10 SIMPLE RULES for 21st Century Healthcare in Singapore

By Dr Louis Tan

While quality of life has been improved by advances in medical technology, gaps in our healthcare system's ability to comprehensively manage chronic diseases remain and will continue to widen if our system continues to be centered on expensive, episodic, and acute care. While acute care remains a key pillar of any healthcare system, there is a pressing call for provision of care beyond the acute sector to prepare for the 'Silver Tsunami' – to develop primary and step-down capability so that care is right-sited, and chronic diseases can be detected early and managed effectively. We need a system that is suited to our needs and can also best integrate our wide spectrum of healthcare providers to deliver the best possible care at affordable rates.

In this article, I would like to share with you 10 simple rules for healthcare in Singapore, based on those from *Crossing the Quality Chasm – A New Health System for the 21st Century,* by the Institute of Medicine.

RULE 1: Good care is continuous and extends beyond the clinical setting

Our current model of care revolves heavily around visits to the doctor but in many cases, face-to-face visits are neither wanted nor warranted. In meeting patients' expectations of care, information, support and reassurance are often as important as medication and treatment. Therefore our mental model of healthcare delivery should not be restricted to clinic visits, but should encompass all forms of 'healing interactions'. While clinic visits will continue to be important, healthcare should be organised to look beyond such visits as the only measure of patient interaction deserving of remuneration. The judicious use of telemedicine will also allow doctors to devote more time towards improving the quality of clinic visits that do occur.

In Singapore, telemedicine promises to be a very potent enabler. We have one of the highest penetration rates for mobile phone usage and we have built up extensive infrastructure to support broadband internet connectivity. We should leverage on these advantages to make healthcare more accessible to patients without caregivers, those faced with issues of mobility as well as those for whom face-to-face visits are not necessary.

RULE 2: Care is customised to patient needs and values

Today, variations in treatment regimes often reflect local or individual preference and training, which may not necessarily align with current evidence-based medicine. Moving forward, variability in treatment should be driven by the patient and not the doctor; such variability may result from the patient's personality, religion and cultural beliefs. An example of this is seen when considering hormone replacement therapy for a menopausal woman – a choice that will be influenced by the extent to which she is bothered by her symptoms and her risk appetite for adverse effects.

RULE 3: The patient is the source of control

Although a departure from the traditional patient-doctor relationship, this rule is nevertheless consistent with the direction in which such relationships are evolving. This is largely the result of increased education levels of patients and their caregivers. Evidence has shown that informed patients who participate actively in decision-making appear to have better outcomes than those who choose to adopt a passive role. Having the patient as the source of control does not imply that they should be forced into decision-making, but rather that they should be able to exercise the degree of control they wish.

RULE 4: Knowledge is shared and information flows feely

As mentioned, information, support and reassurance are often as important to patients as their prescriptions. Therefore, care should also encompass the transfer of knowledge from doctor to patient. Ownership of medical records is a contentious issue as they serve dual roles as legal and patient-care documents. Ideally, patients and the multiplicity of healthcare providers involved in their care should have unrestricted access to their health records, but safeguards are needed to prevent inappropriate usage of health data by providers and improper interpretation of information by patients. In time, this arrangement will also benefit healthcare providers as patients will be able to help identify wrong and/or outdated information. Patients may also be able to contribute meaningfully to their own records and record side effects of treatment and other relevant inputs to help doctors provide better and more personalised care.

Sharing of information should also extend beyond individual patient-doctor relationships. In public health, there are many benefits in facilitating public access to information. Sharing data on the nature of disease, case fatality rates, treatment options and extent of local spread during the first wave of H1N1 was beneficial in generating greater public awareness and understanding. This resulted in more effective containment efforts and a better tolerance of and compliance with unpopular public health measures like home quarantine orders and hospital restrictions on visitor numbers.

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RULE 5: Decisions are evidence-based

Variation in clinical practice may not always be based on well-founded rationale and consequently, care may be unreliable and advice/answers inconsistent. Evidence-based medicine allows us to draw on collective knowledge that one individual doctor cannot be reasonably expected to accrue, even with a lifetime of clinical experience. The use of this in drawing up clinical practice guidelines to serve as adjuncts to experience-based practice can improve standards of care, and indeed this is something which the Ministry of Health has been encouraging. Greater emphasis on evidence-based medicine in undergraduate and post-graduate education will hopefully entrench the value of evidence-based practice within our medical fraternity.

RULE 6: Safety is a system property

One of the greatest barriers to increasing patient safety is lack of awareness of the extent to which errors occur daily – this is contributed in large part by individual fear of reproach. There should therefore be greater recognition that threats to patient safety are the result of a confluence of variables like equipment failure, poor system design and human factors like fatigue, distraction and inadequate training. The strategy should be the identification of root cause of errors and to use this knowledge to design a system that is better able to prevent errors, make visible those that do occur, and mitigate any resultant harm. Quality Assurance Committees (QAC) have been set up for this purpose – to enable hospitals to determine causes of sentinel events and institute measures to prevent recurrences, and not for purposes of litigation or discipline. Initiatives such as the QAC should be exported beyond the borders of the larger healthcare institutes, to involve smaller healthcare groups and even individual clinics. Indeed, as integration of healthcare gains momentum, there should be concerted efforts to roll out a stronger and more embracing nation-wide system to facilitate collective learning and sharing of best practices.

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RULE 7: Transparency is necessary

While patient confidentiality remains of foremost importance, this should not serve as an excuse for concealing our healthcare system's performance from those who depend upon it for care. Transparency and public accountability is paramount and trust should be built through disclosure, even of faults. Performance of various healthcare institutions should be made available so that stakeholders can make informed decisions. There should be no concerns about increased litigation. Instead, there is now a growing body of evidence that supports open disclosure of errors as a means of decreasing the likelihood of malpractice loss.

RULE 8: Needs are anticipated

We should strive towards a system that is able to anticipate the needs of the population and intervene early. Examples of how this may be implemented are seen even today – the use of patient registries, like the Transplant Donor Care Registry, to track patients and draw them into care is an example. The use of models to predict needs, pinpoint possible system bottlenecks and identify high risk groups of patients was an effective tool recently used in our efforts against H1N1.

Such an approach will yield sizeable benefits in the management of geriatric syndromes for the elderly; anticipation allows us to preemptively address the full spectrum of their medical, social and psychological needs before the onset of severe morbidity and mortality. Similar strategies should likewise be incorporated into management of chronic diseases, especially in conditions where risk factors and natural history of disease progression have already been well-established.

RULE 9: Waste is continuously decreased

Too often, there is misplaced emphasis on cost reduction, in the belief that reducing expenditure alone will increase value. This approach fails to recognise that increased cost is not necessarily due to 'waste' and may be unavoidable to achieve a better understanding of diseases and their management by doctors and patients. This in the long run may lead to lower healthcare costs through prevention of disease or complications, and a longer time horizon in considering benefits is warranted.

What we should advocate is improved efficiency through better understanding of the nature of 'waste', to identify components that do not add value and eliminate them. Attention should be paid to all areas of waste: infrastructure, equipment, procedures, personnel and time. With globalisation, shortening of economic cycles and quantum leaps in the field of telecommunication, life now moves at a much quicker pace and financial impact of the man-hours lost while waiting at a clinic may be far greater than the $80 a specialist charges for a 15-minute consult. Economising resources at the expense of time is therefore no longer a viable strategy.

RULE 10: Cooperation among clinicians is a priority

Integration is the current buzzword in healthcare, and impetus from the Prime Minister's National Day Rally speech has helped us take the first tentative steps.

In our current system where each specialty or branch of healthcare largely works within its own silo, it is patient care that is ultimately compromised through loss of continuity, duplication, excess costs and miscommunication. The collocation of step-down care facilities next to acute hospitals and the formation of ortho-geriatric teams to care for elderly patients at risk of frequent falls are examples of past attempts at providing integrated care. These efforts however, have largely been ad-hoc with varying degrees of success. We now face the mammoth challenge of launching a conscious, systematic and nation-wide effort to integrate our health services. As the hospitals discovered during the creation of the two health clusters, the early transition years will likely be painful ones – success will require perseverance and the buy-in of healthcare providers and patients alike.

The above ideas are by no means revolutionary, but in codifying them, these 10 rules serve to highlight gaps in healthcare that we need to address. Our profession must seek to move beyond traditional arenas – a move that is paradoxically driven by the need to remain relevant so that we may continue our centuries-old tradition of providing healing care in tomorrow's Singapore. SMA

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