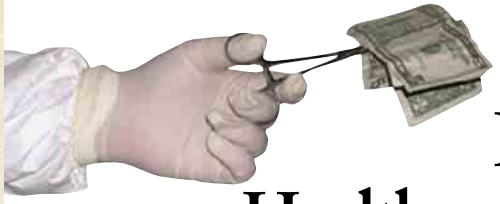

Dollars & Sense in Healthcare Revisited

By Dr Jeremy Lim, Editorial Board Member

Three decades ago, Dr Koh Eng Kheng, former President of the College of Family Physicians and Editorial Board member, penned an article in the SMA News entitled, "Dollars and Sense in Medical Care"[1]. Among other issues raised, Dr Koh lamented the rise in hospital and outpatient charges but also very pragmatically asked "...but is there any other way if we wish to have a high standard of medical care for our people? You cannot have something for nothing." A generation later, 3M, restructured hospitals and clustering have become standard in the health lexicon, but we still return to the eternal paradigm of healthcare: finite resources to meet an infinite demand. The most fundamental issue in healthcare is the same today as it was thirty years ago: Dollars (how much) and Sense (where or prioritisation).

DOLLARS...

Dr Phua Kai Hong, a health economist in NUS, has been in a long-standing debate with the Ministry of Health over government expenditure on health. Deriding the relatively modest 3-4% of GDP spent on health, Dr Phua has pointed out the US spends 15% while the World Health Organisation recommends developed countries set aside about 5% for health[2]. Minister for Health Khaw Boon Wan has robustly defended the Ministry's stance, saying the actual amount is not that critical and is "just a means to an end. And the end is a healthier society."[3]

While Mr Khaw is justifiably proud of Singapore's sterling health indices despite its comparatively low spending, it must be noted that between 1998 and 2003, health costs were reported to have risen by over 60% and each household spends an average of S$186 a month on healthcare. It should be highlighted also that Singapore, by virtue of being completely urban and compactly spread over a mere 699 square kilometres, coupled with a relatively young population, should rightly expect to spend smaller amounts on health compared to other developed countries which are more geographically dispersed and have rural populations among its citizenry.

How much does the government spend on healthcare? Over the same 6-year period where healthcare costs rose 60%, per capita government expenditure (excluding expenditure of restructured hospitals) rose from S$317 to S$489, a S$172 increase and government share of total healthcare expenditure was approximately S$2 billion, or less than one third of the total healthcare bill. Thus it is clear that out-of-pocket spending (defined here as including Medisave and Medishield premium monies) by the public accounts for the lion's share of healthcare payments. However, it should also be noted that the non-profit sector also supports not insignificantly indigent patients for a variety of medical conditions including kidney failure, cancer and heart disease.

Can the government allocate more monies in absolute terms to healthcare? Yes, of course it can. Should it? This brings us to our next question, prioritisation in healthcare. If the healthcare dollar can be stretched even more or redirected to more effective areas of care, then there may be no imperative to increase health financing.

SENSE...

How is the healthcare dollar allocated? The Ministry of Finance has apportioned S$1.9 billion for FY 2005-6. Of this, S$1,321 million (69.5%) went into subsidies, S$85 million (4.5%) to health promotion including preventive health services such as screening, S$69 million (3.6%) to healthcare capacity building and S$61 million (3.2%) to training[4]. Further, the bulk of subsidies go to inpatient care and primary care patients receive only 10%[5]. In a dialogue at the Alumni Association last year, Dr Balaji Sadasivan, Senior Minister of State for Health commented that approximately two-thirds of recurrent healthcare costs go into manpower expenses – one third to doctors' salaries and another third towards nurses' remuneration.

In the United States, a study by Price Waterhouse Coopers in 2002 found that major cost drivers of health premiums included 'Drugs, Medical Devices and Medical Advances' (22%), 'Rising Provider Expenses' (18%) and 'Increasing Consumer Demand' (15%). Medical Inflation and Government Regulations were also significant cost drivers, accounting for 18% and 15% of the rise respectively[6].

What should we make out of this morass of data? Firstly, the largest component of the government health budget is for treatment subsidies and secondly, manpower is the most critical contributor to cost.

In the light of these two observations, how should we critically appraise our funding priorities? There are two questions I humbly suggest we ask as a start to a fuller debate on resource allocation: should we be emphasising treatment subsidies to such an extent and should we re-examine manpower in healthcare? The two issues raised are only a drop in the ocean of potential reform options and close and continued study of the data will reveal literally thousands more possible approaches.

Treatment and more treatment... Why not prevention and early detection?

The successful epidemiological transition of Singapore from an age where infectious diseases predominated to an era of chronic and lifestyle-related illnesses provides valuable pointers. Drawing from the realm of cancer, the leading cause of death in Singapore,

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it is commonly accepted as a rule of thumb that one third of cancers are preventable, another third 'curable' with early detection and treatment, and the final third unfortunately ultimately palliative. For chronic diseases such as hypertension and diabetes, healthy living is believed to be highly effective in preventing disease and reducing complications. The National Center for Chronic Disease Prevention and Health Promotion, USA, provides a plethora of evidence extolling the clinical benefits and cost-effectiveness of preventive health measures and vivid examples include the ability of exercise and diet to lower the risk of developing diabetes by 60%, which was twice as effective as metformin[7]. However, as seen above, only 4.5% of the total government health budget is directed at preventive health. Does it make sense to use Medifund to provide for expensive drugs such as Herceptin (S$3,500 a month) and provide a mere S$50 subsidy for screening mammography? Herceptin* and chemotherapy compared to chemotherapy alone resulted in an 18% absolute risk reduction of recurrence, NOT death, at 4 years (NSABP-B-31 and NCCTG-N9831) while screening mammography is estimated to reduce cancer mortality by 20-35% in women 50 to 69 years of age. Based on American Cancer Society estimates, this would work out to approximately 12,400 deaths prevented for the year 2005[8].

This is not a vitriolic campaign against cutting edge medicine or Singapore's aspirations to be the regional medical hub, but a cautionary note that we forsake what Dr James Marks, former director of the US National Center for Chronic Disease Prevention and Health Promotion, calls the 'power of prevention' at our own folly.

Manpower in health: doctors or nurses?

"If there is no transformation in the way healthcare is delivered, healthcare must eventually bankrupt all economies."

Mr Khaw Boon Wan, Minister for Health, 17 May 2005[9]

The salaries of doctors are not likely to head south even with increasing numbers and the answer to cost containment may in fact lie in reducing the number of doctors over time and re-distributing the various tasks of doctors to other healthcare professionals. This approach can draw comfort from our epidemiological transition to lifestyle-related diseases and recent evidence that nurses may actually be more effective than doctors in counseling and management of chronic diseases[10].

Singapore has already moved actively to enhance the role of nurses and the establishment of a nursing degree programme in NUS and promotion of the concept of Advanced Practice Nurses are steps in the right direction. In time, I am confident that our nurses will rise to the challenge and replace doctors in many of our traditional roles. Nurses can then attain the salaries and status they desire and deserve and we can more closely match our often highly specialised and expensive training with the appropriate case portfolio.

WHAT HAS CHANGED OVER THE LAST 30 YEARS?

While the fundamental paradigm of infinite need and finite resource has remained constant, at least four other developments, one global and three local have changed the landscape of healthcare practice and health economics. Globally, most diseases now have fairly effective treatments or palliative methods and the advent of increasingly sophisticated medicines and medical devices will only push upwards healthcare spending. In Singapore, the most obvious development is that increasing affluence and expectations will increase demand for healthcare and lifestyle medicine. Secondly, the widening income gap will force the Ministry of Health to continue to deploy new strategies to ensure targeting of subsidies so that the truly needy obtain the most support. Lastly, the emergence of non-profits has changed the paradigm of renal replacement therapy with the civic sector taking on the role of providing for Singaporeans independent of the state. With our government's repeated emphasis that we are not a welfare state, it would be natural to expect an ever-increasing role for the non-profit sector in healthcare financing and provision.

CONCLUSION

There are no right or wrong answers, only value judgments as to how much and where healthcare dollars should be allocated. Hard choices will have to be made and many people will be disappointed and disillusioned. But as we sail into the uncertain healthcare paradigm of Singapore's tomorrow, let us not forget Dr Koh's wise words on progress:

"Progress in a nation can be measured by many yardsticks. There is the yardstick of economic progress, the yardstick of material affluence, but there is also the yardstick of benevolence and care we show for the less fortunate members of our society. It is when we show that we do care for the less fortunate amongst us that we can truly say we are no longer a primitive society or an undeveloped nation." ■

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Editor's Note:

** The significant increase in survival benefit of adding herceptin to adjuvant chemotherapy in early breast cancer has compelled the National Institute for Health and Clinical Excellence (NICE) in the United Kingdom to make this drug widely available in the National Health Service (NHS) in the near future.*