
  - First step may be to stabilize the system
  - Allow relationships to form
- **Appreciate what you already have**
  - Increase respect for direct care
  - Increased respect for everyone's contributions
  - Recognition of widespread altruism
  - Build on existing positive relationships
- **Incrementalism:**
  - Small changes can fail
  - Seeds rather than levers