

Title Page

Critique of National Clinical Strategy

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This short paper uses insights from Complexity Science in an attempt to informally review the recent national clinical strategy [1]. We argue that the end point envisaged by the Strategy's authors appears to be at odds with the initial direction of travel; consequently this paper suggests a way in which Scotland could move towards a very different destination than the one envisioned by the authors.

There is no doubt that the majority of the public in Scotland have a desire for both a separate local focus (by repeatedly voting heavily for a party that believes in independence and installing it in a position of power in Holyrood), and at the same time a collective approach by supporting continuing membership of the European Union. Thus the actions of the Scottish population seem to demonstrate the central feature of Complexity Science, namely that Complex Adaptive Systems allow beneficial complex organised behaviour to emerge from a small limited set of interacting deterministic rules [2].

Our critique examines the Strategy from this view point, as in a complex landscape, where the effects of intervention are both "sensitive to initial conditions", and "outcomes are foreseeable but not predictable". Thus small interventions may have enormous effects (e.g. the Arab Spring) while conversely, large inputs may have remarkably little effect on the issue in question but may result in unexpected effects elsewhere which may or may not be beneficial. Sildenafil's failure as a treatment of Angina Pectoris is perhaps a case in point![3]

The opening chapters of the strategy clearly establish the symptoms and signs of a system in considerable distress, facing a very different future to that of the past. We agree with the central tenet of the diagnosis; things cannot remain the same. We have some technical issues with some of the data but these are trivial; they do not alter the conclusion that the current arrangements and the direction of travel established some 40 years ago cannot continue.

Regrettably, the goal of the Scottish health service is not clearly defined in the paper and the authors do not give a clear forecast of what the position will be for the Scotland if current approaches continue. Instead it lists aspirations without providing any justification. More tellingly, it does not indicate the forecast effect of these changes on either patients or, what seems to be their major preoccupation, the cost to the Scottish government.

However, we accept what we think is their coded premise that the current approach of concentrating resources at fewer and fewer large (inefficient) centres is wrong[4]. We also agree that the focus on super specialisation is mistaken. Our diagnosis is that these have arisen out of the false belief that health care is a mass production line; where all patients are regarded as essentially identical, identical treatments are expected to achieve identical outcomes, and things go wrong because someone did not follow the protocol.

A moment's reflection will reveal that every patient is both unique and their needs are also unique, even if they have the same disease as another person. Whilst guidance is always a welcome starting point for considering treatment options, following it to the letter must result in waste due to under or over treatment, and hence reduced cost effectiveness. The authors say that a paradigm shift is required, similar to that which saw the introduction of the horseless carriage or the steam locomotive. However, we believe the strategy proposed to address the impending collapse of health care in Scotland is less of a paradigm shift and

more like a car manufacturer suggesting a new model of the same car albeit with slightly tweaked bodywork and another new engine i.e. more of the same.

In the accompanying paper we suggest one approach that might answer their call for a new way of thinking. We think it recognises that health service delivery and organisation is craft-work not factory-work. We emphasise that this approach is not a move away from evidence informed care, far from it. It is evidence informed care that uses appropriately generated local evidence to inform continuing and continuous improvements in care. This is achieved by responding both to local established need, and the constantly changing environment that helps to define need and our ability to address it.

We maintain that only by making this sort of shift in thinking (of which our paper is but one manifestation) can the current evidence of increasing cost and distress in the system be changed to one that is both more beneficial and less expensive. In passim, it is worth stressing that cost reduction is not the aim of such a change but a consequence. Inevitably there will be some specific cost increases in both the short and long term. However, these will be off-set by the delivery of better outcomes and improved productivity in a constantly changing scenario. This is achieved in two ways. Firstly, by getting the principles right (the care people need, when they need it: no more, no less) which enables the service to flex and accommodate patients' needs. Secondly, by allowing staff to use their professional judgement in a succession of 'working' limited judgements which has a side effect of reducing the health service bill.

This position implies that continuity of care must be re-established as a key element of the health care system, along with the central role of primary care practitioners to establish an initial working diagnosis and deliver long term treatment. As the needs of the population rise the need for GPs rises, but the recent history of major health service growth has been in secondary care staff which equates to reversing into the future.

We consider Scotland to be well placed to develop such an informed approach with its unified data systems, but investment in public health analysis, forecasting and surveillance beyond its traditional area of communicable diseases, malignancy, congenital malformation and financial probity will be needed.

References

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