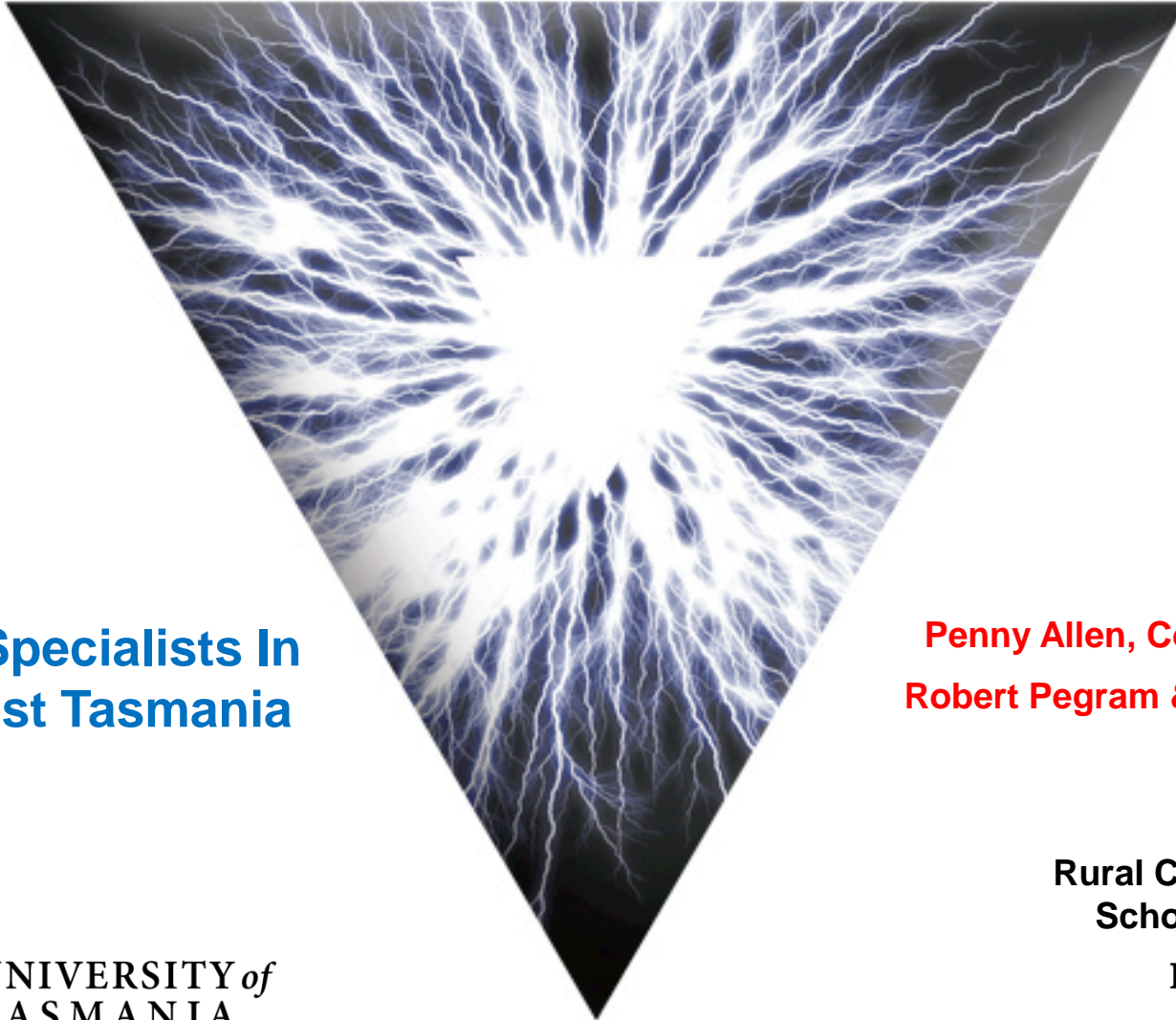


Should I Stay or Should I Go?



**Medical Specialists In
North West Tasmania**

**Penny Allen, Colleen Cheek,
Robert Pegram & Jennifer May**

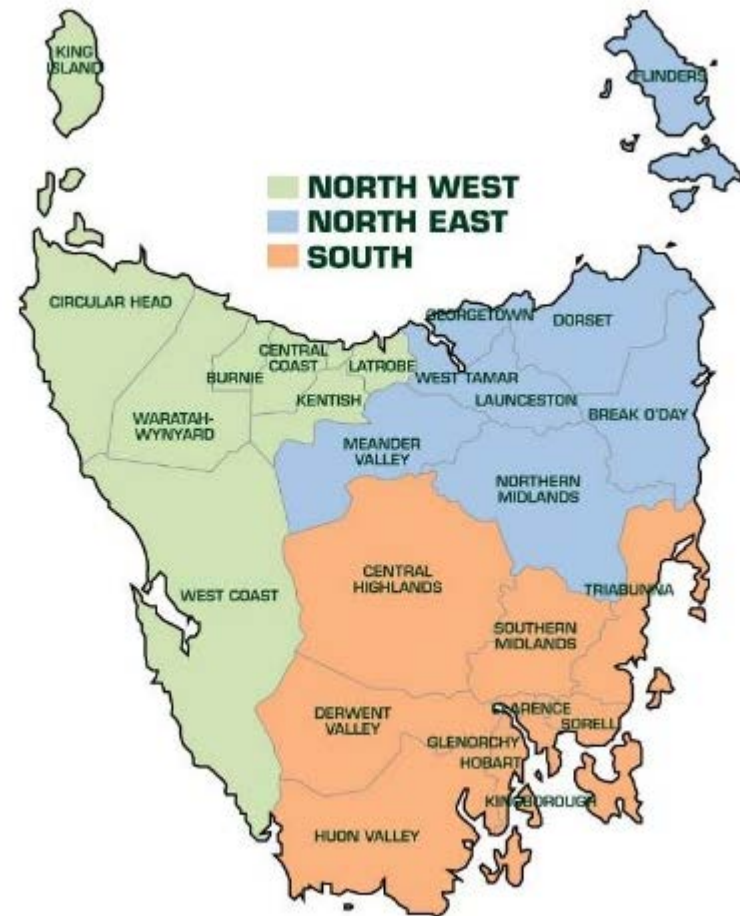
**Rural Clinical School,
School of Medicine**

**FACULTY OF
HEALTH**

Background

North West Tasmania

- Population approximately 114,000 people
- 70% live in coastal towns and communities between Devonport & Wynyard
- Main towns – Burnie & Devonport
- ASGC remoteness ranges from RA3 (Burnie) to RA5 (King Island)



- Older population (median age 41 years vs 37 years for Australia)
- High prevalence of chronic disease and lifestyle risk factors
- Socio-economically disadvantaged (IRSD deciles 1-5)
- Unemployment rate approximately 7-8%



Tasmanian Health Service – North West (THS-NW)

- North West Regional Hospital, Burnie - 160 bed secondary level hospital
- Mersey Community Hospital, Latrobe - 100 beds, limited services
- Smithton District Hospital -12 acute care beds, GP-led A&E, visiting services
- West Coast District Hospital, Queenstown - GP-led A&E, aged care & visiting services
- King Island District Hospital - 6 acute care beds, 8 high care beds & 6 low care residential aged care beds



Specialist Recruitment and Retention

- Attracting and retaining medical specialists is challenging
- Anecdotal evidence of increasing reliance on international medical graduates and locums
- Not unusual to credential >40 locums per month

Aim

- To describe longitudinal specialist workforce trends in North West Tasmania

Methods

Study Design

- Longitudinal analysis of specialist workforce data

Study Period

- 20 years - January 1997 to January 2017

Study Site

- THS – North West

Data Sources

- HR data from DHHS THS-NW
- APHRA database

Study Population

- Medical specialists who worked at THS-NW during the study period



Inclusion criteria

- Specialist medical practitioner during employment at THS-NW

Exclusion criteria

- Locum specialists (defined as appointment <3 months duration)
- Specialists in training

Definition of medical specialist

- Hold an approved qualification for the speciality; or
- Hold another qualification the National Board established for the health profession considers to be substantially equivalent, or based in similar competencies, to an approved qualification for the speciality

(Source: Medical Board of Australia Registration Standard for Specialist Registration,
<http://www.medicalboard.gov.au/Registration-Standards>)

Data Analysis

- Crude turnover rate
- Stability rate
- Survival analysis



Results

- 1370 medical practitioners identified during initial search
- 617 had specialist qualifications registered with AHPRA
- 315 were specialists during at least one appointment with THS-NW

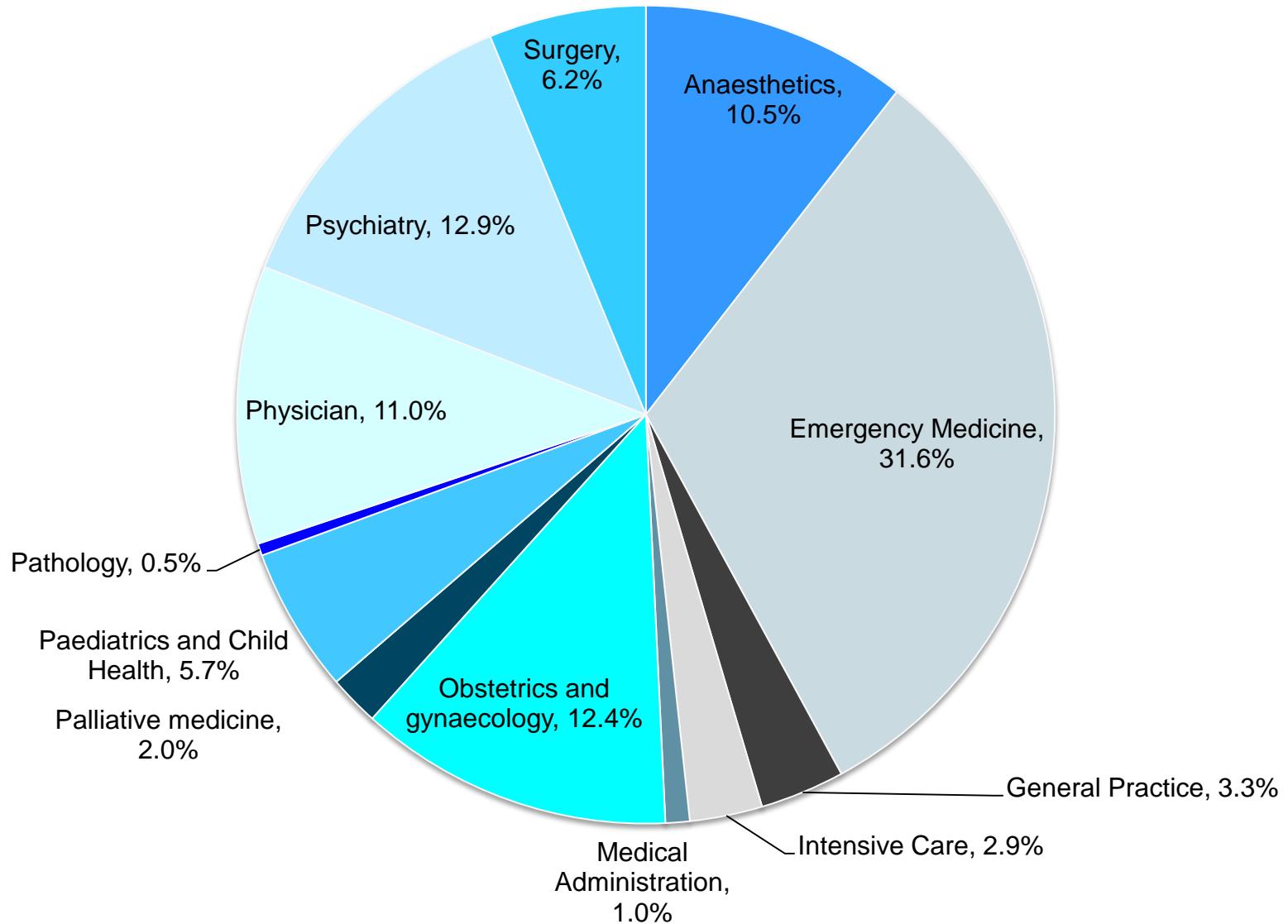
Study sample

- 208 specialists fit the inclusion/exclusion criteria
 - 155 (74.5%) men
 - 53 (25.5%) women
- Median 19 years (IQR 14, 26) since MBBS graduation
- Median 3 years (IQR 1, 11) between fellowship and date of appointment

- 64.4% received their medical degrees overseas
- 5 specialists were graduates of the University of Tasmania

Country MBBS	n	%
Australia	75	35.6
UK	26	12.5
India	18	8.7
New Zealand	17	8.2
South Africa	13	6.3
US	9	4.3
Germany	5	2.4
Iraq	5	2.4
Sri Lanka	5	2.4
Ireland	4	1.9

Percentage of Specialist Workforce by Specialty



Crude Annual Turnover Rates of Specialists at THS-NW

- Calculated for each year – 1997 to 2016
- Inconsistencies in turnover rates for period 2013-2015 compared to other years
- Verification of data against source data required to validate locum identification/exclusion criterion

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Crude Turnover Rate (%)	0.0	0.0	0.0	0.0	22.2	9.1	18.2	0.0	5.0	7.4

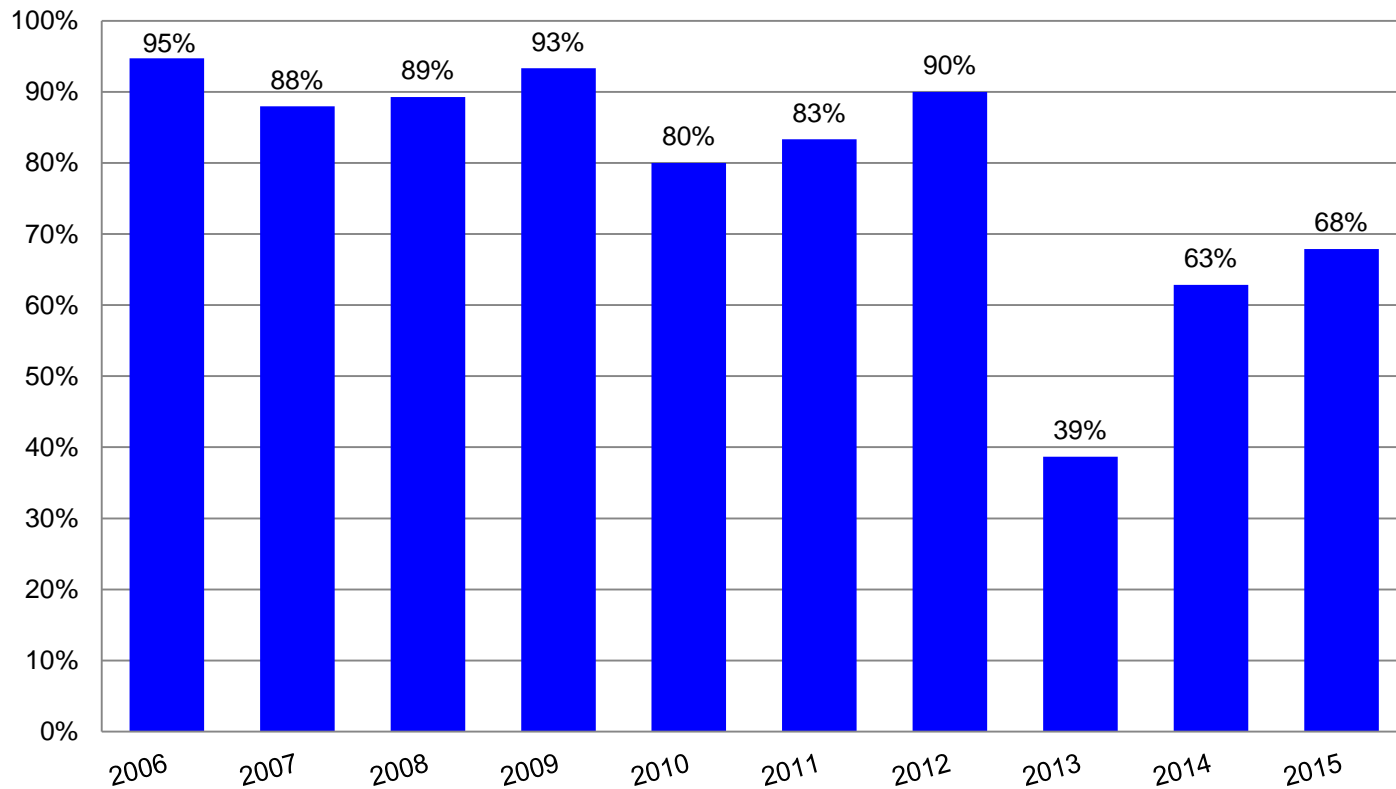
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Crude Turnover Rate (%)	17.9	9.1	13.5	29.7	22.0	10.1	85.3	83.9	52.4	22.7

Stability Rates of Specialists at THS-NW

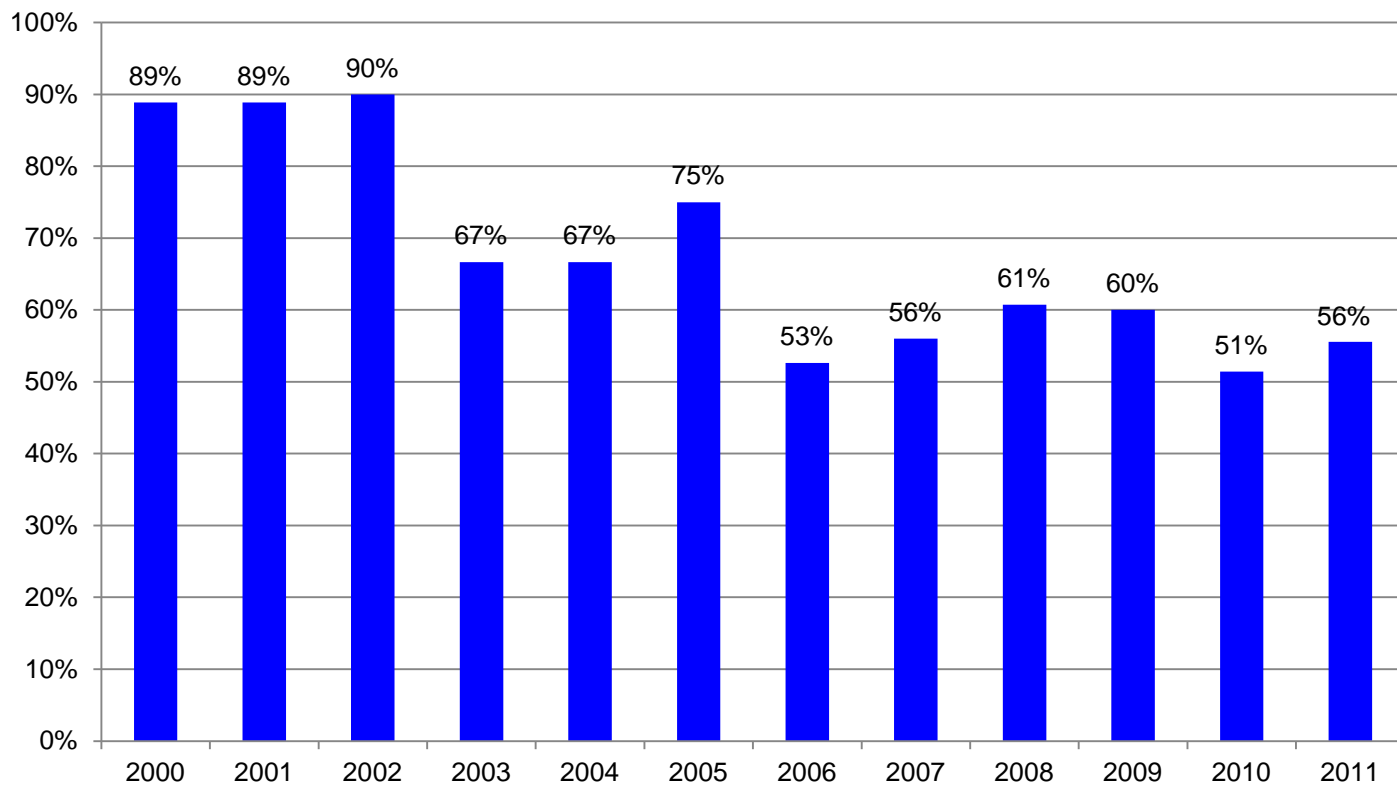
- 12 month and 60 month stability rates calculated
- 100% 12 month stability rates for specialist cohorts recruited from 2000 to 2005
- Verification of data required



12 Month Stability Rate by Recruitment Year Cohort (2006 to 2015)

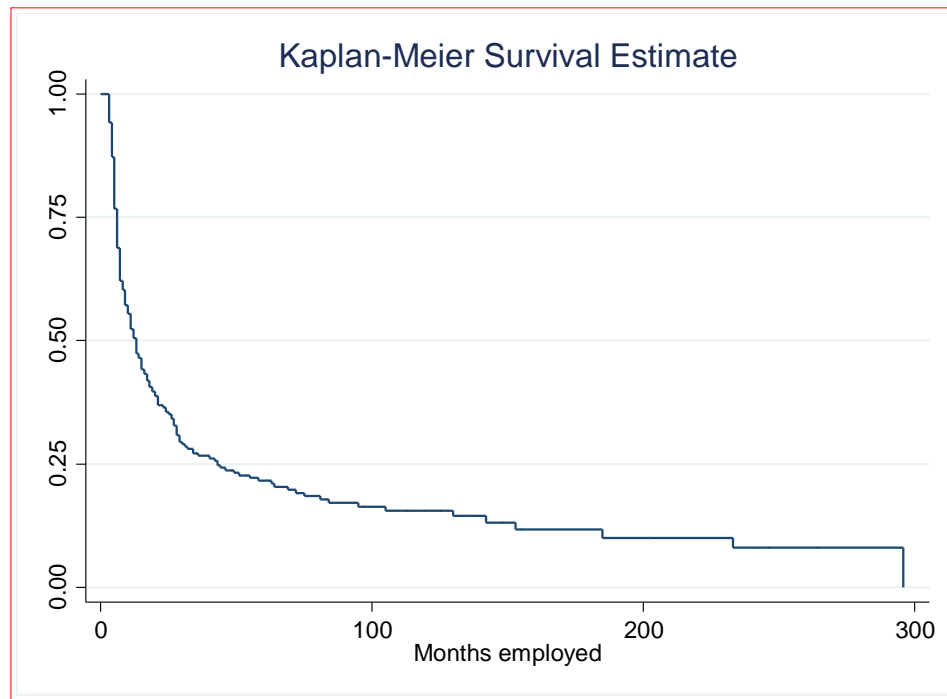


60 Month Stability Rate by Recruitment Year Cohort 2000 to 2011



Survival analysis

- Multiple appointments included – 21 specialists had >1 appointment
- Failure event defined as specialist leaving appointment
- Preliminary analysis - Kaplan-Meier method
- Median duration of specialist appointments was 13 months (IQR 6, 43)



Discussion

- Ethics approval took considerably longer than planned
 - Initial application + 2 amendments
- No readily available electronic data for specialist appointments
- Inconsistencies in available DHHS data
- AHPRA matching process was laborious
- AHPRA has missing data
- Locum identification/exclusion may not be appropriate in rural contexts
- Quantitative data does not tell the whole story
- Phase II qualitative data will provide context for quantitative results

Thank you

