



## Inside this Issue

Do governments actually have the capacity to reallocate health resources to meet policy goals?	1
<i>Book Review: Making moral theory work in medicine</i>	5
<i>Committee Profile</i>	6
<i>Upcoming events</i>	6

## Is it possible to get a demand - supply equilibrium for healthcare professionals?

A vexing problem in health policy is getting the right number of professionals in the right specialities in the right locations at the right time. Currently in Auckland we are grappling with the latest in a seemingly endless parade of groups of health professionals taking industrial action in support of an implicit free market approach of seeking increased remuneration to guarantee supply. In Health Affairs 21 (5) Kevin Grumbach examines market and public planning approaches to getting the number "right". After discussing the basic premises of the invisible hand of the market and the heavy hand of government regulation he concludes that there is a need for a firm regulatory grasp on workforce policy.

In an accompanying article, health economist Uwe Reinhardt argues that Grumbach's proposal is unlikely to ever work anywhere unless the government controls the demand side of the health sector. He argues the closest the demand side might come to the health planners dream is in the "wholesale side of the market, seen here in New Zealand in the setting up of PHOs.

Grumbach's presentation is developed from a paper "*The Role of the Market in the Clinical Workforce*" delivered at the November 2000 Fifth International Medical Workforce Conference held in Sydney, Australia. Although his focus is on physician supply, his argument is applicable to all health professional disciplines.

Analysts and policymakers have been formulating healthcare workforce policy for many years without definitely answering the question: Should such policy be orientated towards government based planning or more market-orientated approaches? Grumbach argues that America's reliance on free market principles to determine physician supply is not only idiosyncratic and irrational but also the key culprit behind the conflict over U.S. physician supply and demand.

Market adherents keep vigil for the miracle of the invisible hand to deftly place the system at the proper point of equilibrium, impeccably balancing patient demand and physician supply. Regulators, for their part, cling to the hope that if they just keep fine-tuning their mathematical models, they will finally solve the riddle of physician supply planning. The result is a saga that reads like Goldilocks written by Albert Camus: an endless cycle of tasting a physician supply porridge that is too hot, or too cold, but never just right.

The result is a saga that reads like Goldilocks written by Albert Camus: an endless cycle of tasting a physician supply porridge that is too hot, or too cold, but never just right.

For policymakers worried about getting the number of physicians right, an alluring quality of the market is the promise that a free market will spontaneously solve its own supply problems. In an ideal market, consumers generate demand for physician services. A supply of physicians develops in response to this exogenous demand, achieving equilibrium between supply and demand. Moments of dysequilibrium may occur. However, in a well functioning market these imbalances should be temporary and self-correcting.

In a free market, supply is simply demand revealed. If physicians are busy, then there cannot by definition be too many of them. And if by some chance there were too many of them, the invisible hand of the market would dispense with the surplus. The weakness of the market begins with the problem that reality too often fails to live up to the theory. The history of workforce policy is riddled with market distortions that defeat the self-equilibrating promise of the invisible hand. Moreover, the invisible hand does not firmly grasp certain principles valued by most health systems, particularly

*(Continued on page 2)*

**Kevin Grumbach** is an Associate Professor in the University of California San Francisco Department of Family and Community Medicine, Director of Research at the UCSF Centre for the Health Professions, Associate Director of the UCSF Primary Care Research Centre, and a faculty member at the UCSF Institute for Health Policy Studies and the UCSF Medical Effectiveness Research Centre for Diverse Populations (MERC). He has published numerous studies on issues in primary care, access to care, the health care workforce, and health policy.

(Continued from page 1)

the goal of social equity.

On the other hand, the planning approach creates the immediate problem that illumination on the question of the right number of physicians will never occur by divine revelation. Planners must make a judgement about the required number of physicians and then implement policies to guide supply to this specified level. This is illustrated by the example of planning of hospital capacity required to care for U.S. soldiers wounded after the D Day invasion. They got the numbers just right. There were half as many casualties as expected but the wounded spent twice as long in hospital as projected. In this story hospital productivity was half that expected. Productivity therefore must be factored into the supply requirements calculation. Further, this story is silent about the most essential variable of interest; the actual health outcomes for wounded soldiers. We do not know what supply of hospital beds, nurses and physicians would have been optimal for producing successful recovery from war trauma, much less the marginal cost per unit of health benefit associated with increasing levels of supply.

Productivity must be factored into the supply requirements calculation.

Grumbach examines in some detail the roles of the invisible and heavy hands of the market as he saw it touching the U.S. physician workforce over 100 years. He identifies five eras:

#### **Pre-1910,**

Where professional standards were low, physician incomes were modest and the physician- population ratio was 175:100,000.

#### **1910-1963,**

Where professional standards increased dramatically, incomes increased and the physician- population ratio dropped to 125:100,000. This was a period dominated by professional regulations and was an uncompetitive market for physician labour. Licensing and regulatory policies confounded the invisible hand by controlling supply. However, the geographical distribution of physicians followed the logic of the market. A 1925 article in the *Journal of the American Medical Association* documented the decreasing supply of physicians in rural America coinciding with deteriorating economic conditions in farming communities. Does that have a familiar ring to it? The AMA author pointed out that physicians exhibited the same behaviour as common labourers, chiropractors and even college professors. They do business where business is good and avoid places where it is bad.

**1963-1990**, where the physician- population ratio increased to 200:100,000, with the increase occurring almost exclusively in the supply of specialists. Despite the growth in supply, the average physicians real income rose during this time. The spending on all health services increased dramatically. Hopes that increased overall supply and market competition would result in passive diffusion of physicians to underserved communities were not realised. Physicians remained clustered in the same affluent areas. This era demonstrated that, contrary to market predictions, a dramatic increase in supply could in fact coexist with rising incomes, particularly when the profession largely directed its fees.

Unwilling to tackle the overall supply issue, the federal government defined its role as one of compensating for the distributional failings of the market place. Programmes, such as the National Health Service Corps attempted to use incentives to induce physicians to practice in communities with a meagre supply.

#### **1990-2000**

This era of “managed competition” attempted to transform the market for physician labour from a retail to a wholesale market. In doing so, this era presented physicians with their most formidable market challenge. The traditional economic model considers physician services as a retail business. Patients shop for physicians and government, out of pocket and insurance payments follow the patient. The intensification of the experiment with managed care and managed competition in the 1990s was in one sense an attempt to convert to physician services into a wholesale market. A new breed of middlemen for physician supply, health maintenance organisations (HMOs), acted as bulk purchasers of physician services through either direct employment or selective contracting with a network of physicians.

The rise of a wholesale market for physicians had the potential to dramatically weaken the relative economic strength of physicians. A well-informed HMO would intercede between individual consumer and the physician, protecting against supplier-induced demand. HMOs could affect physician supply by moving their business away from physicians deemed too expensive, too poor in quality, or simply too plentiful.

The rise of a wholesale market for physicians had the potential to dramatically weaken their relative economic strength

The wholesale market for physician supply would not address all the deficiencies of the market, such as the fundamental tension between market allocation and the equitable distribution of services. But it was reasoned that it would at least deal with some of the key failures of the distorted physician marketplace, such as excessive costs and production inefficiencies. By the mid 1990s research began reporting decreases in employment opportunities for specialists, summed up by a *New Yorker* cartoon showing a despondent surgeon standing on a corner wearing a sign stating “will do bypass surgery for food”.

(Continued on page 3)

*(Continued from page 2)*

As the 1990s progressed it appeared that the market was starting to have an effect, even without the enactment of new regulations. Medical students were responding to market signals about career opportunities. In 1996-97 precipitous decreases occurred in the number of U.S. medical school graduates selecting certain high profile specialties for residency training, such as anaesthesiology and radiology. Conversely, the number of first year residents in the U.S. family practice programmes increased. Subsequent research provided additional evidence that regions with more competitive HMO markets were experiencing slower growth in physician supply and incomes.

Does this American experience provide useful information for us in New Zealand as we move slowly into an era of Primary Health Organisations? Are HMOs and PHOs merely a downward spike in the ever-rising demand for specialist health services?

#### **Health care 2000: the collapse of the wholesale market**

In the new millennium managed care has faltered. Between 1999 and 2000 enrolment in HMOs dropped by nearly half a million. Medicare experienced an exodus of participating HMOs. Premiums for HMOs and less managed insurance plans alike began to rise at rates triple that of overall inflation. The mid 1990s decrease in speciality residency rates and an increase in primary care rates were short-lived phenomena. After the peak year of 1997, family practice residency programmes experienced a steady decline in the number of first year residents. Some observers are calling for a ramping up of specialist supply.

Some observers are celebrating this latest incarnation of the invisible hand in health care, hoping once again that individual demand for care would guide the system to its proper functioning. This notion of untainted individual consumer demand for health care and physicians is a delusion. Supplier induced demand abounds, anti competitive regulations persist, production of physicians is entirely dependent on taxpayer funds, and most care will continue to be collectively financed by means of public and private insurance. The U.S. health care system is embarking on a period of increased costs and inequity, with little promise that this trend will confer benefit to the health of Americans.

The U.S. health care system is embarking on a period of increased costs and inequity, with little promise that this trend will confer benefit to the health of Americans.

Grumbach believes regulation and planning are required yet the technical challenges of planning are formidable. The daunting features of planning often create "analysis paralysis". Policymaking is deferred while awaiting the "right" answer to the question of "how many physicians?" However, if one acknowledges that health is a multifactorial outcome, getting the number of physicians exactly right no longer has such portentous ramifications for health outcomes. Physician supply becomes simply one of many uncertain variables that can combine in many ways to affect health. The little research that has been performed does not reveal a clear association between physician supply, particularly of specialists, and better population health status.

Grumbach offers a number of options for regulation. For the U.S. situation he favours renewed debate in Congress about the adequacy of supply as an opportunity to create a more rational and accountable system of workforce regulation and funding. He notes that medical education, like the health system overall, depends heavily on tax funded programmes. Congress should demand answers to the hard questions of whether the current compliment of physicians is effectively serving the public's needs and what the cost and benefit would be of further increasing the number of physicians per capita.

Reinhardt disagrees. While accepting that these recommendations may seem reasonable at first, he wonders what Grumbach's "firm regulatory grasp" on physician workforce policy would entail and how it would be made compatible with an unregulated demand side of the retail health market. He suggests that to simply wash away the chaotic demand side, as Grumbach does, in favour of a comprehensive planned health care system as a platform for physi-

*(Continued on page 4)*

Uwe Reinhardt, is Professor of Economics and Public Affairs at Princeton. He has taught and researched on a variety of subjects, including economic theory, accounting, and financial management. He has served on numerous committees and commissions, including the governing council of the Institute of Medicine of the National Academy of Sciences and the National Council on Health Care Technology. He has been a member of numerous editorial boards including the New England Journal of Medicine and the Journal of the American Medical Association.



*(Continued from page 3)*

cian workforce planning is just to continue the health planners century old dream. He does concede that government planning of the physician workforce might possibly make sense in a country whose government effectively controlled the demand side of healthcare. He suggests that, in principle, health planners in those countries could try to manage the health workforce on the basis of long-range demands. He notes that medical education in the U.S. is subsidised by the importation of "thousands of foreign trained physicians year after year".

Further, Reinhardt claims that, unlike the U.S., most other countries do not treat healthcare basically as primarily a private consumer good and medical practice as just another form of free enterprise. Instead they tend to treat physicians as quasi civil servants with explicit social obligations. To that end, they think nothing of controlling physicians fees, income and even locations, which then furnishes the economic rationale for granting them full tax-financed medical education and training in return. He fails to pick up the paradox of those same trained physicians being moved by the invisible hand of the market and emigrating to the U.S. where presumably the reward is higher.

Reinhardt advances a model for a physician workforce policy for twenty-first century America. This model would accept as permanent a payment system that envisages harsh rationing of health care for up to thirty million uninsured Americans at the bottom of the economic ladder and lavish, often wasteful care for customers on the upper rungs who are able to pay for what is now called "boutique medicine". In between will be an entire spectrum of arrangements, ranging from tightly controlled HMOs for low income workers to relatively more open ended preferred provider organisations (PPOs) for higher income families, albeit with high cost sharing at the point of service.

A distinguishing characteristic of such a system is that it values the work of physicians so differently in different corners of the market. To illustrate, legislators may be willing to pay paediatricians \$10 to see a poor child covered by Medicaid – but pay the same paediatrician \$50 or more to see the legislators own children in the commercial corner of the market. U.S. physicians are not obliged to treat patients whose treatment is assigned a low value by society. How then planners guarantee that patients in the low valued corner of the market get access to needed healthcare?

In response Reinhardt suggests a free market with physicians setting their own fees and the government providing targeted subsidies to those on lower incomes. Now where have we heard that before?

In summary, Grumbach favours regulation. Reinhardt says that is an unrealisable dream and will not work. He prefers to rely on the invisible hand of the market with those unable to pay subsidised by the taxpayer. Our experience suggests that in practice this is neither equitable nor does not produce desired outcomes of improved population health status. Can we match supply and demand for healthcare professionals? Perhaps with rising public expectations the answer is no. However, the public demands we continue the search for this Holy Grail.

Reinhardt says that regulation is an unrealisable dream that will not work.

Bruce Parkes

Two little kids are in a hospital, lying on stretchers next to each other, outside the theatre. The first kid leans over and asks, "What are you in here for?" The second kid says, "I'm in here to get my tonsils out and I'm a little nervous."

The first kid says, "You've got nothing to worry about. I had that done when I was four. They put you to sleep and when you wake up they give you lots of Jelly and ice cream. It's a breeze."

The second kid then asks, "What are you here for?" The first kid says, "A circumcision." And the second kid says, "Whoa, I had that done when I was born, couldn't walk for a year."

## Book review

### Matters of Life and Death: Making Moral Theory Work in Medicine and the Law.

Princeton University Press, 2001

Bio-ethical philosophical debates over the fundamental principles that should guide life-and-death medical decisions usually occur well removed from the tough, real-world choices made in hospitals, courthouses, and legislatures. As identified in our lead story, moral theory does not always lead to clear answers for policy makers.

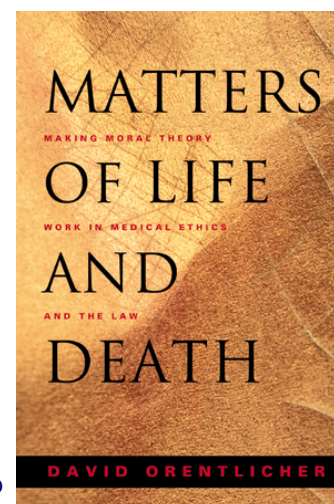
David Orentlicher, doctor, lawyer, ethicist and since November 5<sup>th</sup> member of the Indiana State Legislature, seeks to change that by drawing on his extensive experience in both medicine and law to address the translation of moral principle into practice. Creating public policy around moral issues is especially challenging. Tough policy decisions often call for the use of rules and precedents in complex combinations not easily translated into consistent guidelines for decision makers.

Orentlicher uses 3 moral concerns that should apply to public policy about life-and-death medical issues. Physician-assisted suicide illustrates the application of "generally valid rules," a model that provides predictability and simplicity and, more importantly, avoids the personal biases that influence case-by-case judgments. The author then takes up the debate over forcing pregnant women to accept treatments to save their fetuses. He uses this issue to debate the unintended consequences of rules, which he terms the "avoidance of perverse incentives". Third, Orentlicher considers the difficulties in the denial of life-sustaining treatment on grounds of medical futility in his evaluation of the "tragic choices" model, which hides difficult life-and-death choices in order to prevent paralysing social conflict.

A book sellers review claims "*Matters of Life and Death* is a rich and stimulating contribution to bioethics and law. The first book to examine closely the broad problems of translating principle into practice and by analysing specific controversies along the way, it develops original insights likely to provoke both moral philosophers and those working on thorny issues of life and death."

Other reviewers were not so complimentary. They found that although Orentlicher's writing style was convincing and his incisive intellect and understanding morality shone through, his promise to make "moral theory work" by helping to translate theory into practice did not translate into much practical advice. For example when discussing medical futility he does so only to illustrate that it can be a subterfuge for rationing. Suggesting that finance and deceit are the bottom line reasons for futility policies omits many of the other issues that make futility an important issue in practice. Futility policies must address respect, conflicts of interest, self and other awareness, professional duties and prerogatives and more. His limited approach weakens his argument.

This book receives damning praise as a "good book for moral theorists who do not understand why their testimony is never translated into law". Laid out like a philosophy text, the practical experience of the author becomes lost as he explains one argument on top of another, demonstrating by example why policy maker's eyes glaze over at moral theorising



**David Orentlicher**, MD, JD, is Samuel R. Rosen Professor of Law and Co-director of the Centre for Law and Health at Indiana University School of Law-Indianapolis. He is a member of the adjunct faculty at Indiana University School of Medicine, a co-author of *Health Care Law and Ethics*, and co-editor of *Health Care Crisis? The Search for Answers*



New Zealand  
Institute of Health  
Management  
A Branch of the  
Australian College of  
Health Service  
Executives

For all inquiries re Branch  
activities or membership  
contact [nzihm@xtra.co.nz](mailto:nzihm@xtra.co.nz) or  
(09) 577 5477 Phone/Fax



## Profile

Convenor of our Branch's seminar sub-committee, Trisha Ross is the "organiser supreme". Our excellent seminar programme is a testimonial to her skill and vision in putting together a schedule of presentations on a wide range of subjects of interest to members. Besides co-ordinating the branch seminar programme Trisha is National Vice President and the convenor of the NZIHM National Conference Committee.

A native of Oamaru, Trisha trained, then worked as a nurse in Christchurch before she embarked on her great "OE", first to Australia and then to England. In England she completed a post graduate Diploma in Management Studies and made the shift into management roles.

Returning to New Zealand Trisha settled in Auckland and took on increasingly challenging roles at Green Lane and Starship Children's Hospitals. At the same time she gained her Masters of Health Management with Honours from the University of Auckland. For the past year she has been Hospital Manager at Gillies Hospital, a private surgical hospital in Epsom.

Despite her busy work schedule and contribution to the Institute at Branch and National level, Trisha finds time for walking, skiing, gardening, music, theatre and enjoying an occasional glass of wine.



## Seminar report delay

Through a last minute production problem we are unable to provide for this edition a report on Tim Tenbenschel's presentation to our Branch's October Minter Ellison Seminar. Tim will provide an overview of his presentation *Do governments actually have the capacity to reallocate health resources to meet policy goals?* for inclusion in Inform 6 to be e-mailed to you in December.



## Contributions Welcome

1. The Auckland Branch welcomes contributions to **Inform** on subjects of interest to managers in the health and disability sector. Articles may be longer researched contributions, comments on current practice, or shorter notes and/or reviews. The range of possible subjects is very wide.
2. The maximum length is generally 3000 words. Shorter contributions are very welcome. Please include an e-mail address so authors can be contacted and a brief list of key points or an abstract.
3. Copy should be provided by e-mail or on a computer disk.
4. Contributions may be passed to the Editorial Committee for consideration.
5. Make submissions or contact the Editor for more information at [nzihm@xtra.co.nz](mailto:nzihm@xtra.co.nz)