Bridging the practice chasm

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This editorial refers to 'The clinical characteristics and investigations planned in patients with stable angina presenting to cardiologists in Europe: from the Euro Heart Survey of Stable Angina'† by C.A. Daly et al., on page 996 and 'The initial management of stable angina in Europe, from the Euro Heart Survey. A description of pharmacological management and revascularization strategies initiated within the first month of presentation to a cardiologist in the Euro Heart Survey of Stable Angina'‡ by C.A. Daly et al., on page 1011.

Since the description of angina by Herberden in 1768, the management of patients with angina has improved significantly. Over the past decades, several novel diagnostic and therapeutic techniques have provided better means of detection and treatment. Even with these favourable innovations, numerous studies have consistently demonstrated a wide discrepancy between knowledge and practice. Under-treatment of patients with acute coronary syndromes has been documented in the countries of North America,1, 2 Europe,3 and around the world.4

Unlike the commercialization of other technological devices, the introduction of medical products requires a long and arduous process of pre-clinical and clinical studies. On the basis of these results, a panel of eminent specialists in the field, gathered by reputable medical organizations, develops guidelines to assist clinicians in the management of these conditions. Generally, this information is disseminated through international scientific meetings and key medical journals. Notwithstanding the extensive efforts in this exercise, Daly et al.5 concluded that the management of modifiable cardiovascular risk factors and secondary preventive measures remain inadequately adhered to for patients with newly diagnosed angina pectoris in Europe. In an accompanying article, the authors6 also found substantial variation in the use and timing of clinical investigations across Europe. Though there are limitations in generalizing the information because of sampling technique, the information derived is notable. Indeed, the deficiency in patient care is of great concern, particularly when others have shown compliance with guidelines-improved outcome of patients with unstable angina.7

Previously, acquisition of new knowledge has been an important barrier to technology diffusion and adoption. Generally, it took a long time before the results of clinical trials were transmitted to the practising physician. But today, the spread of information has never been so rapid with the uncountable number of scientific meetings and roving lecturers, and more recently, the internet. The task of understanding and applying these results has been further simplified by the summaries and debates provided by independent respectable physicians. Nowadays, with several medical regulatory bodies requiring some form of compulsory continuing medical education programmes for renewal of practice licence, most clinicians are likely to have received new information in one way or another. Furthermore, extensive efforts have been undertaken during the development for each product, clearly the demarcation between early adopters (technically sophisticated and interested in new technologies in solving problems) and pragmatists (who are less technology focused and interested in new technologies in solving problems) and pragmatists (who are less technology focused and interested in new technologies in solving problems) becomes less distinct in the field of clinical medicine. In spite of all these favourable developments, disparity in healthcare delivery still exists today.

Among the various evidence-based medicines, Daly et al.5 found that antiplatelet therapy was widely implemented, but the use of statins was more restricted. About half of the patients were not receiving statins and only one-fifth of them had specific contraindications. Importantly, the authors pointed out that one-third of the patients who were not on statins was treated with other lipid-lowering agents and another quarter were awaiting results of their investigations. However, it is reassuring to note that 70–80% of those with dyslipidemia were treated with statins. Taken together, these findings may also reflect on the uncertainty of diagnosis as well.

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But the decision to implement these recommendations by each doctor depends on a variety of other factors, including personal beliefs, preferences, personalities, and perspectives. Moreover, the fear of loss of autonomy in patient management when following guidelines may impact on physician attitude. Understandably, results from clinical trials may not be broadly applicable because of stringent selection criteria, clinical guidelines are likely to provide the basis for optimal practice.

On the other hand, patients also need to be convinced of the value of such interventions, particularly when everyone faces an incessant bombardment of information and misinformation on the World Wide Web. Furthermore, persons from different geographical regions are likely to have dissimilar upbringing and cultural practices. Other characteristics may also influence an individual’s receptiveness to recommendations by physicians. In this study, the elderly and women were less likely to undergo stress testing and coronary angiography. Not unexpectedly, the complex interpersonal relations and patient willingness or aversion to new ideas may have accounted for some of these discrepancies and could have prolonged the decision-making process.

Another critical element for a successful integration of a new technology is the commitment provided by institutions and supportive social policies established by governmental agencies. Clearly, different healthcare reimbursement systems have a considerable impact on the rate of diffusion and adoption of novel technologies. Patient management patterns are influenced substantially by regulatory and economic incentives or disincentives. Understandably, the healthcare infrastructure, in some ways, determines the ability (or inability) to cope with patient consultation, investigative and therapeutic procedures. In the study by Daly et al., the broad range of waiting time for investigative cardiac procedures and duration of follow-up visits among the different regions of Europe suggested that institutions and governments played a crucial role in delivery of care. They also found that those centres with invasive facilities were more likely to be compliant with guidelines. Although these patients may be better informed and more affluent, other investigators reported that financial motivation and patient affordability could not explain fully the variation in utilization of health resources. Indeed, even in the same geographical region, such differences are expected. Furthermore, ethnic disparities in healthcare delivery have been repeatedly shown in several studies. Probably, the cost and benefit of every intervention is dependent on each society’s perception and recognition. Therefore, striking a balance between these two forces is tricky and the stakes for politicians are generally high. Although regulators require the provision of quality care by providers, they are also concerned about rising healthcare costs.

Greater interactions among providers and financiers and more rapid and effective means of communication among opinion leaders and practising physicians may help lift barriers to healthcare delivery. Further simplification of key messages in guidelines is likely to ensure greater compliance. The inclusion of cost-effectiveness substudies in several of the more recently conducted clinical trials can provide additional insight into balancing the cost benefit equation. Nonetheless, there is still a need to understand some of the complex processes of healthcare delivery and appreciate the variations observed in different regions. Recognizing these issues will help streamline strategies and public policies. But the incessant supply of novel innovations in medicine together with changes in demographics, disease patterns, and reimbursement structures will continue to challenge the healthcare systems in the coming years. Every doctor must guard against the erosion of professionalism by external pressures. Finally, to bridge the chasm of evidence-based medicine in current practice, there must be strong visionary leadership from institutions and policy-makers to create best outcomes.

References