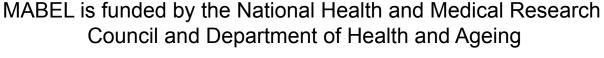


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# An empirical analysis of dual medical practice in Australia

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# **Background**

- Medical practitioners who work concurrently in public and private sectors (dual practice: DP) are common, although the forms of dual practice vary widely and poorly understood
- Allocation of time by medical practitioners to two sectors can have important effects on population health and health care cost
  - Economic efficiency perspective: Public sector patients are of lower socieconomic status, poorer health, more complex conditions >> greater capacity to benefit from health care
  - Equity perspective: Resources should be directed to the least well off regardless of benefits
- The allocation of time between public and private work achieve doctors' or societal's objective?

# **Background**

- Incentives for doctors to influence the decisions by patients between public and private care, increasing doctors' income.
  - 'Cream-skimming' or 'cherry-picking'. Public sector left with more severe cases, increase cost and waiting lists. (Barros and Olivella 2005; Garcia-Prado and Gonzalez 2006)
- Financial losses for public sector arising from misuse of public resources. Fewer incentives to provide quality services in public sector (Bir Eggleston 2003, Biglaiser and Ma 2007).
- Consequence of dual practice not always negative
  - Supply of medical services increase if doctors increase total work hours.
  - Increase attractiveness of public sector position, assisting with recruitment and retention of medical practitioners.

# **Background**

- Allocation of time driven by institutional and individual level factors:
  - Context of health systems, regulations of DP and incentives schemes
  - 2. Culture and peer group norms of the specialty
  - 3. Preferences of medical practitioners influence extent of DP. Driven by motivations including income, reputation, autonomy, improving population health
    - E.g. doctors may have high level of motivation to work in public sector, strong preferences for procedural work.

# Aims and objectives

- Despite its ubiquity, there is a lack of research on the extent and nature of public and private work by Australian doctors.
  - The aim of this paper is to examine and describe patterns of dual practice in Australia.
  - Focus on medical specialists since GPs operate largely in the private sector

# Institutional setting in Australia

- Medicare subsidies medical services and technologies according to schedule of fees (Medicare Benefit Schedule).
- Australian public hospitals admits both public (Medicare) and private patients. Public hospital care free for public patients, private care afforded by private health insurance (if available).
- Dual practice takes the form of public hospital work combined with private consulting rooms and/or private hospitals
  - Defining the public or private nature of activity: (1) Sources of financing, (2) Ownership.
  - Combination of public and private sources of financing for private hospital treatment.

# Institutional setting in Australia

- Doctors employed in the public hospital sector may undertake private work. Agreements specific to each State and jurisdiction, can vary across Australia.
- Salaried Medical Officers (SMO): hospital employee
  - (A) Rights to private practice with allowance of 16% of base salary
  - (B) Fees from private practice paid into trust fund from which a % paid to hospital, allowance for specialists (capped at 16%). Monies can be used for travel, research or equipment.
  - (C) Proportion of full-time (e.g 80%), allowed to retain fees exceeding 16%.
- Visiting Medical Officer (VMO): contracted for the treatment of public and private patients in public hospitals. Paid by sessional payments, FFS.

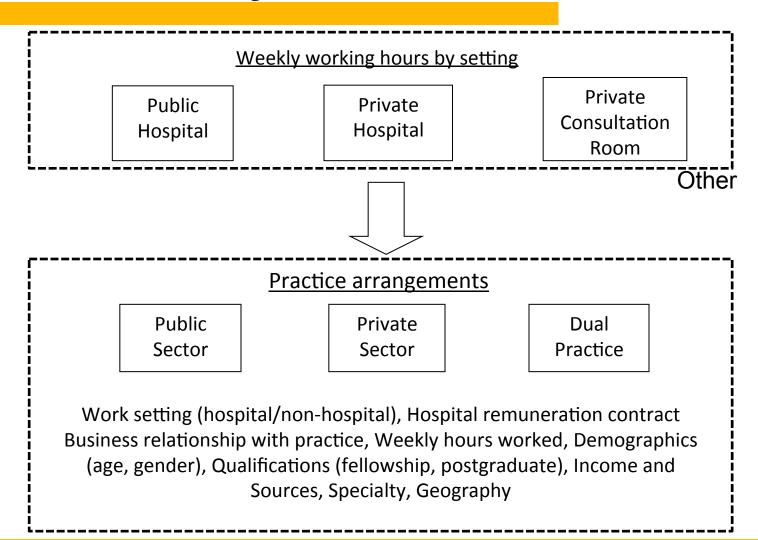
#### **Data**

- Medicine in Australia: Balancing Employment and Life (MABEL) longitudinal survey of doctors
  - Designed to examine workforce participation patterns and their determinants.
- All 54,750 doctors undertaking clinical work listed on AMPCo Medical Directory were invited to participate.
  - 4 category of doctor type: GPs, specialists, specialists-intraining, hospital non-specialists
- Baseline data (Wave 1) collected between June and November 2008. Wave 4 (2011) data is currently in the field.

#### **Data**

- Questionaire collected data on:
  - working arrangements; hours worked; workload, finances
  - job satisfaction; intentions to change labour supply
  - discrete choice experiment (preferences & tradeoffs for jobs)
  - demographics, family circumstances.
- Overall response rate for Wave 1 is 19.36%, with a total of 10,498 doctors. Cohort nationally representative with respect to age, gender doctor type, geographic location and hours worked.
- This paper uses data for qualified specialists from Wave 1.

# Methods: Analytical framework



# **Analysis**

- Analyse the frequency of specialists (public, private and dual practice)
- Describe remuneration contracts (hospital spec.) and business relationship with practice (non-hospital spec.)
- Multivariate regression to analyse factors associated with practice arrangements
  - Multinomial logit, base category == public sector
  - Relative risk ratios.

- Sample construction observations excluded if
  - Missing data on hours work, earnings and sources of income. Majority of hours in 'Other setting' category
- Analysis sample of 2,536 specialists
  - 860 (33.9%) in public sector; 478 (18.9%) in private sector;
     1198 (47.2%) dual practice.

**Table 1: Summary statistics** 

Variables	Public (N=860)			/ate 478)	Dual Practice (N=1198)	
	Mean	Std dev	Mean	Std dev	Mean	Std dev
Female	0.37	(0.48)	0.28	(0.45)	0.22	(0.41)
Age	48.0	(9.54)	54.5	(10.6)	49.6	(9.1)
Weekly hours	43.2	(13.4)	39.8	(15.9)	48.0	(12.8)
% time teach/ research	13	(12)	4.5	(7.9)	7.4	(8.8)
Income source (%): Medicare	4.8	(13)	73.0	(33)	47.0	(30)
Non-Medicare	0.9	(4.7)	13	(24)	9.5	(16)
Hospital work	90	(18)	5.9	(20)	40	(30)

Table 2: Hospital remuneration contracts by practice status (%)

Remuneration mode         Public only (N=860)         Private only (N=133)         DP - Public Hospital (N=544)         DP - Private Hospital (N=204)           Fee-for-service         1.3%         85%         10.3%         63.2%           Sessional/Hourly         10.0%         4.5%         20.0%         16.2%           Salary with no RPP¹         37.8%         4.5%         11.4%         2.9%           Salary with RPP¹         50.7%         6.0%         56.1%         14.7%					
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	Salary with RPP <sup>1</sup>	50.7%	6.0%	56.1%	14.7%
Other 0.2% 0.0% 2.2% 2.9%	Other	0.2%	0.0%	2.2%	2.9%

<sup>1</sup>RPP: Rights to private practice

www.mabel.org.au

Table 3: Business relationship with private practice for non-hospital specialists

Business relationship	Private only' (N=345)	Dual Practice (N=450)
Principal/Partner	57.4%	67.1%
Associate	9.3%	16.0%
Independent and Solo	13.9%	6.4%
Salaried/Contracted Employee	18.3%	8.9%
Locum	1.2%	0.7%
Other	0.0%	0.9%

**Table 4: Relative risk ratios** 

Variables	Private Only <sup>1</sup>	Sig.	Dual Practice <sup>1</sup>	Sig.
Female	1.37		1.02	
Age: 40-44 years	1.25		1.05	
45-49 years	1.38		1.26	
50-54 years	2.56	**	1.51	*
55-59 years	2.20	*	1.28	
60-64 years	3.30	***	1.41	
65 years and over	3.38	***	1.07	
% time in teach/research	0.97	**	0.99	
Weekly hours: 20-29	0.51		1.62	
30-39 hours	0.68		3.31	**
40-49 hours	0.52		2.97	**
50 hours and over	0.32	*	2.47	*

<sup>&</sup>lt;sup>1</sup>Omitted category: Public Only Estimates on qualifications variables not reported

**Table 4: Relative risk ratios** 

Variables	Private Only <sup>1</sup>	Sig.	Dual Practice <sup>1</sup>	Sig.
Earnings (in '000):\$150—\$200	0.94		1.00	
\$200—\$250	0.82		0.99	
\$250—\$300	0.75		1.04	
\$300—\$350	0.80		0.92	
\$350—\$450	0.80		1.27	
\$450—\$550	3.15	***	4.32	***
\$550 or more	2.63		3.02	
Financial sources: Medicare	1.04	***	1.06	***
Non-medicare	1.07	***	1.08	***
Government incentives	0.82	**	1.00	
Hospital work	0.91	***	0.99	*

<sup>&</sup>lt;sup>1</sup>Omitted category: Public Only Estimates on qualifications variables not reported

**Table 4: Relative risk ratios** 

Variables	Private Only <sup>1</sup>	Sig.	Dual Practice <sup>1</sup>	Sig.
Specialty (Base=Paediatrics) General medicine	1.59		2.89	**
Pathology	47.0	***	0.98	
General surgery	2.50		4.84	***
Orthopaedic surgery	1.76		2.52	
Other surgery			4.87	***
Anaesthetics	4.11	***	2.66	***
Diagnostic radiology	2.73		1.79	
Obstetrics & Gynaecology	4.05	**	2.53	***
Ophthalmology	16.56	**	13.53	**
Psychiatry	11.70	***	1.74	*
Other	9.12	***	1.80	*

<sup>&</sup>lt;sup>1</sup>Omitted category: Public Only Estimates on qualifications variables not reported

**Table 4: Relative risk ratios** 

Variables	Private Only <sup>1</sup>	Sig.	Dual Practice <sup>1</sup>	Sig.
State: (Base=NSW) VIC	1.26		1.89	***
QLD	2.45	***	0.83	
WA	3.02	***	2.05	***
SA	0.68		0.75	
TAS	1.94		1.53	
ACT	2.53		1.29	
NT	4.17		1.45	
Remoteness: (Base=Major city) Inner regional	0.56		1.06	
Outer regional and Other	0.40		0.98	

# **Concluding remarks**

- Working patterns of medical specialists in Australia are complex.
  - Considerable variation in working settings and remuneration across and within settings.
- Specialists in DP are likely to be younger and work more hours than those in private practice, and have higher annual earnings than those who work only in public hospitals. DP doctors have a wider range of income sources.
- Further research is required to establish the causal determinants of the allocation of time between sectors to inform policies to alter the distribution of doctors between sectors.

