By Dr Jeremy Lim, Editorial Board Member

Performance Bonuses for Doctors – Misguided and Misinformed?

It is the time of the year when all of Singapore eagerly awaits announcements of bonuses. The emphasis today on 'variable bonus payment' as encouraged by august bodies including Singapore's National Wage Council is premised on, as Prof Lazear of Stanford puts succinctly, the assumption "paying on the basis of output will induce workers to supply more output". How valid is this assumption in healthcare, and particularly in the context of doctors?

The Safelite Glass Corporation studies conducted by Lazear between 1994 and 1995 are often quoted as evidence that individual incentives work. In this work studying the effect of different incentive systems for installation of windshields by workers, Lazear documented a 44% gain in productivity after moving from hourly wages to piece-rate wages with a wage increase of only 7%. What is not commonly mentioned by aficionados is that windshield installation essentially involves only one worker who is absolutely clear about his role and responsibility throughout the entire process. Lazear also qualifies his work, saying that windshield installation is ideally suited for individual incentive systems because "output is easily measured, quality problems are readily detected and blame assignable".

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In healthcare, performance is much more complex and multi-dimensional. Let us apply Lazear's three criteria for output, quality and blame to the productivity of doctors and determine what challenges lie in direct application of incentive systems for windshield installers to the medical profession.

Firstly, **"Output"** is difficult to quantify given that all patients and hence all patient encounters are unique. Adjustment for case mix is thus necessary, but that in itself is a murky and imprecise science, laden with its own set of assumptions. Simple volume statistics, commonplace in all healthcare institutions are inherently unfair due to the inability to adjust for case mix and hence meaningfully quantify the differences between the doctor seeing 10 patients in one hour and

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the one who sees five in the same period. The second parameter in our assessment **"Quality"** is also fraught with challenges. Other than a few well-known risk adjustment methods applied in for example, cardiac surgery, the majority of specialties cannot distinguish 'scientifically' quality differences between two doctors. Finally, the era of team-based as opposed to physician-driven clinical care is well and truly established, and especially in chronic disease management, the patient is often the most important member of the care team with the largest contribution to success or failure. It is hard to precisely assign **"Blame"** (or more accurately, accountability) in modern healthcare as patients literally come into contact with dozens of hospital staff even during routine admissions. Furthermore, current patient safety thinking firmly emphasises the Swiss cheese model of errors, asserting that in the majority of medical errors, a multitude of 'small' errors usually need to occur (lining up of slices of Swiss cheese such that a row of holes is in alignment) before patients suffer an adverse outcome.

I am not against individual incentives as the basis for physician compensation. However, I do believe their limitations and context in healthcare have not been robustly discussed before adoption and thus impact on their usefulness and acceptability today. We need to work together to first better define output, quality and accountability before rushing headlong into "paying for performance" and running the risk of gaming, inappropriate physician decision making and ultimately poorer patient care.

Finally we should also remember that the sociological perspective of a *professional* is one that put his clients (or patients) interests first and foremost, even above that of his own. ■

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