Revisiting horizontal inequity of health care use in Australia

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Emerging Health Policy Research Conference
Menzies Centre for Health Policy, University of Sydney, Australia
27 July 2017
Background

- Health system performance measurement: 3 major domains
  - Effectiveness
  - Efficiency
  - Equity

- Twin principles of Medicare in Australia:
  - Equity in access to health care services: according to need
  - Equity in health care financing: payment according to ability

- Equity goal in health care distinguishes between:
  - Horizontal equity – equal treatment of equals
  - Vertical equity – appropriate unequal treatment of unequals
Objective and Hypothesis

Objectives:
1. Estimate the extent of horizontal inequity (HI) of health care use
2. Explain contributing factors of income-related HI
3. Examine the geographic (state) dimension of HI

Hypotheses:
✓ H1: No change in HI between 2012-2015
✓ H2: No variation in HI across states
Method

- Horizontal inequity (HI) approach: 3 steps

  - Identification: Regression analysis

  - Presentation and estimation: Concentration curve (CC) and Concentration index (CI) of need-adjusted use

  - Explanation: The decomposition of CI of actual use
    (a) Need-related inequality (acceptable or fair inequality)
    (b) Non-need related inequality (unfair inequality): Horizontal Inequity (HI)

      \[ HI = CI - (a) \]

      - Pro-rich inequity: HI > 0 or Pro-poor inequity: HI < 0
Data and variables

**Data**: National Health Survey (NHS) of 2011-2012 & 2014-15

**Health care use**: Any specialist visit in last 12 months

**Need indicators**: age-sex dummies, SAH, mental health, LTCs, disability

**Income**: equivalued household income in deciles

**Non-need indicators**: country of birth, private health insurance, concession card, employment, education, language at home, remoteness, state, SEIFA
Results

Distribution of health care use by income quintiles: 2011-12

Distribution of specialist visit by income quintiles

Distribution of health care use by income quintiles: 2014-15
Concentration curves

Concentration curves: 2011-12

- Actual use
- Need predicted use
- Need standardised use
- line of equality

cumulative share of specialist visit

cumulative share of individuals (poorest to richest)

Concentration curves: 2014-15

- Actual use
- Need predicted use
- Need standardised use
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cumulative share of specialist visit

cumulative share of individuals (poorest to richest)
Inequality and inequity

Inequality in healthcare use

- Line of equality
- 2011-12
- 2014-15

Inequity in healthcare use

- Line of equality
- 2011-12
- 2014-15
Variation in HI

2011-12

2014-15
Decomposition

2012

Contribution to HI

2015

Contribution to HI
Conclusion

☐ Summary
✓ No change in pro-rich HI of specialist use in recent years
✓ Some evidence of state level variation in HI
✓ Contribution of income to inequity has declined
✓ Contribution of area level socioeconomic status has increased
✓ Private health insurance and education explain a part of HI

☐ Policy implications
✓ Regular reporting of equity using concentration indices
✓ Investment in the development of valid measures of need
✓ Improve access to specialist care in low SES areas