

Structures, Processes and Patterns: Key to Understanding and Transforming Whole Systems

Paul Plsek, Consultant in Innovation and Complex Systems, Atlanta, USA
<paulplsek@DirectedCreativity.com>

Whilst there has certainly been plenty of talk about whole-systems transformation, we have not yet actually seen much of it in health care. What are we missing?

Physicist and complex-systems scientist, Fritjof Capra, has demonstrated that complex systems comprise structure, process, and pattern—SPP for short. If we want fundamental and transformational change in a complex system, we must consider interactions and changes in all three aspects of SPP.

Much of the change effort in the NHS has focused on *structure*; changing organisational boundaries, responsibility for resources, introducing new jobs, tools, targets, teams etc. We have learned many times over in past change efforts that modifying structures alone is probably not sufficient to bring about the transformation we seek in our complex system.

Service improvement work has been successful more recently in focussing on *processes* to fundamentally redesign the way care is delivered. Despite excellent efforts, we are seeing that transformation does not necessarily follow naturally from process redesign work alone.

To truly bring about fundamental change in complex systems, we also need to recognise the importance of *patterns* that drive thinking and behaviour. By patterns we mean such things as values, trust, how various groups communicate with one another, etc. Often, the failure to achieve fundamental change through reorganisations and new programmes lies in the fact that the underlying patterns in the system remain unchanged and unchallenged.

Five key patterns in the culture of organisations that often strongly influence the organisation's ability to bring about whole-systems transformation are:

- **Relationships:** Do the interactions among the various parts of the system generate energy and innovative ideas for change, or do they drain the organisation?
- **Decision-making:** Are decisions about change made rapidly and by the people with the most knowledge of the issue, or is change bogged down in a treacle of hierarchy and position-authority?
- **Power:** Do individuals and groups acquire and exercise power in positive, constructive ways toward a collective purpose, or is power coveted and used mainly for self-interest and self-preservation?
- **Conflict:** Are conflicts and differences of opinion embraced as opportunities to discover new ways of working, or are these seen as negative and destructive?
- **Learning:** Is the system naturally curious and eager to learn more about itself and about what might be better, or is new thinking viewed mainly as potentially risky and threatening to the status quo?

We conclude that transformational, whole-systems change will occur more naturally and more frequently when we learn to integrate changes across the SPPs. We have learned how to change structures and processes, our next challenge lies in honest dialogue about the five key patterns above and in finding ways to modify these to be supportive of transformation.

For further study, see...

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