What's an internship worth, and to whom?
An economic perspective on internship

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Agenda

• Some numbers
• How is the problem framed?
• Some options

NB: mostly talk about interns but issues are relevant across a range of disciplines and training levels.
Framing version 1: graduates

• (Implicit) promise by universities that graduates would be able to fulfill requirements for registration (i.e. get an internship) if they paid for a medical degree
• May also have been assumption that could get permanent residency as a result (skill shortage)
• Dashed expectations (at relatively short notice)
  • real personal costs

‘Australia owes us/them’ then reframed as ‘Australia would benefit from us/them’
Was that a reasonable promise?

No knowledge of state nod or wink

4. Pre-registration and postgraduate training positions should be sufficient to guarantee access to such training by all Australian citizens who are graduates of Australian medical schools.

14. In the first instance postgraduate training positions should be filled by Australian citizens who are medical graduates of Australian universities and Australian citizens who are medical graduates of foreign universities. Postgraduate training positions should be filled by foreign citizens only if there is an excess of training positions over those required by Australian citizens.

AMA policy on Health workforce and training (adopted 1997)

It didn’t matter before but now it does
Framing version 2: consumers/system

Expansion of PGY training is necessary only if it will lead, over time, to (one or more of)

• reduced waiting times for elective surgery (as the number of surgeons is a constraint)
• Improved access to other (necessary) specialist care
• improved access to primary care, especially in rural/remote areas
• reduced out-of-pocket costs
• reduced reliance on international medical graduates

OR it is necessary for (contemporary) staffing of hospital

Framing version 2: consumers/system

- **Step 1**: Increase in internships
- **Step 2**: Increase in PGY2 and advanced trainee positions (2013 intern ‘crisis’ is just start of pipeline)
- **Step 3**: Work in specialty in location of need
- **Step 4**: Work in appropriate style (e.g. with no/reduced out of pockets)
Is increasing doctor supply the best way of improving access?

Health workforce reform for more effective, efficient and accessible service delivery

• Reform health workforce roles to improve productivity and support more effective, efficient and accessible service delivery models that better address population health needs

Examples of common tasks performed by Physician Assistants

<table>
<thead>
<tr>
<th>Primary care</th>
<th>Emergency department</th>
<th>Surgery / procedural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking patient histories</td>
<td>Taking patient history</td>
<td>Taking patient history</td>
</tr>
<tr>
<td>Patient examinations and investigations, e.g.</td>
<td>Ordering diagnostic tests and interpreting results</td>
<td>Physical examinations</td>
</tr>
<tr>
<td>• Complete body skin examinations</td>
<td>Discharging, admitting, or referring patients to specialists</td>
<td>Recording progress notes</td>
</tr>
<tr>
<td>• Digital rectal examinations</td>
<td>Administering treatments, e.g.</td>
<td>Writing discharge summaries</td>
</tr>
<tr>
<td>• Breast examinations</td>
<td>• Foreign body removal</td>
<td>Outpatient surgical care</td>
</tr>
<tr>
<td>• 'Pap' tests</td>
<td>• Incision and drainage of abscesses</td>
<td>Procedures, e.g.</td>
</tr>
<tr>
<td>Prescribing</td>
<td>• Resuscitation</td>
<td>• Central venous catheter placement</td>
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<tr>
<td></td>
<td></td>
<td>• Chest tube insertion</td>
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<tr>
<td></td>
<td></td>
<td>• Diagnostic peritoneal lavage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Wound evaluation and treatment</td>
</tr>
</tbody>
</table>
Where is the expansion of supply expected to occur?

Doctor supply is expected to be very uneven in 2025
Schedule fee observance doesn’t seem particularly responsive to supply, at least for specialists

Number of Employed Specialists
Number of Employed GPs
Schedule Fee Observance (Proportion of GPs)
Schedule Fee Observance (Proportion of Specialists)

As schedule fee observance went down, Medicare’s political salience went up

Proportion of Voters who Consider Health & Medicare Very Important Issues
Schedule Fee Observance (Proportion of GPs)
Health Workforce Australia views

An extensive number of policies, programs and measures already exist to encourage doctors to work in rural and remote areas. ....... With the exception of restrictions on access to Medicare provider numbers for some categories of overseas trained doctors and return of service obligations associated with graduating doctors on bonded scholarships, these measures are almost exclusively voluntary, and incentive or training based.

The magnitude of some of the shifts outlined in the scenario modelled suggests that existing programs and measures are unlikely to effect significant change in geographical distribution.

There is a unique and immediate opportunity provided by the future growth in medical graduates to convert this into better distribution of the medical workforce. This is because it is likely to be less complicated to redistribute future workforce growth rather than the existing workforce. It is timely to review and enhance the suite of national and jurisdictional measures and provide a more effective balance of carrots and sticks than presently exists.

Framing version 1: economist

• At the current effective price, supply of interns is greater than demand

• Is the market working OK? i.e. should there be any intervention?
  • international graduating students say market failure
  • Commonwealth government said market failure

• Should supply change?
• Should demand change
• Should effective price change?
Medical workforce supply and demand – three scenarios

Number of doctors

- Comparison
- Productivity gain
- Low demand

Supply
Demand

Should demand change?

- To what extent are there externalities in the employment of interns?

- Public hospitals (and possibly state governments) are myopic
  - ‘Tragedy of commons’
  - Perception that policy problems are principally Commonwealth responsibilities (or at least, not state)
    - ?elective surgery waiting times

NB: It is feasible for other employers of interns to enter the market (e.g. general practice) but this is not considered here
Should supply change?

- Medical education is expensive for international students and for the Australian taxpayer

- Relying on a single variable (graduation rates) as the principal instrument for achieving access objectives outlined above is inefficient

Annual funding rate to universities, 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health sciences</td>
<td>$16,000</td>
</tr>
<tr>
<td>Nursing</td>
<td>$16,000</td>
</tr>
<tr>
<td>Medicine</td>
<td>$26,000</td>
</tr>
</tbody>
</table>

This does not include HWA grants for clinical placements for additional students:
- $52800 for medical course
- $9714 per nursing
- $5000-14000 health sciences

From student, covered by HELP
From Commonwealth government (includes ‘medical student loading’)
Should effective price change?

Effective price is net cost to hospitals
  \( \text{= Wages/salaries paid to interns} \)
  - Cost of supervision etc
  + price paid by interns for training
  - Subsidies (bribes)

2013 response included 100% Commonwealth subsidy to private hospitals. Policy design did not
  • allow market testing of optimum incentive design
  • trial alternative models of training places (esp for PGY2, rural, GP)

Q: Why consider subsidies at all?
A: requires a digression about Activity Based Funding\(^2\)

An ABF digression

• Health sector funding is increasingly on basis of outputs
• Interns (and later year trainees) are involved in two distinct ‘services’:
  • Clinical service provision: as one of the inputs into the care of patients
  • Training

Q: What proportion of the costs of intern employment is/should be attributable to their work as part of the clinical team?
If not 100\% where should the balance come from?
Who should pay for the training component?

- Good public policy tries to align costs and benefits
- Who benefits from training?
  - Governments (see earlier discussion about policy objectives re access etc)
  - Trainees
- Which government?
  - From 1 July 2014 Commonwealth will fund 45% of growth in (efficient) cost (over 2013-14 year)
  - States traditionally involved in funding intern training
- What about trainees?
  - If the internship is a continuation of training, should the same funding principles that applied to university funding apply here
  - Mix of private funding and public subsidy

Trainee contributions

- Monetary
  - Fee HELP type arrangement?
  - accelerated write off for particular types of service? and/or particular types of location
Net present value of university study (at median)

- $200,000
- $200,000
- $600,000
- $1,000,000
- $1,400,000

Performing Arts

Trainee contributions

- Monetary
  - Fee HELP type arrangement?
  - accelerated write off for particular types of service? and/or particular types of location
- Service obligation
  - Traineeships contingent on agreeing to particular (workforce planning-based) conditions
- None
Policy issues

• Is excess supply a public problem that needs to be solved through policy change?
• If so, whose problem is it mainly?
  • aka who needs to change most?
  • Trainees, states/hospitals, Commonwealth
• What is a rational basis for intervention and why
  • who should pay whom for what
• The excess intern supply provides an opportunity to think differently about aspects of medical workforce policy, that opportunity shouldn’t be wasted

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