Is there a substantive role for occupational medicine in New Zealand?

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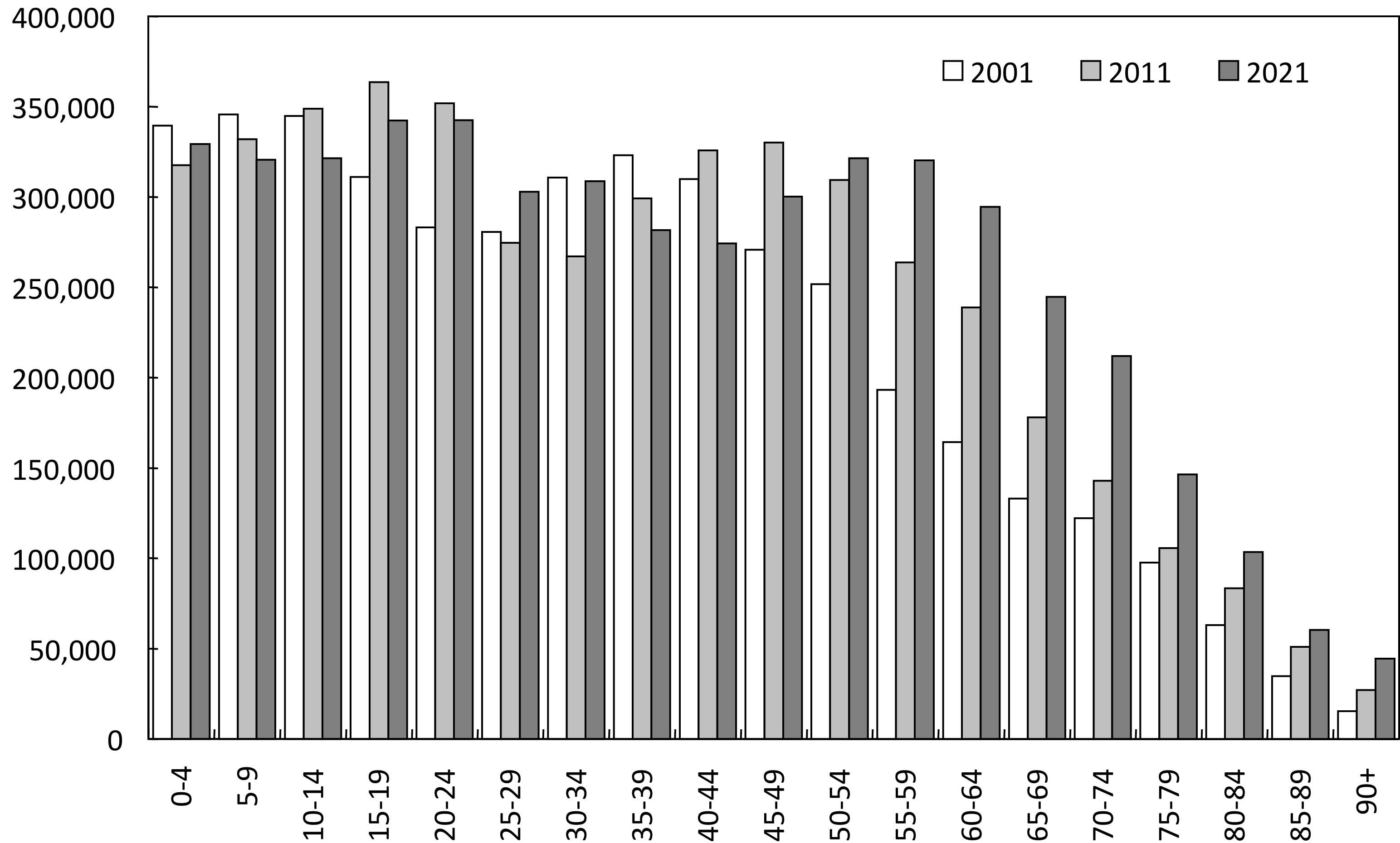
The background to future health services in New Zealand

- New Zealander’s expectations of their health services.
- A global mismatch between the demand for health services and the supply and affordability of those services.
  - Projections of demand.
  - Likely workforce growth.
  - Possible funding increases.

NZIER (2005)

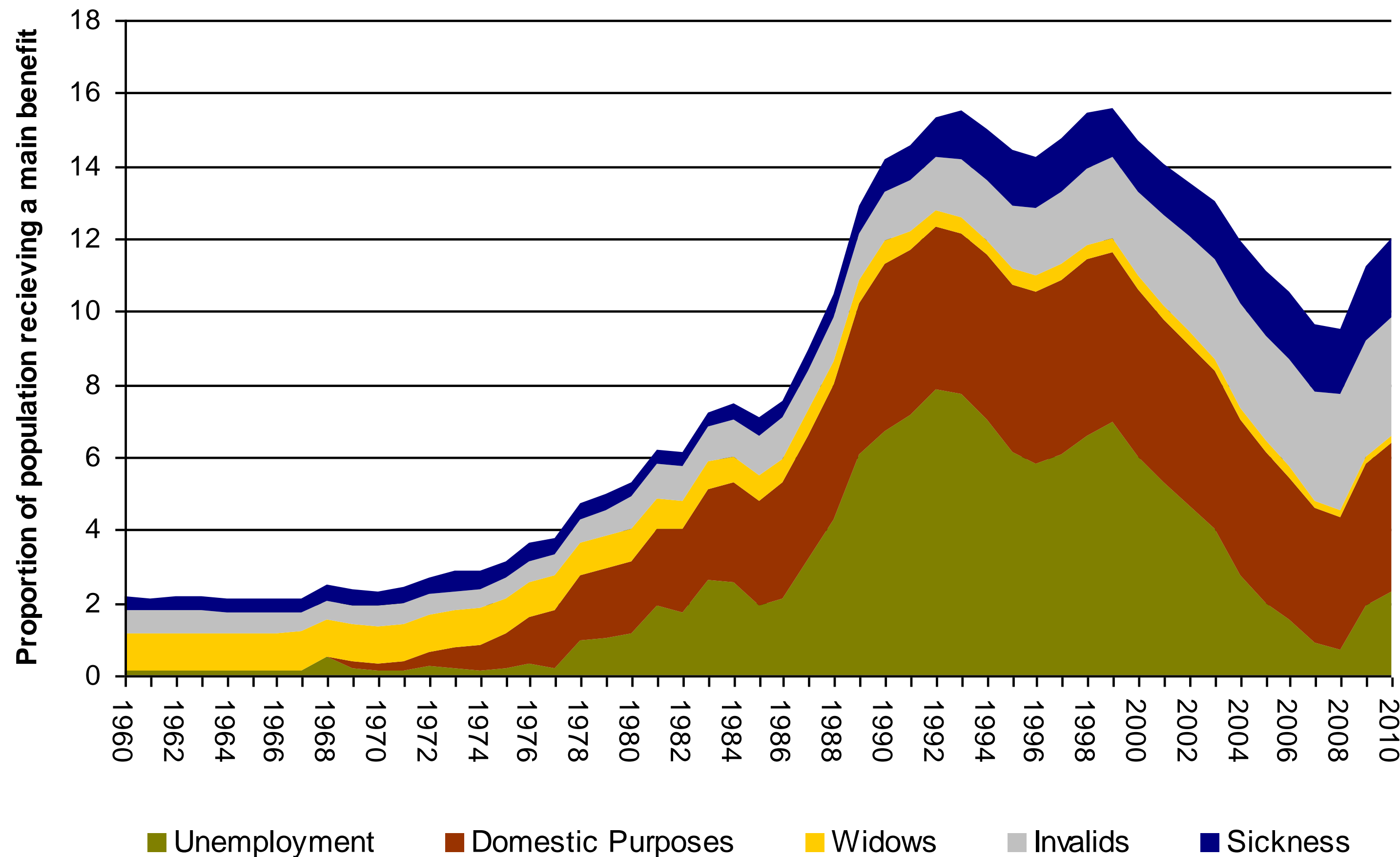
NZ Population Projections by Age Cohort (Assuming medium population growth)



Demand, supply and affordability

- On the basis of extant feminisation, part-time work, career choice, migration and retirement, and using a head count of the practitioners and trainees in 2010, <u>none</u> of the medical disciplines will have enough practitioners by 2021 to meet NZIER's <u>best case</u> scenario.
- Some workforces are already in critical shortage and this has adverse personal and societal impact.

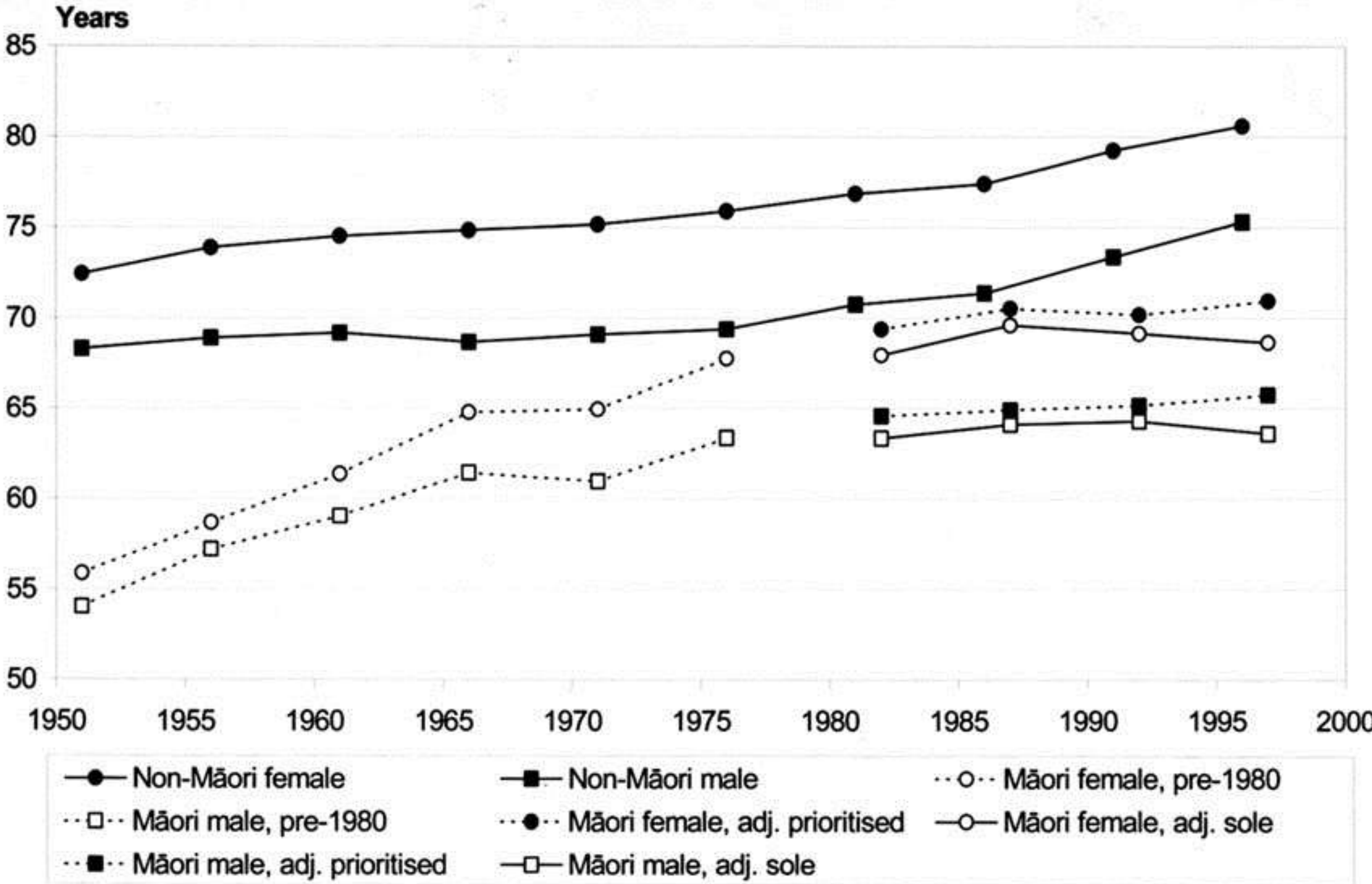
Proportion of the working age population receiving different main benefits, 1960-2010

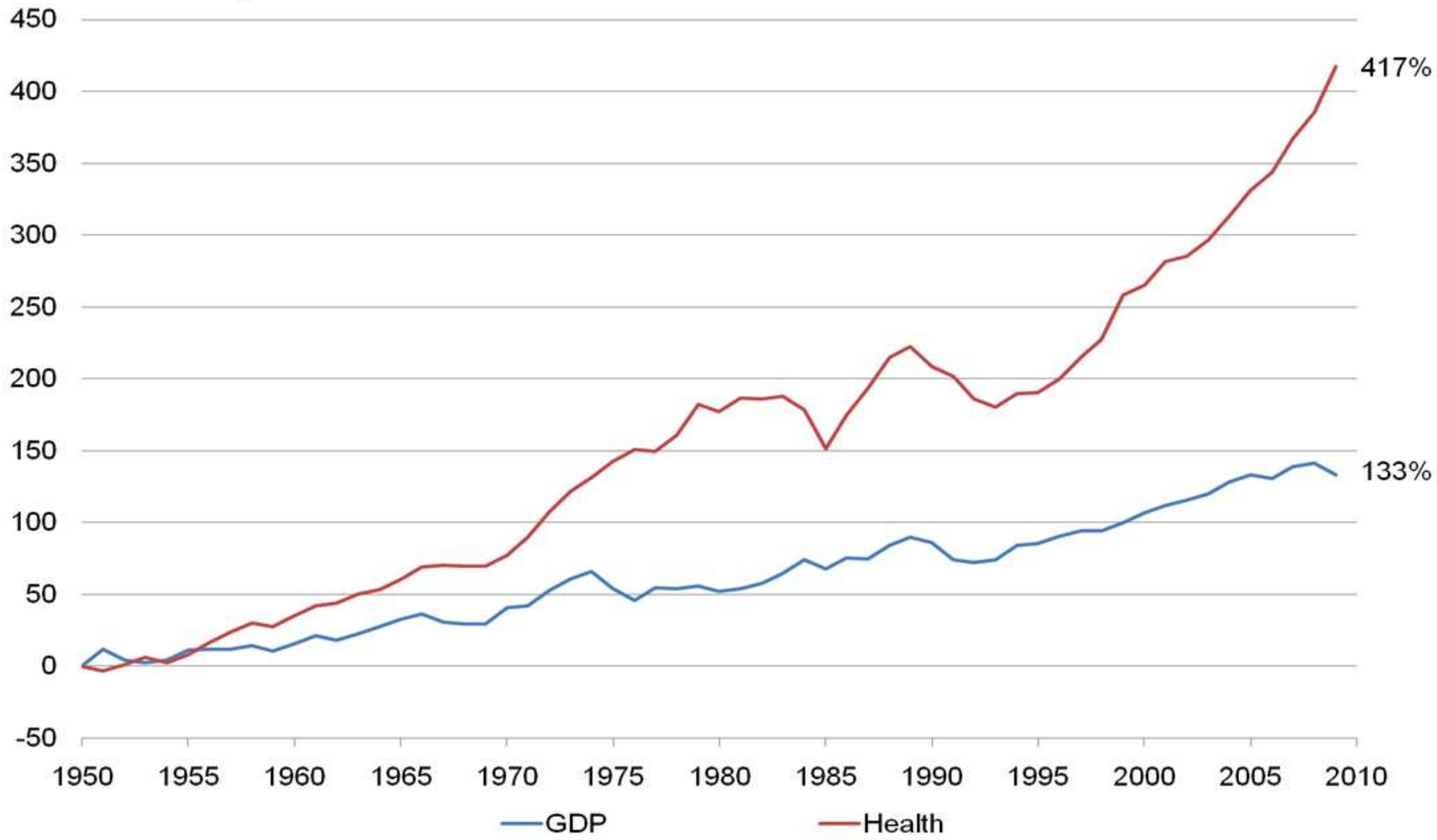


Source: MSD Statistical Reports

Note: Population 18-64 years. The count of benefits excludes individuals receiving a benefit as a partner

Figure 20: Māori and non-Māori life expectancy, by gender, 1950–2000




Cumulative % change
450
400
350
300
250
200
150
100
50
0
-50
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
417%
133%
GDP
Health

A terrible but liberating conundrum

- An informed, but conservative guess of the growth in demand for health services is for a doubling between now and 2021.
- At best, it may be possible to increase the health workforce by about 40% over this period.
- If increases in health funding are to be linked to growth in GDP, then the likely increase in health funding will also be about 40%.

A terrible but liberating conundrum

- The solution to the conundrum is to both reduce the demand for health care and to reduce the cost of meeting that demand.

A terrible but liberating conundrum

- Consequently, we will need to do many if not most things differently and this will necessarily require a reform of service configurations and models of care. This recognition leads to the adoption of the following core design principles: an <u>inclusive intelligence</u>; <u>disruptive innovations</u> as business as usual; and, <u>clinician leadership</u>.

A terrible but liberating conundrum

- There is a general acceptance among OECD nations that a key response is to slow down the rate at which hospitals are being built and the rate at which hospital specialists are being recruited, trained and employed.

A terrible but liberating conundrum

- It follows that there will need to be a shift in the site of patient care from hospitals to community networks, and into the home, and to do this, the following will be essential: (1) a shared care record; (2) a different form of funding services and of rewarding providers; and (3) a fit-for-purpose community based health workforce.

An illustrative vignette: Aunty and her poor diabetes control

- The status quo.
- A virtual version of the status quo.
- A reformed model of care involving an advanced care pharmacist.
- A reformed model of care involving an diabetes nurse prescriber.
- Barriers to reformation.

** = Daughter off-work to drive Aunty to appointments

GP **

Lab

GP **

Physician **

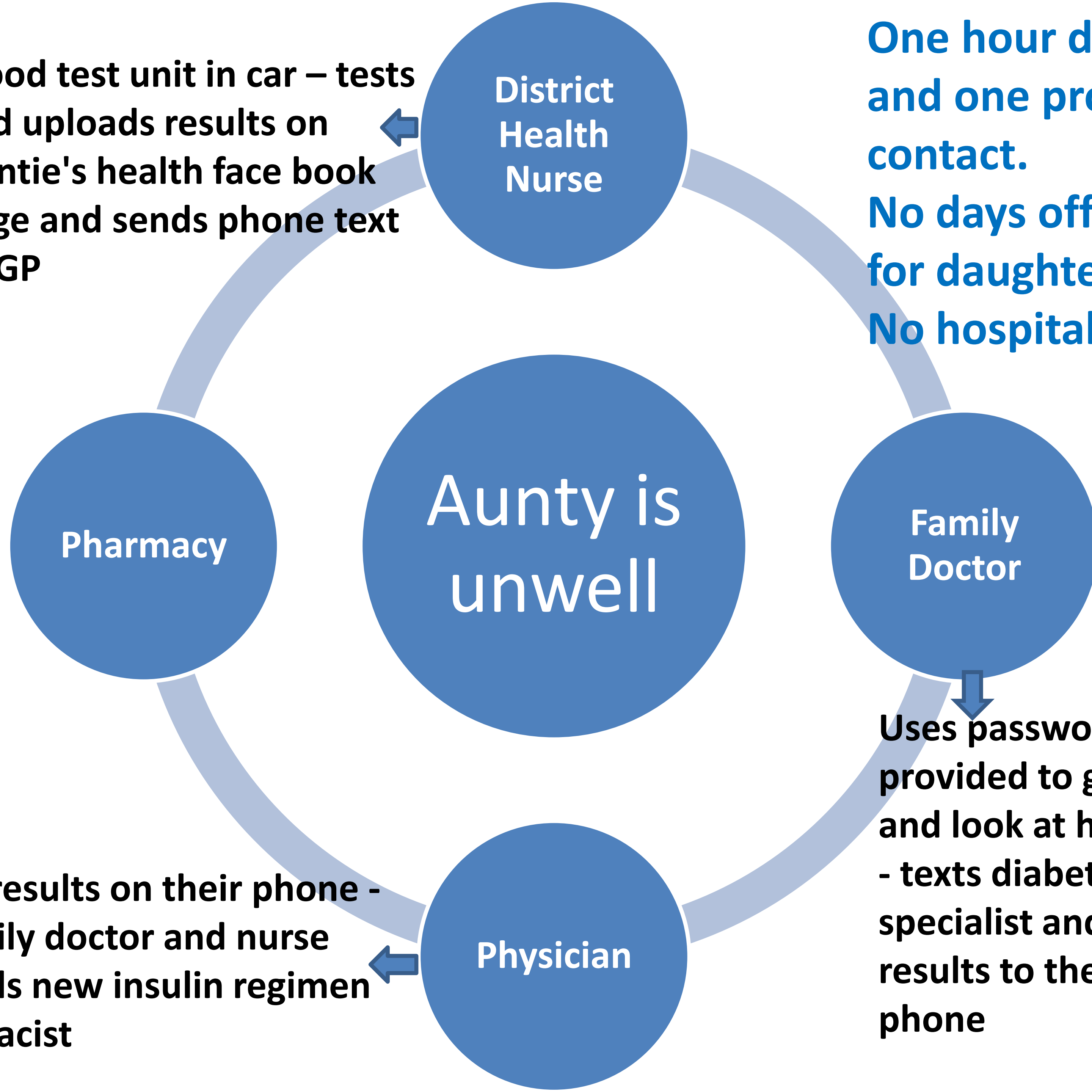
Pharmacy

District Health Nurse

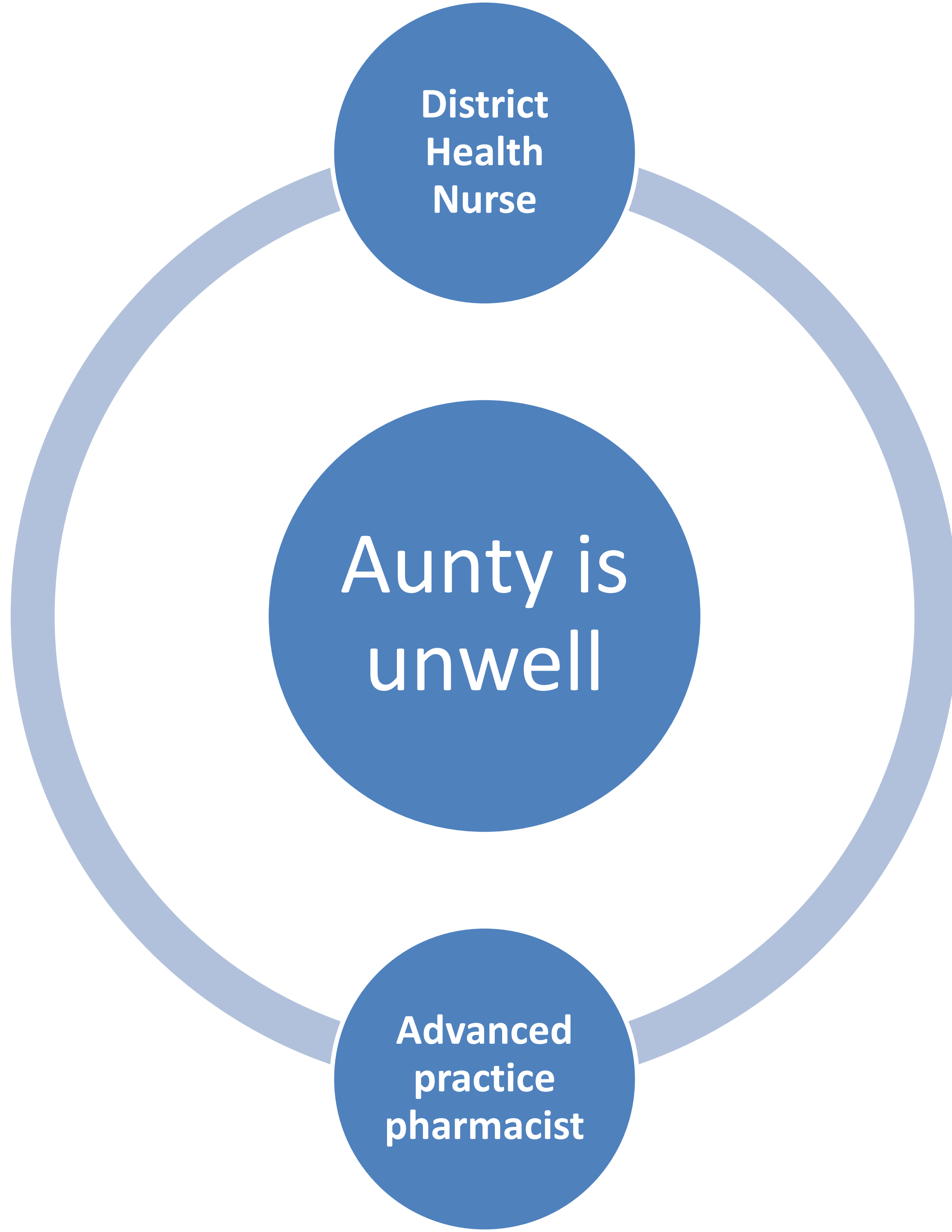
Aunty is unwell

Fourteen week duration and six provider contacts; three days off-work for daughter; and, two hospital admissions.

Three month wait and two hospital admissions for falls

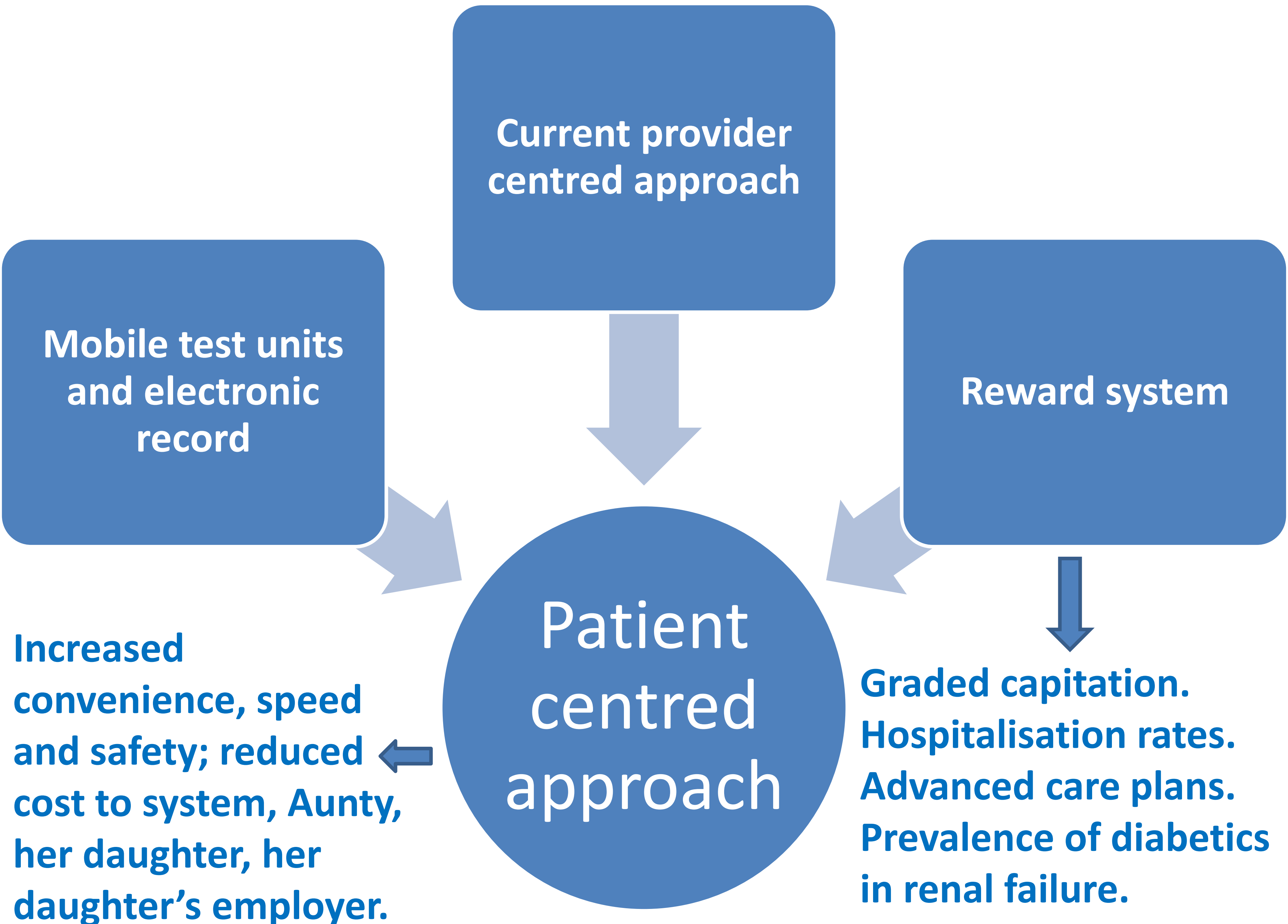


District Health Nurse
Blood test unit in car – tests and uploads results on Auntie's health face book page and sends phone text to GP
One hour duration and one provider contact.
No days off work for daughter.
No hospitalisations.
Pharmacy
Aunty is unwell
Family Doctor
Uses password Aunty provided to go online and look at her results - texts diabetes specialist and sends results to them by phone
Physician
Looks at results on their phone - rings family doctor and nurse and emails new insulin regimen to pharmacist


District Health Nurse
Aunty is unwell
Advanced practice pharmacist

Diabetes Nurse Prescriber

Aunty is unwell



Current provider centred approach
Mobile test units and electronic record
Reward system
Patient centred approach
Increased convenience, speed and safety; reduced cost to system, Aunty, her daughter, her daughter's employer.
Graded capitation.
Hospitalisation rates.
Advanced care plans.
Prevalence of diabetics in renal failure.

Managing health funding– an exercise in investment and disinvestment

The status quo

- Hospital based specialists and dislocated small business model of community providers

Up-skilling community providers

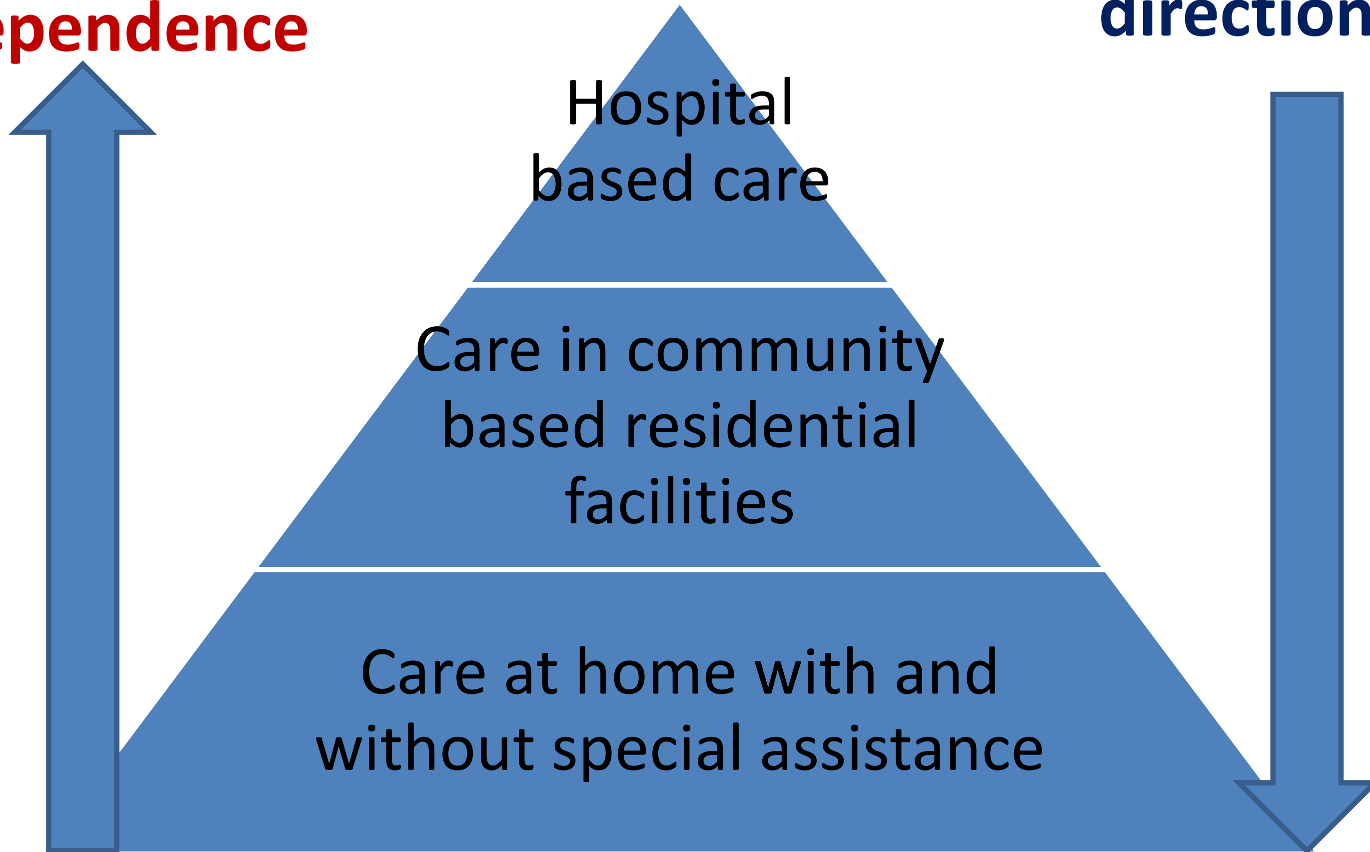
- Community based health provider networks
- Integrated care and corporatisation

Fewer hospitals and specialists

- Home based and patient directed care

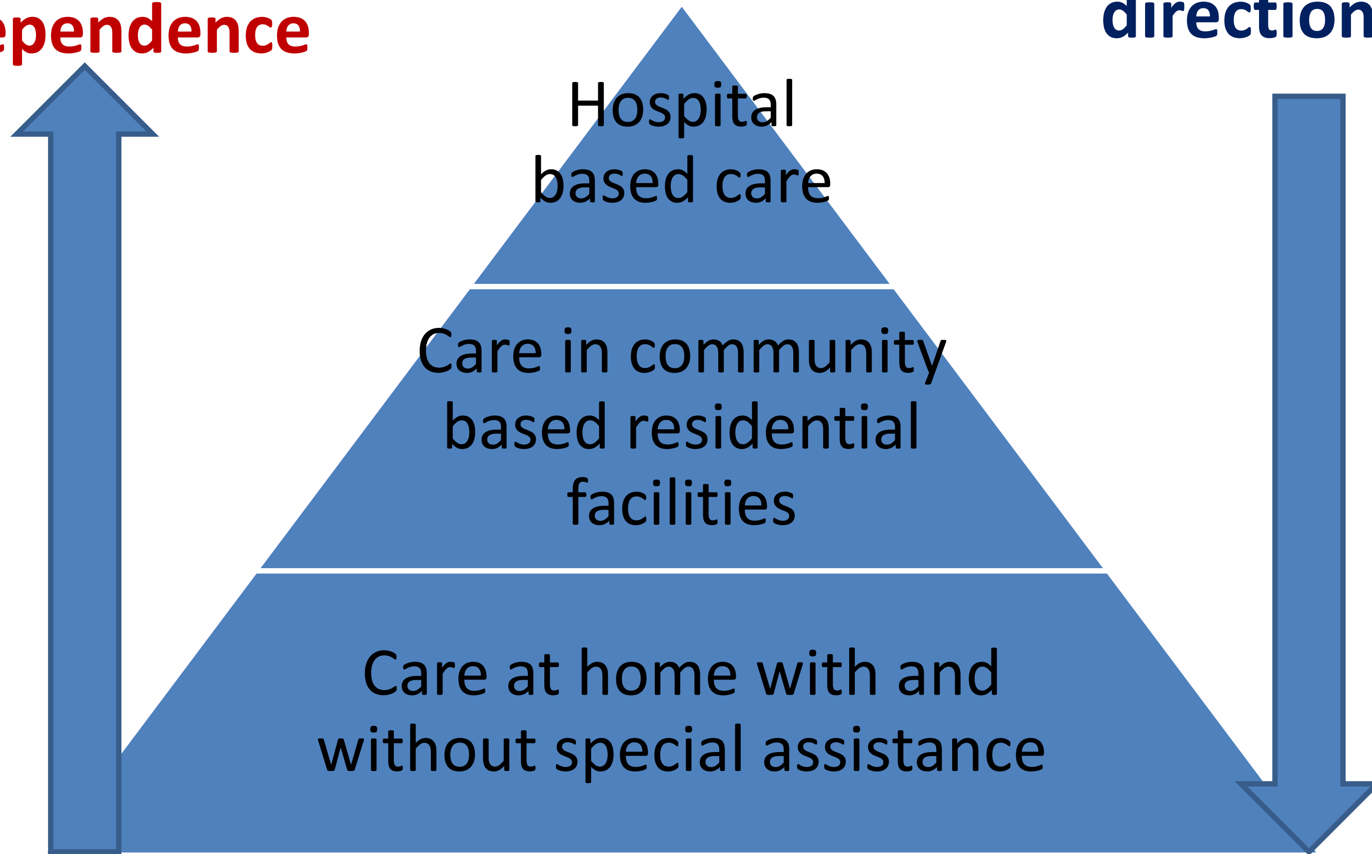
Increased cost and reduced independence

What is necessary to shift care in this direction?



Increased cost and reduced independence

What is necessary to shift care in this direction?



What is the role of the occupational physician here and in meeting the Government’s health targets?

The Government's 'clinical' health targets

- **Health Target One**: Better, sooner, more convenient health services
- **Health Target Two**: Improving service, reducing waiting times, and increasing the volume of elective surgery
- **Health Target Three**: Achieving health targets relating to cancer, smoking, immunisation, diabetes, cardiovascular health, and the performance of emergency departments

The Government's 'clinical' health targets

- **Health Target Four**: Delivering services closer to home in local community settings
- **Health Target Five**: New systems and services to safely and effectively respond to the health needs of older people, including prevention

Is there a substantive role for occupational medicine in New Zealand?

- Health service planning in 2011 to achieve a sustainable and fit for purpose health system.

Health workforce planning

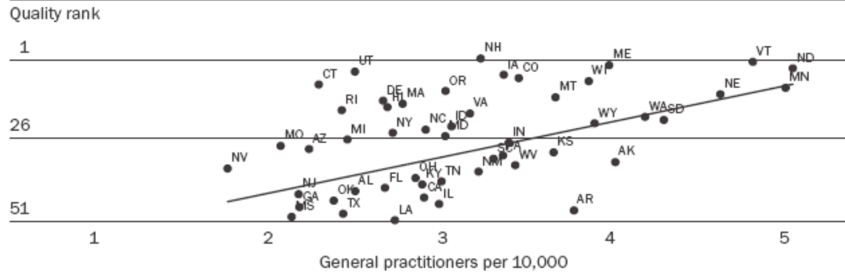
- It is probable that the only truism in health workforce planning is that we will inevitably get it wrong.
- This recognition can either be seen as an excuse to give up and resort to serendipity and to rely on the vagaries of the market place or as a stimulus to adopt principles that enable planning under conditions of uncertainty.

Health workforce planning

- Planning must be based on a dynamic intelligence.
- Most of the health workforce needs to be able to be flexibly employed, and quickly re-trained and re-deployed (e.g. a generic rehabilitation clinician).
- Slow to train and expensive health workers need to be employed in as general a scope of practice as is possible and must work "at the top end of their licence".

EXHIBIT 8

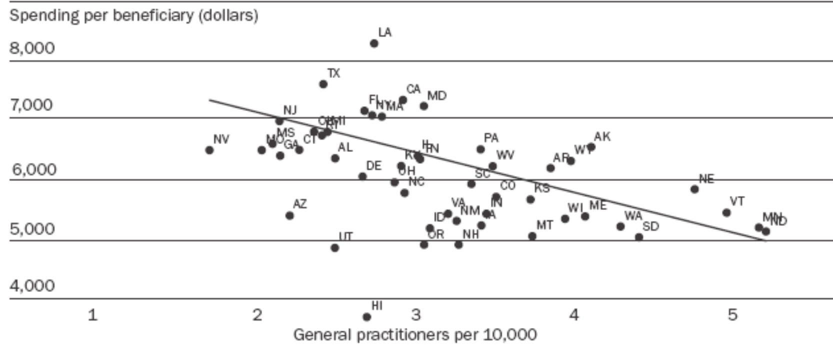
Relationship Between Provider Workforce And Quality: General Practitioners Per 10,000 And Quality Rank In 2000



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

EXHIBIT 9

Relationship Between Provider Workforce And Medicare Spending: General Practitioners Per 10,000 And Spending Per Beneficiary In 2000



SOURCES: Medicare claims data; and Area Resource File, 2003.
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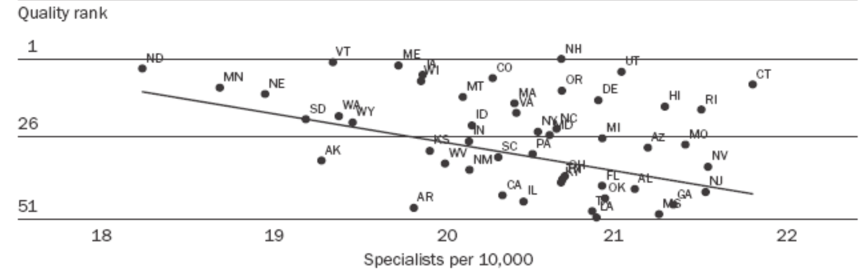
EXHIBIT 6

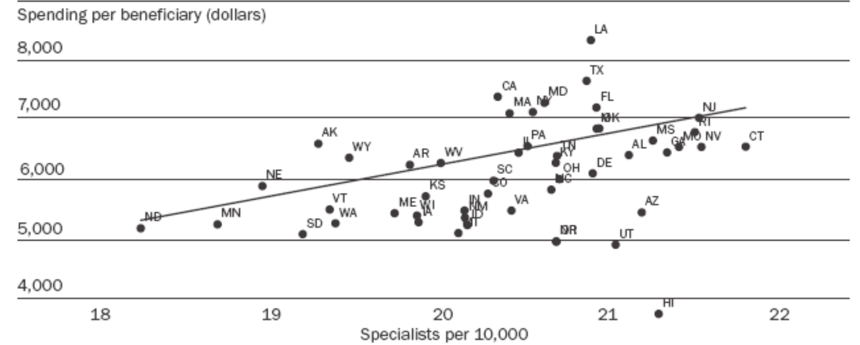
Relationship Between Provider Workforce And Quality: Specialists Per 10,000 And Quality Rank In 2000



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

EXHIBIT 7

Relationship Between Provider Workforce And Medicare Spending: Specialists Per 10,000 And Spending Per Beneficiary In 2000

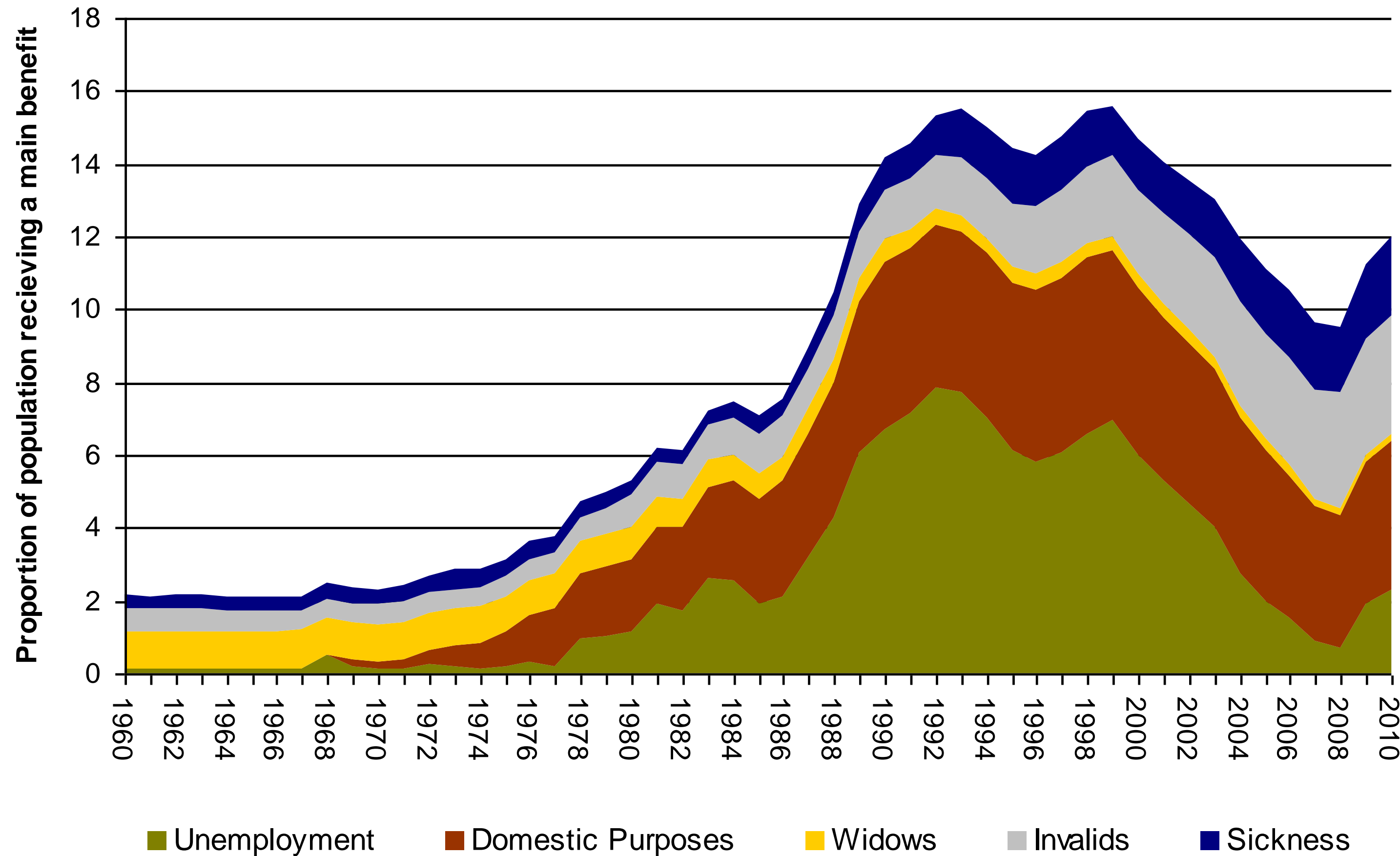


SOURCES: Medicare claims data; and Area Resource File, 2003.
NOTE: Total physicians held constant.

Is there a substantive role for occupational medicine in New Zealand?

- The Industrial Revolution and the rationale for public health and preventive medicine.
  - Is there a sound economic and or productivity argument for occupational medicine in this context?
  - Is occupational medicine now synonymous with ‘insurance medicine’?
- The shortfall in rehabilitation services in New Zealand and the consequent personal and financial cost.

Proportion of the working age population receiving different main benefits, 1960-2010



Source: MSD Statistical Reports

Note: Population 18-64 years. The count of benefits excludes individuals receiving a benefit as a partner

Economic productivity and the rehabilitation need

- On the assumption that there is either an economic productivity argument for occupational health workers or that such workers can contribute meaningfully to the rehabilitation need, then what is the desirable occupational health workforce?

Economic productivity and the rehabilitation need

- Why would any or many of the desirable workforce need to be clinicians?
- If they are to be clinicians, then what is the argument against this being the province of the nurse specialist in occupational health and the general medical practitioner who has an advanced scope of practice in occupational medicine?

Economic productivity and the rehabilitation need

- If we need any medical workforce other than general practitioners, what is the relevant need for:
  - General physicians (FRACP) who have either advanced training in occupational medicine or, preferably, who have dual trained as general physicians and as occupational physicians?
  - Community medicine specialists who have co-trained in public health, health management and in occupational medicine?

Is there a substantive role for occupational medicine in New Zealand?

- An affordable, sustainable and fit-for-purpose health system can only be achieved by way of a clinician-led and intelligence-informed innovative reform of funding and remuneration, and of service configurations and models of care across the health and disability sector.

Is there a substantive role for occupational medicine in New Zealand?

- Given the intrinsic uncertainty, health workforce planning must be informed by a dynamic and inclusive intelligence, needs to create and maintain a core workforce that can be employed flexibly and re-deployed quickly, and ensure that those necessary elements of the workforce that are slow and expensive to train have a scope of practice that is as general as is possible.