

Models for Enquiry in Healthcare

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During a week's holiday in St Ives, my first visit, I was assisted by an illustrated map of the town, a two-dimensional model showing the relative positions of local attractions, not least golden beaches, coffee shops - also promoted along the map's border - and the Barbara Hepworth Museum with Sculpture Garden.

This kind of map is not unusual, and no doubt demand for it increases during the summer months.

Some models are less well known.

A very different type of model emerged because of research by Professor Peter Checkland and colleagues based in the Department of Systems Engineering at Lancaster University.

Founded by statistician Gwilym Jenkins in the 1960s, the department's earliest work on behalf of fee-paying clients involved applying quantitative models to achieve results, for instance, the economic transport of goods or flow of chemicals through industrial plant.

Yet, Jenkins realised several contracts held opaque difficulties hard for clients to define, let alone solve.

Recruited at a senior level to devise a new strand of '*systems thinking*,' Checkland oversaw the development of Soft Systems Methodology (often abbreviated to SSM).

A set of coherent guidelines to support enquiry between managers, technicians, and others as they sought improvement within an organisational setting.

Clients back then included the NHS, the Civil Service, and International Computers Ltd. – plus hundreds of smaller businesses.

Checkland describes SSM as a four-stage framework which steers users from finding out about scenario X (1), to sketching coherent systems models (2), which are assessed during a debate stage (3) before effecting agreed improvement within X (4).

The freehand sketches help structure debate among lay folk – you don't have to be an expert to use SSM. The freehand sketches help structure debate among lay folk – you don't have to be an expert to use SSM.

Each model shows purposeful behaviour via activities which could be conducted in practice. That is, models are operational, not merely clichés or hoped for outcomes.

For instance, during research on behalf of Berkshire Health Authority to help revamp Community Medicine,

several notional models were sketched and discussed.

One of these held thirteen activities, admittedly experts drafted this system.

A smaller model includes the activity phrases;

'Define health care needs' c and 'Decide what health care to provide' f.

An arrow from c to f indicates the latter depends on information from activity c. And...

... exactly how these activities might be actioned is debated in stage 3.

The principles of using SSM can be learnt, as with other subjects.

However, what distinguishes this methodology from, say, history or business studies is that it supports investigation of original topics – other people's unique problems and values drive the study.

A new HR manager employed by a manufacturer of health

products could adapt the principles when mulling over the use of outside trainers. The phrases define training needs and choose options which best meets factory managers' needs, being part of a sketch, makes ideas about the problem explicit – and shareable with colleagues.

Do they opt for the latest HR fad, pay more for what others have seen as relevant, or assess how much their graduate recruit contributes to the exercise?

In applications of SSM, models may stretch across department boundaries and suggest new activities for participants: models don't have to map neatly onto existing corporate arrangements. And...

... those which fail to stir debate can be quickly dropped.

Distinct from maps, engineering diagrams, and car handbooks indicating how the real

world 'actually is,' SSM signifies a means to explore complex problems via sketches which never represent an organisation; rather, each works as an explicit base for questions, answers,

and moderate adjustments in the changeful stream of everyday life.
