

The new age of dentistry - Possible consequences of the recession

Marc B Cooper

Abstract

When the environment radically changes, some species flourish while others perish. It is the same with business. When the economic environment is fundamentally altered, some business models thrive, others crumble. As the recession continues, this will begin to occur in dentistry. Those practices that cannot change and adapt to the new environment will lose their fiscal footing. In this new environment, new models of dental care will move from the fringe to the core. Given the lack of financing, these will not only take root but some will grow like they're on steroids. With greater science and new technologies available dentistry will move from total repair to minimal repair which will lower need and increase access as well as yield better long term clinical outcomes. As the market begins to understand that this approach minimizes cost and increases health it is likely that minimum intervention dentistry will emerge as a significant delivery model.

When the climate drastically changes some species increase in size and strength, others become vulnerable, weak, and unable to survive.

It is the same with business. When the economic environment is fundamentally altered, some business models thrive, others crumble. When the business climate changes, some businesses increase their dominance, while others, are unable to perform and quietly fade away.

The recession has and will continue to change the financial environment and the economic climate. Many long-standing and highly regarded Fortune 500 companies in the U.S. have already gone out of existence. More small to medium sized businesses have closed their doors than ever before.

Many businesses have been weakened by the recession and have been acquired such as Wells Fargo's acquisition of Wachovia and Bank of America's acquisition of Merrill Lynch. As the recession continues, this will also occur in dentistry. Dental practices that cannot perform successfully in the recession will be vulnerable to acquisition.

Those practices that cannot change and adapt to the new environment will lose their fiscal footing. Unable to make ends meet, they will either sell or go out of business. Since banks are getting tough on lending, only those practices with a history of strong financial performance will be able to borrow money. Strong practices will acquire weaker practices. In addition, stronger practices will hire

Address of author:

Dr. Marc Cooper, DDS, MSD
The Mastery Company
PO Box 1806
Woodinville, WA 98072
Ph. 425 806-8830

www.MasteryCompany.com

specialists who couldn't remain viable in this new environment. Strong practices will get larger and stronger as weak practices disappear.

With an ever-increasing number of practices in financial trouble, larger entities such as MSOs (Managed Service Organizations) and DPMCs (Dental Practice Management Companies) will return to aggregate these weak practices and manage them at a substantial cost to the dentists¹. Third parties might even consider developing some hybrid delivery models since dentists will be readily available and much more amenable².

In this new environment, new models of dental care will also move from the fringe to the core. Given the lack of financing, the greater impact of 3rd parties, and the current political forces shaping health care, these new delivery models will not only take root but some will grow like they're on steroids.

Adding fuel to the fire is President Obama's decree that government policies and actions in health care be based on science³. Science will become the major driving force. This will directly impact dentistry.

Here are a few likely scenarios: The science of dental adhesives and restorative materials, along with the new understanding of the caries process and remineralization, offers a totally new way to diagnose and treat caries⁴. With expanded capacities to gather and analyze data, it's fairly simple to chart changes in caries prevalence⁵. With these elements in place, there will be a transformation in caries management from G.V. Black's "extension for prevention" to "minimally invasive" dentistry^{6,7}.

With greater science and new technologies available for early

diagnosis⁸; with a modified classification of caries based on site and size of lesion remineralization^{9,10}; with reduction of cariogenic bacteria¹¹; and the emergence of minimally invasive cavity preparation designs¹², techniques and material selection, dentistry will move from total repair to minimal repair. Lower cost. Better long-term clinical outcome¹³.

Now, if the market (people, employers and 3rd parties) begins to understand that this approach minimizes cost and increases health^{14,15} and these entities become the drivers of the economic engine, what do you think will happen? Buoyed by the advances in science and technology along with a rocket-boost from 3rd parties and employers, it is likely that minimally invasive dentistry will emerge. And the technical, political and economic obstacles to fully implementing minimally invasive dentistry will disappear as the environment changes.

Another strong possibility is the placement of patients into distinct sub-populations based on risk⁵. The computing utilities, algorithms, and science are proven and available^{16,17}. Each risk category will determine the specific treatment that can be most successfully delivered. Kois is doing this in his diagnostic model based on risk¹⁷. PreViser is effectively assessing risk with their online program for caries and periodontal disease. PreViser's platform has been thoroughly tested and proven scientifically valid¹⁶.

Risk management is already becoming a dominant theme in medicine with diabetes, cardiovascular disease and obesity as well as a many other chronic diseases¹⁸.

Finally, P4P (Pay for Performance) is quickly becoming the dominant context in medicine¹⁹. U.S hospitals are being asked to report

outcomes. Add to this the capacity of computing and the Internet and it is now possible to rate and compare performance and outcomes in health care based on results. It is possible to compare hospital to hospital, division to division and even doctor to doctor based on clinical outcomes and cost. Cardiac, thoracic surgery, maternity, and many other areas can now be compared in certain regions of the U.S.

P4P is being instituted on a physician-by-physician basis²⁰. If they can work it out for individual physicians, they'll eventually be able to do it for individual dentists as well. If P4P becomes accepted in medicine and demonstrates the capacity to decrease costs and increase competition, fitting the larger context of "market-driven health care"^{19,20}, dentistry will be forced to follow.

The context of dentistry has changed dramatically since September and it may well continue to morph over the next year or two. Previous newsletters have outlined actions to take now that will improve your chances of success in the new economy and allow you to survive the recession and make use of the opportunities caused by the recession. As the science and technology (and culture) of practicing dentistry continues to evolve, staying viable, promoting health over beauty, and creating a strong, service-oriented team will allow you to remain fiscally fit and be prepared for whatever follows. I leave you with the famous quote from Nietzsche:

'That which does not kill me, makes me stronger.'

Now is your opportunity to test this.

摘引

当环境发生巨大的改变时，有些类群会繁荣，有些则会消亡。生意也是如此。当经济环境发生根本的改变时，一些商业模式会兴旺，另一些则会崩溃。随着经济的不景气持续进行，这种现象也会在牙科业界开始出现。那些不能根据新的环境应时而变的开业者将会丧失他们的财政基础。在这种新环境下，新型的牙科护理将从边缘移向核心。考虑到资金的缺乏，这些新模式不但会生根，其中有些还会快速成长。在更好更新的科技支持下，牙科医学将从整体修理转向最小修理，这将会降低需求、增加可得性以及获得更好的长期临床效果。当市场开始了解这种方法将最小化成本及改进健康状况，那么最小干预牙科就有可能开始出现，并成为一种重要的医疗手段。

Resumen

Quando el medio cambia radicalmente, algunas especies florecen mientras que otras mueren. Lo mismo sucede al tratarse de los negocios. Cuando el ambiente económico se ve alterado en lo fundamental, algunos modelos de negocios prosperan, otros se desmoronan. Es lo que empezará a suceder en la odontología a medida que continúa la recesión. Aquellos consultorios que no pueden cambiar o adaptarse al nuevo ambiente, perderán su posición fiscal. En este nuevo medio, nuevos modelos de cuidado dental se moverán de los márgenes hacia al centro. Dada la falta de financiamiento, éstos no sólo echarán raíces sino que algunos crecerán como si estuvieran influenciados por esteroides. Con la disponibilidad de más y mejor ciencia, así como de nuevas tecnologías, la odontología pasará de reparación total a mínima lo que disminuirá la necesidad y aumentará el

acceso a ella, produciendo mejores resultados clínicos a largo plazo. A medida que el mercado comience a comprender que esta aproximación minimiza costos y mejora la salud, es probable que la odontología de mínima intervención emerja como un modelo de entrega importante.

References

1. Holden C, Lawler A, Kintisch E, Mervis J, Stokstad E. Science and the election. Obama victory raises hopes for new policies, bigger budgets. *Science* 2008; 322: 1034-5.
2. Ericson D, Kidd E, McComb D, Mjör I, Noack MJ. Minimally Invasive Dentistry-concepts and techniques in cariology. *Oral Health Prev Dent* 2003; 1: 59-72.
3. White JM, Eakle S. Rationale and treatment approach in minimally invasive dentistry. *J Am Dent Assoc* 2000; 131: 13S-19S.
4. Midentistry. Minimum intervention (MI) in dentistry: evidence based compendium - database (2005, 2006, 2007, 2008, 2009); <http://www.midentistry.com/compendium.html>
5. Young DA, Featherstone JD, Roth JR, Anderson M, Autio-Gold J, Christensen GJ, Fontana M, Kutsch VK, Peters MC, Simonsen RJ, Wolff MS. Caries management by risk assessment: implementation guidelines. *J Calif Dent Assoc* 2007; 35: 799-805.
6. FDI policy statement: Minimal Intervention in the Management of Dental Caries 2002.
7. <http://koiscenter.com>
8. Yin W, Feng Y, Hu D, Ellwood RP, Pretty IA. Reliability of quantitative laser fluorescence analysis of smooth surface lesions adjacent to the gingival tissues. *Caries Res* 2007; 41: 186-9.
9. Mount GJ, Tyas JM, Duke ES, Hume WR, Lasfargues JJ, Kaleka R.A proposal for a new classification of lesions of exposed tooth surfaces. *Int Dent J* 2006; 56: 82-91. Cochrane NJ, Saranathan S, Cai F, Cross KJ, Reynolds EC. Enamel subsurface lesion remineralisation with casein phosphopeptide stabilised solutions of calcium, phosphate and fluoride. *Caries Res* 2008; 42: 88-97.
10. Frencken JE, Imazato S, Toi C, Mulder J, Mickenautsch S, Takahashi Y, Ebisu S. Antibacterial effect of chlorhexidine-containing glass ionomer cement in vivo: a pilot study. *Caries Res* 2007; 41: 102-7.
11. van 't Hof MA, Frencken JE, van Palenstein Helderma WH, Holmgren CJ. The atraumatic restorative treatment (ART) approach for managing dental caries: a meta-analysis. *Int Dent J* 2006; 56: 345-51.
12. Mount GJ. A new paradigm for operative dentistry. *Aust Dent J* 2007; 52: 264-70.
13. Zavras AI, Edelstein BL, Vamvakidis A. Health care savings from microbiological caries risk screening of toddlers: a cost estimation model. *J Public Health Dent* 2000; 60: 182-8.
14. Mickenautsch S, Munshi I, Grossman ES. Comparative cost of ART and conventional treatment within a dental school clinic. *S Afric Dent J* 2002; 57: 52-8.

15. Martin JA, Page RC, Kaye EK, Hamed MT, Loeb CF. Periodontitis Severity Plus Risk as a Tooth Loss Predictor. *J Periodontol*. 2009; 80: 202-9.
16. <http://www.previser.com>
17. Beckman H, Suchman AL, Curtin K, Greene RA. Physician reactions to quantitative individual performance reports. *Am J Med Qual* 2006; 21: 192-9.
18. Herzlinger, R. E. *Market-Driven Health Care*. Reading, Mass.: Addison-Wesley Publishing Co. Inc., 1996.
19. Herzlinger, Regina E. *Consumer-Driven Health Care: Implications for Providers, Payers, and Policymakers*. San Francisco: Jossey-Bass Publishers, 2004.