Lessons for Healthcare from the Airline Industry

– Is It Time to Sacrifice Efficiency for Safety?

By Dr Teoh Yee Leong

One day, I received a phone call from a doctor colleague that made me realise how dangerous it was to practise Medicine in a busy and overworked clinical practice. The call was from a consultant geriatrician who very nicely informed me that I had wrongly referred a non-geriatric patient to his clinic. I was very apologetic and realised that when I was working as a locum in a busy emergency department the previous day, I had wrongly typed the referral letter of my patient to the Geriatric Medicine department instead of the General Medicine department. Luckily it was not a fatal error, but one that only caused inconvenience to my patient due to my oversight, as his appointment to consult the specialist clinic had to be rescheduled.

On hindsight, I realised that the mistake occurred as it was a very busy morning in the department, where the workload of the doctors is very heavy, like most other public hospitals. This is not unusual, even though the hospitals have been hiring locums like me to supplement their regular medical manpower to cope with the heavy workload.

Three years ago, I was at the Kuala Lumpur International Airport, returning from a business trip to the Malaysian capital, when the Singapore Airlines plane I was supposed to board had some technical problems and the flight was grounded for further checks. The airline brought in a replacement aircraft, but as the original team of airline crew (both pilots and cabin crew) had exceeded the limits of their working hours (which include standby hours while waiting for the flight to resume), they were not allowed by law to operate the replacement aircraft due to safety reasons. Consequently, the passengers had to stay overnight and fly out the next day with a new team of airline crew.

Similarly, in 2011, I was onboard a new Singapore Airlines Airbus A380 in Heathrow Airport, returning from another business trip in London back to Singapore. The pilot announced that there was a problem with the ventilation of the cabin crew's room, and a team of engineers had come onboard to fix it. As the law requires cabin crew to rest during the long flight, the aircraft would not be allowed to fly if the crew were unable to use their room due to the ventilation problem.

After two hours' delay (all the passengers were still in their seats), the pilot announced that if the problem could not be fixed within the next hour, all of us would have to disembark and wait overnight at the airport for a new team of cabin crew to arrive. The current team was not allowed to operate on that flight, as their total working time (including standby hours waiting for the problem to be fixed, plus the flight time from London to Singapore) would have exceeded the legally allowed working hours. Luckily, the problem was fixed in time and the plane managed to take off before we had to stay overnight for a new team of air crew.

These two airline incidents made me realise that inasmuch as the airline industry advocates good service and efficiency, they do not compromise on safety. Even though it may cause a lot of trouble for the passengers (e.g., staying overnight in the airport and disrupting their travel plans), it is the safety of the passengers that overrides all the inconveniences.

In healthcare, we know that it is a tough job to balance cost, efficiency and

quality. If you want one aspect to improve, you need to sacrifice the others. As the Government is now trying to control the escalating cost of healthcare, if we want efficiency, the quality will suffer.

Thus, with all the pressures of reducing waiting time for patients, are we sacrificing their safety? Although there has been tremendous improvements in the working environment of the junior doctors in the public hospitals over the last ten years (e.g., many hospitals now have dedicated medical officers for night shifts instead of the 36-hour overnight shifts we used to perform previously), the workload remains very heavy.

With the pressures of shorter waiting times for patients in the government polyclinics, emergency departments, specialist outpatient clinics etc, perhaps it is time for the administrators in the Ministry of Health to learn from the regulators of the airline industries. Certain safety measures, such as limiting the number of working hours and total patient load per doctor, can be enforced in the public hospitals to ensure that safety is not compromised. Limiting working hours without limiting patient load is still not acceptable as heavy patient load in shorter working hours makes it likely for mistakes to happen.

Many years ago I attended a medico-legal talk organised by SMA and I remembered the speaker from overseas asking us a risk assessment question. He said, "If you are performing a routine procedure with a risk of 0.5% mortality rate, is this acceptable?" Most of us nodded our head as we felt that any risk of less than 1% was already very low. He then asked us again, "If there are 200 flights departing from Changi Airport every day, if 0.5% of the flights, which means one flight out of the 200 will crash, is this acceptable?" All of us shook our head. Thus, in the airline industry, the push for safety is paramount, and perhaps it is time for the healthcare industry to follow suit with more stringent workload limits for doctors in the public sector. SMA

Dr Teoh Yee Leong is a public health physician currently working in the private sector. He has been practising as a locum doctor in public sector emergency departments during his free time for more than ten years. He was formerly head of one of the largest government polyclinics in Singapore. This commentary is contributed in his personal capacity and does not represent the views of any previous or current organisations he is associated with.