Developing a modern health workforce

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Developing a modern health workforce.
Are current health workforces able to meet future needs?

- In the context of local health service quality and access, the first issue to consider is the adequacy of the status quo.
- To paraphrase Jean-Paul Sartre, to do nothing and to “not make a choice” is actually to choose the status quo.
The adequacy of current health services.

- New Zealand is chosen here to illustrate that even in perceptibly well funded health systems (about 10% of GDP) that problems exist in even meeting current health needs.
  - New Zealand does not have an HIV epidemic to manage.
  - TB is endemic in some rural Maori communities.
  - New Zealand has effective border control.

- Do we have equity in health service access and outcome in New Zealand?
The adequacy of current health services in New Zealand.

- New Zealand is the most reliant country in the OECD on overseas trained doctors.
  - What is the mean age of NZ GP’s and what is the mean age and origins of rural GP’s?

- The global medical market is not evenly distributed and shows a net movement to high expenditure health systems (i.e. the USA is the mouth of the Nile).
The adequacy of current health services in New Zealand.

- Do we have equity in health service access and outcome in New Zealand?
  - What are the demographic projections for NZ and what predictable effect will these have on health service needs?
  - If the current models of health care are employed, what will happen to the NZ health budget over the next 10 years?
NZIER (2005)
NZ Population Projections by Age Cohort (Assuming medium population growth).
Projected demand for health professionals to maintain current health service levels to 2021.

- NZIER predictions are based on three scenarios of population age and size, disease incidence and disability progression.
- Best case scenario = 40% more registered health professionals needed for 2021.
- Medium case scenario = 47% more registered health professionals needed for 2021.
- Worst case scenario = 69% more registered health professionals needed for 2021.
Projected demand for health professionals to maintain current health service levels to 2021.

- NZIER predictions are based on three scenarios of population age and size, disease incidence and disability progression.
  - Given the time that it takes to train health professionals, when should this additional 40 to 69% have been recruited?

- It is reasonable to conclude that directly or indirectly choosing the status quo is not an acceptable response to even current health service needs, let alone those predicted for 2021.
Proposals to establish an effective health workforce.

- The years of morbidity in later life could be compressed.
- The elements of the education and health systems could be better aligned with each other and with patient care needs.
- The percentage of the community employed in health services could be increased and/or greater output could be obtained from the current workforce.
- Identify and employ disruptive innovations.
Proposals to establish an effective health workforce.

- Proposals unlikely to have utility.
  - The years of morbidity in later life could be compressed.
    - Diabetes in Maori, obesity, patient immigration, the affluent well worried-sick
  - The percentage of the community employed in health services could be increased and/or greater output could be obtained from the current workforce.
    - The effect of feminisation, work life balances, litigation and practice safety, unionisation, indebtedness, demographic changes, profitable low utility practice, practitioner emigration

- Proposals likely to have utility.
  - The elements of the education and health systems could be better aligned with each other and with patient care needs.
  - Identify and employ disruptive innovations.
Proposals to establish an effective health workforce.

- **Hypothesis**: In the USA, there are enough members of the health workforce and the expenditure on health is appropriate, but, the workforce is poorly aligned with need and subject to perverse incentives.

- **Hypothesis**: The solution to establishing an effective health workforce is to align need and supply through training and incentives.
Baicker K, Chandra A. Health Affairs Data Watch, 07 April 2004.

EXHIBIT 1
Relationship Between Quality And Medicare Spending, As Expressed By Overall Quality Ranking, 2000-2001

EXHIBIT 6
Relationship Between Provider Workforce And Quality: Specialists Per 10,000 And Quality Rank In 2000

EXHIBIT 8
Relationship Between Provider Workforce And Quality: General Practitioners Per 10,000 And Quality Rank In 2000

EXHIBIT 10
Relationship Between Provider Workforce And Quality: Nurses Per 10,000 And Quality Rank In 2000


NOTE: For quality ranking, smaller values equal higher quality.

NOTES: For quality ranking, smaller values equal higher quality. Total physicians held constant.
The cost and outcome efficacy argument for medical generalism.

- There is an urgent need for incentives that will help increase the relative number and activity of GP’s.
  - Affirmation, immersion and role models in medical education.
  - Increase the profitability of general medical practice.
  - Increase the status of general medical practice.
  - Increase the enjoyment and range of practice for general medical practitioners.
### The mal-alignment of health supply and demand.

- **The aircraft analogy.**
- **Urgent need for relative values study.**
  - The political versus the medical planning cycle and community perceptions of value and health service quality.
  - What was the origin of the procedure bias in remuneration and do these factors still operate?
  - The effect of student debt in determining career justifies bonded cadet schemes, debt forgiveness for entering priority roles and capping already well subscribed specialities.
- **The increasing female domination of the medical profession must be accommodated by way of training and career flexibility.**
  - Women doctors will need to and are most likely to lead a “generalist” reformation.
- **Undergraduate and postgraduate training should be time-independent.**
- **Limits need to be placed on doctor litigation to reduce over-servicing and to re-direct care from the legal protection of the practitioner to the health needs of the consumer.**
Proposals to establish an effective health workforce.

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Disruptive innovations in health care.

- **Innovative programs that are underway.**
  - UK Foundation Degrees.
  - UK geriatric health workers.
  - USA employment of nurse practitioners, endoscopists and anaesthetists.
  - In New Zealand, the concept of a Physician Assistant is being considered as a method of reducing the need for RMOs and to enhance the continuity of patient care.

- **Nurse practitioners.**
  - It makes little sense to move significant numbers of fully-trained practitioners from one area that is already experiencing shortages such as nursing and to retrain them over months to years for these novel roles. While it might seem easier to initially prove the concept with a group that already has legitimacy in the health care system, this will reinforce the assumed necessity of the traditional doctor-nurse paradigm.
  - What is a sensible role for the nurse practitioner of the future?
Disruptive innovations in health care.

- Need to identify why some innovative roles and novel health workers are successful and why others are not.
- Need to trial integrated care, electronic patient information and monitoring systems, telemedicine.
- Need to field-trial employment of new grades of health care workers such as non-physician endoscopists, technician anaesthetists and Iwi-based community health providers.
  - These trials will not be easy and will require strong drivers to establish and sustain. It is inevitable that those being disrupted will oppose the trial.
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- Education of doctors, and health professionals generally, can be subject to reactionary and to creative developments. Clearly, the latter is preferable. Hopefully, there is still time for reasoned, sensible and sustainable reform. The problems presented here need attention soon given the lead time to alter medical and other health-related education programs and the even longer time to alter the nature of the health provider community.
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<td>Gorman DF, Scott PJ. Is a concentration on generalist medical practitioners the solution to the New Zealand Health Workforce Crisis? New Zealand Family Physician 2005; 32 (6): 368-71</td>
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<td>Gorman DF, Scott, PJ. Time for a medical educational change in time. Journal of Internal Medicine 2006; 36 (11): 687-9</td>
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Key external references.


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