




New Zealand		
	<h1 data-bbox="443 510 890 611">Anatomy of a health workforce crisis</h1> <p data-bbox="371 667 821 745">Professor Des Gorman Head of the School of Medicine</p>	 <p data-bbox="1018 622 1249 723">THE UNIVERSITY OF AUCKLAND NEW ZEALAND Te Whare Wānanga o Tamaki Makaurau</p>
The University of Auckland	<div style="background-color: #e0f0ff; height: 100px;"></div>	

	<h2 data-bbox="411 1205 922 1249">Outline of the presentation.</h2>	 <p data-bbox="1066 1216 1249 1294">THE UNIVERSITY OF AUCKLAND NEW ZEALAND Te Whare Wānanga o Tamaki Makaurau</p>
14 September 2006	<ul style="list-style-type: none"> <li data-bbox="379 1350 818 1384">▣ Key internal references. <li data-bbox="379 1406 818 1440">▣ Key external references. 	
New Zealand	<ul style="list-style-type: none"> <li data-bbox="379 1462 1161 1541">▣ The nature and basis of the health workforce crisis. <li data-bbox="379 1563 1137 1641">▣ Hypotheses to explain the health workforce crisis. 	
The University of Auckland	<ul style="list-style-type: none"> <li data-bbox="379 1664 1233 1697">▣ Proposed solutions to the health workforce crisis. <li data-bbox="379 1720 619 1753">▣ Summation. 	

Outline of the presentation.

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- ▣ Summation.

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Key internal references.

- ▣ Gorman DF, Scott PJ. The social distortion of medical practice. *Medicine Today* 2003; 4 (11): 75-7
- ▣ Gorman DF, Scott PJ. Twin dilemma for medical education. *Journal of Internal Medicine* 2005; 35 (3): 141-2
- ▣ Gorman DF, Scott PJ, Poole P. Dilemma for medical education re-visited. *Journal of Internal Medicine Med J* 2005; 35: 507-9
- ▣ 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

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- ▣ Summation.

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Key external references.

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Key external references.

- ▣ New Zealand Health Workforce Advisory Committee (2005) <http://www.hwac.govt.nz/publications/hwac-fitforpurpose-consultationdocument.pdf>
- ▣ The NZ Institute of Economic Research (NZIER), 2005 Ageing New Zealand and Health and Disability Services Demand Projections and Workforce Implications 2001-21

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The nature and basis of the health workforce crisis.

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- ▣ NZIER (2005).
 - NZ Population Projections by Age Cohort.
- ▣ Projected demand for registered health professionals to maintain current health service levels to 2021.
- ▣ The adequacy of current health services in New Zealand.

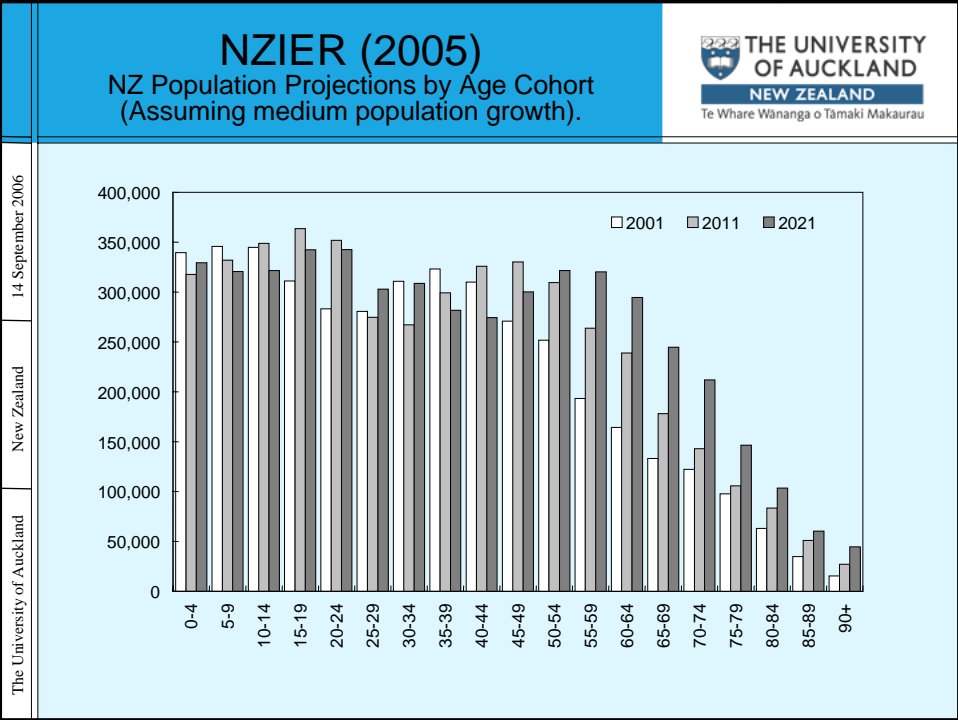
The nature and basis of the health workforce crisis.


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- ▣ **NZIER (2005).**
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- The nature and basis of the health workforce crisis.**
-  **THE UNIVERSITY OF AUCKLAND**
 NEW ZEALAND
 Te Whare Wānanga o Tāmaki Makaurau
- ▣ NZIER (2005).
 - ▣ NZ Population Projections by Age Cohort.
 - ▣ **Projected demand for registered health professionals to maintain current health service levels to 2021.**
 - ▣ The adequacy of current health services in New Zealand.

	<h2>Projected demand for health professionals to maintain current health service levels to 2021.</h2>	 <p>Te Whare Wānanga o Tāmaki Makaurau</p>
14 September 2006	<ul style="list-style-type: none"> ▣ NZIER predictions are based on three scenarios of population age and size, disease incidence and disability progression. 	
New Zealand	<ul style="list-style-type: none"> ▣ Best case scenario = 40% more registered health professionals needed for 2021. ▣ Medium case scenario = 47% more registered health professionals needed for 2021. 	
The University of Auckland	<ul style="list-style-type: none"> ▣ Worst case scenario = 69% more registered health professionals needed for 2021. 	

	<h2>Projected demand for health professionals to maintain current health service levels to 2021.</h2>	 <p>Te Whare Wānanga o Tāmaki Makaurau</p>
14 September 2006	<ul style="list-style-type: none"> ▣ NZIER predictions are based on three scenarios of population age and size, disease incidence and disability progression. 	
The University of Auckland	<ul style="list-style-type: none"> ▣ Given the time that it takes to train health professionals, when should this additional 40 to 69% have been recruited? 	

The nature and basis of the health workforce crisis.

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- NZIER (2005).
 - NZ Population Projections by Age Cohort.
- Projected demand for registered health professionals to maintain current health service levels to 2021.
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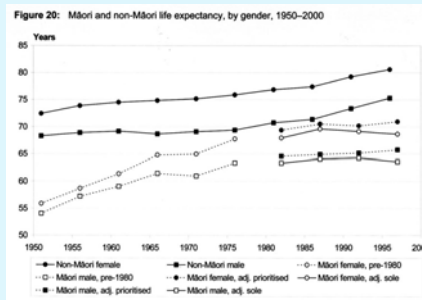
The adequacy of current health services in New Zealand.

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- Do we have equity in health service access and outcome in New Zealand?



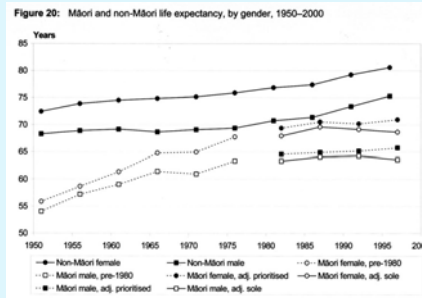
The adequacy of current health services in New Zealand.

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- Do we have equity in health service access and outcome in New Zealand?
- New Zealand is the most reliant country in the OECD on overseas trained doctors.
- Australia has a new policy of medical self-sufficiency.



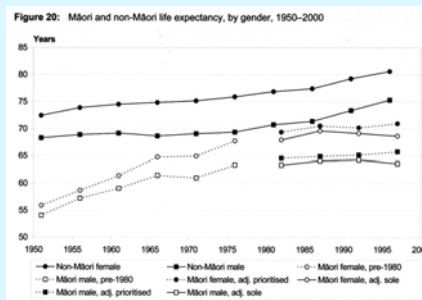
The adequacy of current health services in New Zealand.

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- Do we have equity in health service access and outcome in New Zealand?
- What is likely to happen to international and private versus public recruitment pressures on the health workforce and what effect is this likely to have?



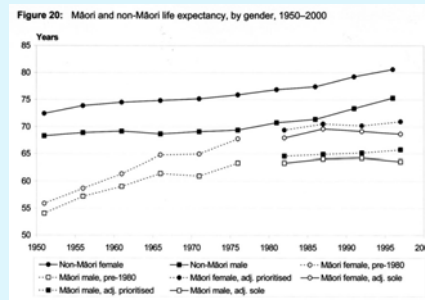
The adequacy of current health services in New Zealand.

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- Do we have equity in health service access and outcome in New Zealand?
- What is the current situation in the USA with respect to health expenditure and health service access?



Outline of the presentation.

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- Key internal references.
- Key external references.
- The nature and basis of the health workforce crisis.
- Hypotheses to explain the health workforce crisis.
- Proposed solutions to the health workforce crisis.
- Summation.

Hypotheses to explain the health workforce crisis.

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- **Gorman DF, Scott PJ. Medicine Today 2003; 4 (11): 75-7**
- Hypothesis 1: Society has been extensively medicalised.
- Hypothesis 2: Medicine has been extensively socialised.

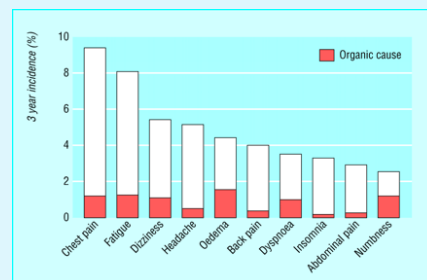
Hypothesis 1: Society has been extensively medicalised.

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- Richard Mayou, Professor of Psychiatry, Oxford University.
- The frequency of symptoms in primary care and the percentage of those eventually shown to have a somatic basis.



Hypothesis 2: Medicine has been extensively socialised.

- What are the determinants of a general medical practitioner's diagnosis?
- Patient retention.
- Patient disposal.
- Fear of complaint.
- Financial support for the patient.
- The nature of the patient's health problem.

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Hypotheses to explain the health workforce crisis.

- Gorman DF, Scott PJ. J Intern Med 2005; 35 (3): 141-2**
- Hypothesis 3: Current health force composition and related education programs are inappropriate and inadequate respectively for the health needs of society in 2021.
- Hypothesis 4: The nature of under- and post-graduate medical education reduces the likelihood of sentient doctors.
- Hypothesis 5: Many medical graduates have abandoned one or more of the characteristics of professionalism.

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Hypothesis 3: Current health force ...inadequate respectively for the health needs of society in 2021.

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- ▣ The aircraft analogy.
 - Anaesthesia as a model of alternative health provision.
 - The Harvard concept of disruptive innovations.
- ▣ The effect of student debt on career choice.
 - Australian and New Zealand data.
- ▣ The effect of relative values on career choice.
 - Cognitive versus procedural practice.
 - What is the role of the doctor of the future?

Hypothesis 3: Current health force ...inadequate respectively for the health needs of society in 2021.

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- ▣ The Hippocratic tradition, medical education and the medical guild.
 - Does medical education serve the needs of society or the needs of the guild?
 - Why is there increasing Government intervention into health service delivery?
- ▣ Recent Government initiatives.
 - Nurse practitioners, PHO's, rural schemes, altered subsidies etc.
 - Where is the disease burden now and where will it be in 2021?

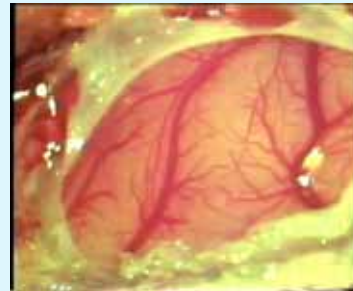
Hypothesis 4: The nature of ... medical education reduces the likelihood of sentient doctors.

- ▣ Generic examples.
 - ✦ The ischaemic model of angina.
 - ✦ MRI scans and back surgery.
 - ✦ The relative expenditure of pharmaceutical companies and medical schools.

- ▣ The RACP Part One Examination.
 - ✦ The evolution of an ephemeral hypothesis into a life long fact.

- ▣ The art of medicine.
 - ✦ Is this something we use to excuse evidence-free practice?
 - ✦ On what basis does society convey privilege to medical practitioners?

Personal examples.



Hypothesis 5: Many medical graduates have abandoned professionalism.

- ▣ The classic definition of professionalism was made early in the twentieth century by Justice Brandeis of the United States Supreme Court.
 - ✦ *First, a profession is an occupation in which the necessary preliminary training is intellectual in character, involving knowledge and to some extent learning, as distinguished from mere skill.*
 - ✦ *Second, it is an occupation, which is pursued largely for others and not merely for oneself.*
 - ✦ *Third, it is an occupation in which the amount of financial return is not the accepted measure of success.*

Outline of the presentation.

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- ▣ Summation.

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Proposed solutions to the health workforce crisis.


- ▣ 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.

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	<h2 style="text-align: center;">Proposed solutions to the health workforce crisis.</h2>	 <p style="text-align: center;">Te Whare Wānanga o Tāmaki Makaurau</p>
14 September 2006	<ul style="list-style-type: none"> ▣ 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. <ul style="list-style-type: none"> ▣ To these four categories of solution, a fifth over-arching consideration can be added; the NZ health workforce crisis will probably not be adequately addressed until there is a national non-partisan devised and complete reorganisation of the fiscal basis of the health system, including agreement on the balancing of private and tax payer contributions. 	
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	<h2 style="text-align: center;">Proposed solutions to the health workforce crisis.</h2>	 <p style="text-align: center;">Te Whare Wānanga o Tāmaki Makaurau</p>
14 September 2006	<ul style="list-style-type: none"> ▣ 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. 	
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The years of morbidity in later life could be compressed.

- ▣ Factors that will act against any compression of morbidity in later life.
 - ▣ Imminent epidemics of obesity and diabetes.
 - ▣ Immigration from developing nations.
 - ▣ Increasing health expectations and a better informed demanding population.
 - ▣ Need for generalist individual health care within a population health approach.

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Proposed solutions to the health workforce crisis.

- ▣ 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.**
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The elements of the ...health systems could be better aligned

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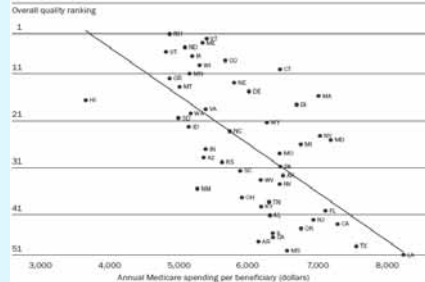
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 Baicker K, Chandra A. Medicare spending, the physician workforce, and beneficiaries' quality of care. Health Affairs Data Watch, 07 April 2004

 Relationship between Sate expenditure and quality ranking.

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




SOURCES: Medicare claims data, and S.F. Jencks et al., "Change in the Quality of Care Delivered to Medicare Beneficiaries, 1998-1999 to 2000-2001," Journal of the American Medical Association 289, no. 3 (2003): 305-312.
NOTE: For quality ranking, smaller values equal higher quality.

The elements of the ...health systems could be better aligned

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 Baicker K, Chandra A. Medicare spending, the physician workforce, and beneficiaries' quality of care. Health Affairs Data Watch, 07 April 2004


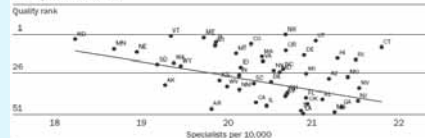
 Relationship between number of specialists per capita and quality ranking.

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



SOURCES: Medicare claims data, and Area Resource File, 2003.
NOTES: For quality ranking, smaller values equal higher quality. Total physicians held constant.

The elements of the ...health systems could be better aligned

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▣ Baicker K, Chandra A. Medicare spending, the physician workforce, and beneficiaries' quality of care. Health Affairs Data Watch, 07 April 2004

▣ **Conclusions:**

▣ 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.

The elements of the ...health systems could be better aligned

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▣ Baicker K, Chandra A. Medicare spending, the physician workforce, and beneficiaries' quality of care. Health Affairs Data Watch, 07 April 2004

▣ **Conclusions:**

▣ There is an urgent need for incentives that will help increase the relative number and activity of GP's.

- ▣ Increase the profitability of general medical practice.
- ▣ Increase the status of general medical practice.
- ▣ Increase the enjoyment of general medical practice.

The elements of the ...health systems could be better aligned

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- ▣ Past and present Government initiatives.
- ▣ Urgent need for relative values study.
 - ▣ 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 duration of both undergraduate and postgraduate training must be reduced.
- ▣ 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.

Proposed solutions to the health workforce crisis.

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- ▣ 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.

The percentage ... employed ... could be increased and/or greater output could be obtained ...

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- ▣ The effect of every doctor in New Zealand working an extra hour per week = 500 additional doctors.
 - ▣ Is the increase in work hours per doctor over the last 20 years likely to continue?
- ▣ Increasing recruitment into medical schools for many people will also be hindered by:
 - inevitable debt; and
 - decreasing relative and soon perhaps actual numbers of younger people.
- ▣ What is the likely impact of increasing feminisation and unionisation of the workforce, the greater attention being paid to “healthier” work-life balances and the concern about the safety of practice by overworked tired doctors?
- ▣ Other negative factors will included ongoing and increasing international and private (versus public) recruitment pressures and by highly profitable but low utility disciplines such as appearance medicine.

Proposed solutions to the health workforce crisis.

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- ▣ 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.
- ▣ **The overwhelming conclusion is that to be appropriately effective in 2021 that the health workforce will need to be differently configured and/or work differently.**

Proposed solutions to the health workforce crisis.

- ▣ 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.**

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Identify and employ disruptive innovations.

- ▣ Innovative programs underway here and elsewhere.
 - ▣ 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?

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Identify and employ disruptive innovations.

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- ❑ 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 trials.
 - Current relatively high levels of CABG surgery.
 - Fred Hollow's eye "surgeons" and Dr George Salmond.



Outline of the presentation.

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- ❑ **Summation.**

Anatomy of a health workforce crisis.

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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.

Anatomy of a health workforce crisis.

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- ▣ Acknowledgements.
 - ▣ Emeritus Professor Sir John Scott.
 - ▣ Associate Professor Phillippa Poole.
 - ▣ Professor Iain Martin.
- ▣ Questions and answers.