Introduction
I believe that the biggest issue facing our profession is change. I also believe that one of the future’s most prized skills will be the ability to adapt to and manage change. My objective here is to examine where and how this change is occurring and to understand its implications for dentistry. And second, to consider the skills needed to manage change.

Clinical Practice
Over the next few years, I predict the introduction of a caries vaccine, hard tissue laser applications, anti-plaque agents, bonding agents and bonded materials as permanent as the tooth itself, and improved electronic anesthesia. Online databases containing treatment outcomes and guidelines of care will be utilized to enhance clinical decision making.

From the patient’s perspective, this technology will alter how we select health providers, what we expect when we visit a dentist’s office, and our attitudes about health care and health professions. Technology will change our lives.

What skills are required to deal with these changes? Oral health care, like all industries, must monitor and respond to rapidly emerging technologies and consider their wide-ranging impact on clinical dental care as well as on the financial, behavioural and social aspects of care delivery. Not only will dentists need to understand the basic biology underlying these technologies, but they will have to understand how to use them and assess their effectiveness. In addition, they’ll have to keep up with new knowledge generated by rapidly advancing research.

These current and emerging trends offer tremendous challenge and opportunity for dentistry and clearly indicate the need for the profession to become engaged in shaping the future. Dentists must recognize the need to be well-trained, skilled clinicians; to become smart business people; to monitor advances beyond dentistry and acquire new knowledge and skills; and to integrate new knowledge into their practices and businesses. Like the rest of our society, dentists must be prepared to be perpetual learners. To be teachable, trainable, malleable, and responsive to a changing world.

Evidence-based Dentistry
Far too few decisions in health services are made as a result of good evidence. Why? There are problems with the amount of evidence available (or lack thereof), problems with its quality, or our ability to access it, and for some issues, problems with overcoming a culture of practice based on authority rather than evidence. Yet evidence-based dentistry improves the effective use of research evidence in clinical practice. It uses resources more effectively. It relies on scientific evidence rather than authority for clinical decision making. And it enables practitioners to monitor and develop clinical performance.

What are the skills required to meet these challenges? We need to develop new skills for identifying clinical problems, for searching the literature, and for critical appraisal of information, techniques, materials and outcomes.

Demography
Present projections indicate our population will increase by 60 per cent by the year 2050. Moreover, the growth will be concentrated at the two ends of the age spectrum. The birthrate is expected to increase dramatically in the new century, and Canada will receive many young immigrants. By the year 2011, the early members of the baby boom will reach 65, and by 2050, the number of citizens 65 years and older will have doubled. Concurrently, our population will become far more diverse, and the term “minority” will need to be redefined.

As we grow older, our needs and attitudes change. There are also shifts in the distribution of wealth, in service needs and

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opportunities, and in the organization of our society. We are now experiencing the largest generational transfer of wealth and power in our history as the World War II generation passes the baton to the baby boomers. We are repeatedly reminded that the generation capitalizing on this flow of funds will be an important player in the financial structure of the early 21st century. By 2010, the boomers will be on the brink of their senior years and the numbers of people over the age of 65 will reach new heights.

What are the implications for dentistry? The aging population will have fewer new caries and more root caries. More teeth will be retained, and more people will be even more disposed to keep their teeth. There will be more chronic illness and multiple disease problems, and the risk for oral disease will be elevated by these medical conditions and the associated medications. The baby boomers and their children will be better educated and will have access to a wider range of information. They’ll have greater financial resources. They’ll be demanding and questioning, wanting information and seeking second opinions. They’ll shop around. They’ll expect to be part of treatment planning and clinical decision making, and they’ll expect value and service. Their decisions will be made on self-image and comfort, and on insurance coverage.

Regarding the increasing diversity of the population, there will be increasingly diverse attitudes toward health, health care, and health team members. There will be variation in priorities for using financial resources. Many racial, ethnic, cultural and gender groups will seek dentists from similar backgrounds. There will be language and communication issues. And there will be wider variations in health and disease patterns.

What skills will be required? We’ll have to have a service orientation, and a better understanding of consumers’ values. We’ll have to increase our cultural awareness and sensitivity. We’ll need to be information savvy and know what information resources are available to consumers. We’ll need to embrace continued learning.

**Economics**

Finances will be a driving force in society, health care and dentistry. The need to understand financial and economic forces and their impact will be vital for the dental industry in the coming decades. One such force that has many concerned is managed care. Managed care programs are likely to continue into the future, although their label and their approach may change slightly.

Dentistry, however, can become even more effective in informing consumers and health plan purchasers of the unique aspects of oral health care services and the ultimate benefits of appropriate care. Similarly, the profession must be able to appropriately explain the cost elements within its fee structures and the implications of typical managed care coverage approaches. Ultimately it’s important to take an open view of the trends and potential impact of a market-driven health care system and to address issues that have been controversial, or have been put aside in the past.

**Human Resources**

What about change in the area of human resources? We can identify the following trends. There are reports of inadequate access to care by the uninsured and by individuals with limited financial resources in some communities. There's a potential increased need for oral health care due to an aging population, individuals with limited childhood preventive care, and medically complex and compromised patients. There’s a declining number of dental school graduates and an increasing number of dentists reaching retirement age. There is an increasing number of females entering the profession, many of whom may choose to practice part-time during child-bearing years.

The skills required? This one’s the easiest, yet also the hardest. To manage this change effectively, you need a dental degree, and a commitment to being the best you can be.

**Ethics**

As dentists, we must ensure that each one of our patients is treated with utmost professionalism and care. We must ensure that any changes incorporated into our practices are directed toward better quality oral health care for those we serve. We must resolve any potential conflict between the benefits we enjoy and the responsibilities we assume.

Let me use composites as a quick and simple illustration. New composites come onto the market monthly, perhaps even weekly. All are accompanied by the highest acclaim of the manufacturers. Most are accompanied by sincere-sounding recommendations of educators in dental schools and on the circuit. And many are incorporated into our practices without thorough product testing, and without objective research through clinical trials. With little evidential support for their use, is the best interest of our patients truly being served?

**Conclusions**

The changing face of dentistry of the last 20 to 30 years is responsible for much of the anxiety we feel about the future. The scope and speed of change during this time are greater than in any other period of recorded history. It’s not surprising that we are, at times, overwhelmed. The future does pose significant challenges. But it also offers opportunities that will encourage us to use our knowledge and skills and will feed our curiosity. Future success will depend on a willingness to learn about what is happening around us, a willingness to critically evaluate new information and knowledge, and a desire to grow and adapt.

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