

# Clustering: Boon, Bane or Bust?

By Dr Jeremy Lim, Editorial Board Member

**Editorial note:**

An anonymous posting on the website of the Cut Waste Panel at <http://app.mof.gov.sg/cutwaste>, and the reply from the Ministry of Health. The site was accessed on 1 May 2004.

**Category:** Health

**Subject:** Two Health Clusters in Singapore

**Suggestion:**

What is the point of having 2 health clusters in a population of 4 million? What is the point of having 2 Cancer Centres, 2 Paeds Centres, 2 Neuro Science Centre, 2 Eye Centres etc, etc?

Those were the days when there was ONE Health Ministry with one center coordinating body and 5 Hospitals with their own MDs. Now there is still the MOH, 2 Clusters CEO with ALL their Administrative crap, and EVERY HOSPITAL with their own CEO and administrative staff – there is THREE layers of administrative fat these days to handle what used to be done by one efficient MOH. What happened?

Is the Healthcare situation any better than it was 10 years ago? Look around the region and the answer should be pretty obvious; every other country is catching up or even better than SG today. Take Thailand for example; they are doing more CABGs and heart/liver transplants than SG. They are getting more tourist dollars than SG.

The reason should be obvious, too. Health care is getting too expensive in SG, and what are we paying for? THREE layers of administrative fat.

Is there real competition? The answer is the same as the Mass Rapid Transit lines; is it true competition or just an administrative perceived answer? Ask any reasonable REAL health care professional; not a pseudo-healthcare administrative professional.

**Date Of Reply:** 16/02/2004

**Reply:**

Thank you for your feedback. We agree with your concerns and appreciate this opportunity to clarify the issue.

Hospitals are large and complex entities, bigger than many private organisations. Tan Tock Seng Hospital, for example, has 1000 beds, employs 4,000 staff and has an annual revenue of \$400 million. It is important for each of our hospitals to have a well-staffed organisational structure comprising professional and administrative staff to ensure that the hospitals deliver a good standard of healthcare services and achieve cost and operational efficiency as well.

We have set up the clusters to achieve better integration of healthcare services and greater efficiency through cooperation and resource sharing across institutions. When we do so, we have avoided unnecessary bureaucracy or duplication in administration. For example, the national centres being smaller entities, leverage on the administrative support of the clusters or the hospitals they are co-located with. Clustering has in fact provided opportunities to further consolidate administrative requirements and backroom services to save on cost and manpower requirements. For example, centralising IT systems management and support at the cluster level has cut overall manpower requirements by 15% while group purchasing has resulted in significant cost savings of \$19 mil annually. The clusters are committed to managing healthcare costs, and will continue to look into ways to do so through consolidation and co-operation.

**Han Kok Juan**

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A senior colleague lamented that, years ago, the Medical Officers Posting Exercise (MOPEX) was managed by Prof Chee Yam Cheng, one Ministry of Health (MOH) executive and a few administrative clerks. He went on to bemoan the expansion of administrators today, within both clusters' headquarters, as well as the hospitals, to cater to medical manpower. Clearly, the situation for MOs' satisfaction in

terms of postings is now much better, but was this worth "three layers of administrative fat"? The U.S. healthcare system is noted for its good outcomes, but health consumes 13.2% of the GDP, and of every dollar spent on healthcare, 24% goes into administrative costs<sup>1</sup>. Clustering has undoubtedly increased the administrative costs, but has this led to greater all-round efficiency?



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Looking at the examples cited above (IT systems and group purchasing), it is clear that the arguments in support of clustering are specious. Centralising IT systems at the cluster level may have cut manpower requirements by 15%, but this must only be in comparison with each institute initiating and maintaining its own IT network. An electronic medical record system implemented nationwide before 2000 would have been far more prudent, and would have obviated the need for measures like the EMR Xchange.

Group purchasing is another much-praised initiative. While the benefits of bulk purchases are undoubted, surely the Group Purchasing Office (GPO) could NOT have been a direct result of clustering. If so, it would have made much more sense to initiate group purchasing when all hospitals were directly under the MOH in the late 1980s.

*“Both clusters will also collaborate and cooperate to minimise wasteful duplication.” – Mr Lim Hng Kiang, Minister of Health, Addendum to the President’s Address, 27 March 2002.*

Despite Mr Lim’s good intentions, I am doubtful that we have indeed “minimised wasteful duplication”. In 1999, we had the Singapore National Eye Centre, National Heart Centre and the National Cancer Centre, purportedly to “**spearhead** and **co-ordinate** the provision of specialised... services with emphasis on quality education and research”, to serve as the “**national** referral centre” and “**focal point** for nationally ... activities” respectively<sup>2</sup>. Today, we still have these national centres, but we also have the Eye Institute, the Heart Institute, and the Cancer Institute. Are all centres and institutes functioning at full capacity and drawing an increasing pool of foreign and local patients? Anecdotal accounts seem to suggest that the overall numbers remain the same, and patients are simply moving from centre to institute, and vice versa.

Patients now have more choice, but what about better outcomes? Is this costly duplication in the national interest?

### IS IT TIME FOR THE CLUSTERS TO GO?

Though there are some very strident views calling for an abolition of the cluster system, supporters insist they still have a role in providing consumers a choice, which is fundamental to any free market. Healthcare hegemony, while streamlining administration, leads to a situation where there is no incentive to improve or respond to consumer wants and needs. I wholeheartedly agree with the need for competition, but examining the issue from a larger perspective, we are already in a highly competitive environment, and there may be a need for the clusters to see themselves more as “half the public sector”, a sector competing with both the private sector and overseas health industries, and in danger of losing out to both.

Singapore’s desire is to be a clinical and research hub of excellence<sup>3</sup>, and this is consonant with both clusters’ mission statements. How can clustering support these twin goals?

**Clinical expertise** is a function of volume and experience. Medical literature is replete with examples of a consistent



volume-outcome relationship, especially in complex cancer surgery such as oesophagectomy and pancreaticoduodenectomy<sup>4</sup>. In fact, Dudley estimates that as many as 4,000 deaths in the U.S. annually may be averted by selective referral to high-volume centres<sup>5</sup>. Clusters should evaluate the results of their daughter institutions and if the volume-outcome relationship is preserved locally, re-organise to concentrate their expertise in certain diseases to one centre and restrict conduct of surgeries or management to that centre.

**Clinical research** is another aspect of institutional practice that is highly dependent on patient recruitment. Cohort size is paramount in any respectable trial. Combining patients from all the hospitals and institutions within the same cluster, or even both clusters, is the only way to achieve numbers comparable to the large centres in the west, which have a catchment population of millions. The Mayo Clinic, Rochester, recently published a trial on the role of neurolytic coeliac plexus block in unresectable pancreatic cancer<sup>6</sup>. Their numbers? 100 eligible patients in a short three and a half years. The Centre for Medical Genetics, Johns Hopkins University, recruited 70 patients with classical Marfan’s syndrome to study the rate of aortic root progression<sup>7</sup>. How many such patients does any one Singapore centre see in a year? It is clear that to survive and thrive in the ruthless world of academic medicine, we will have to “collaborate and cooperate”.

It has been four years since clustering was effected. The health landscape has changed dramatically in the intervening years. Are our clusters living up to the challenges of today’s world? If not, they have to evolve and emphasise the national imperative of Singapore becoming a clinical and research hub, or risk being, at best redundant, at worst obstructive. ■

### References:

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5. Dudley et al. Selective referral to high-volume centres: an estimate of potentially avoidable deaths. *JAMA* 2000; 283: 1159-66.
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7. Shores et al. Progression of aortic dilatation and the benefit of long-term beta-adrenergic blockade in Marfan’s syndrome. *N Engl J Med.* 1994 May 12; 330(19):1335-41.