

Long-term effects of informing women about overdiagnosis in breast screening

Jolyn Hersch,

Alexandra Barratt, Jesse Jansen, Kevin McGeechan, Gemma Jacklyn, Nehmat Houssami, Les Irwig, Haryana Dhillon, *and* Kirsten McCaffery

SYDNEY MEDICAL SCHOOL

Sydney School of Public Health



THE UNIVERSITY OF
SYDNEY

 @jolynhersch



BACKGROUND

- › Screening → early diagnosis + treatment
→ reduce breast cancer deaths

- › **Overdiagnosis / overdetetection**
 - Finding disease that would not present clinically in lifetime
 - Leads to **overtreatment**

- › What is the risk of overdetetection through regular screening?
 - Estimates vary
 - 30% of breast cancers diagnosed in regularly screened women, during the active screening period (*Jacklyn et al. 2016*)



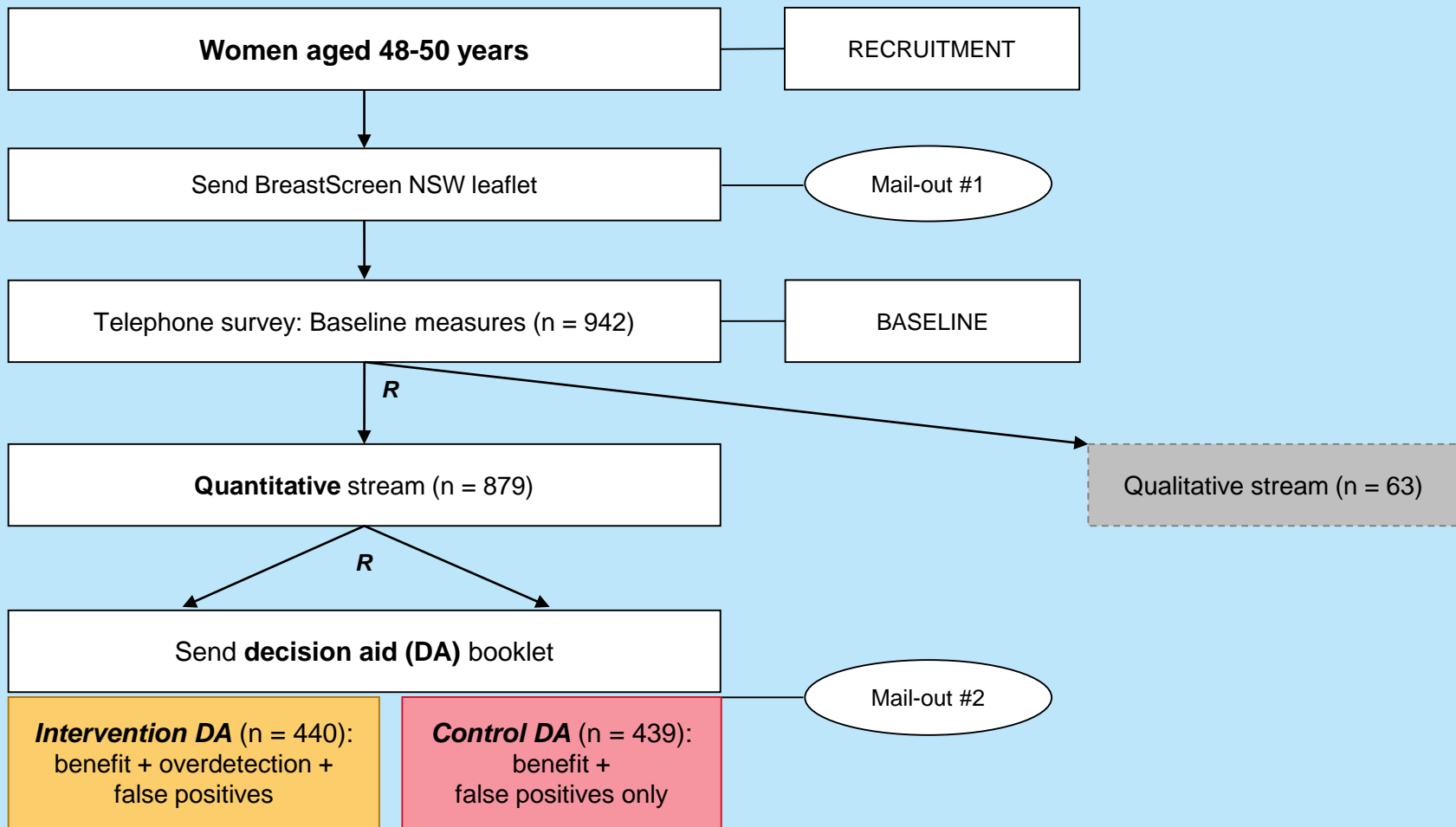
Image from guardian.co.uk

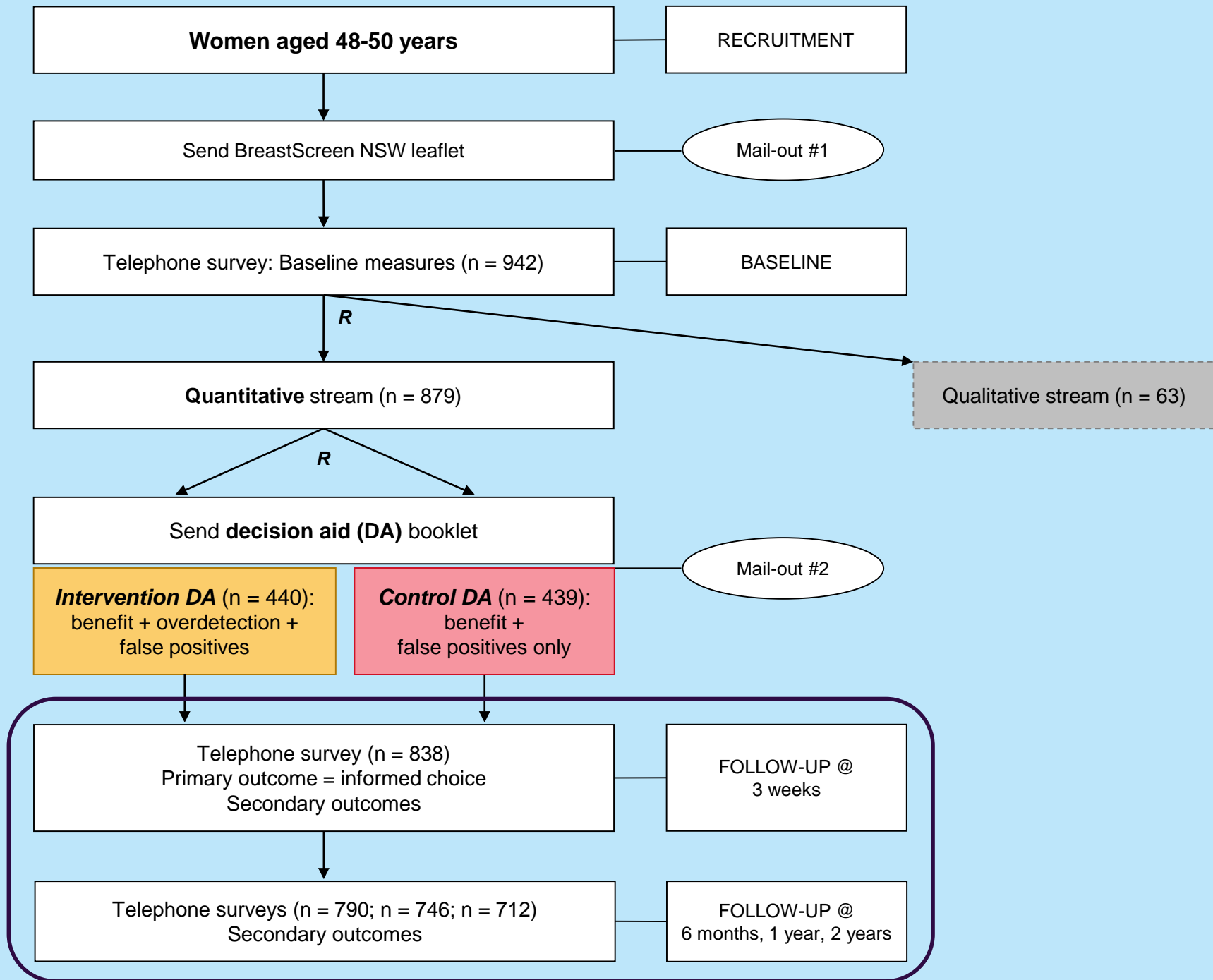
RATIONALE

- › Breast screening can lead to overdetetection / overdiagnosis and overtreatment of inconsequential breast cancers
 - Harm to physical and emotional health in short and long term



- › “Information should be made available in a transparent and objective way to women invited to screening so that they can make **informed decisions**” - *Independent UK Panel*
- › Need to investigate the effects of giving women information about overdetetection





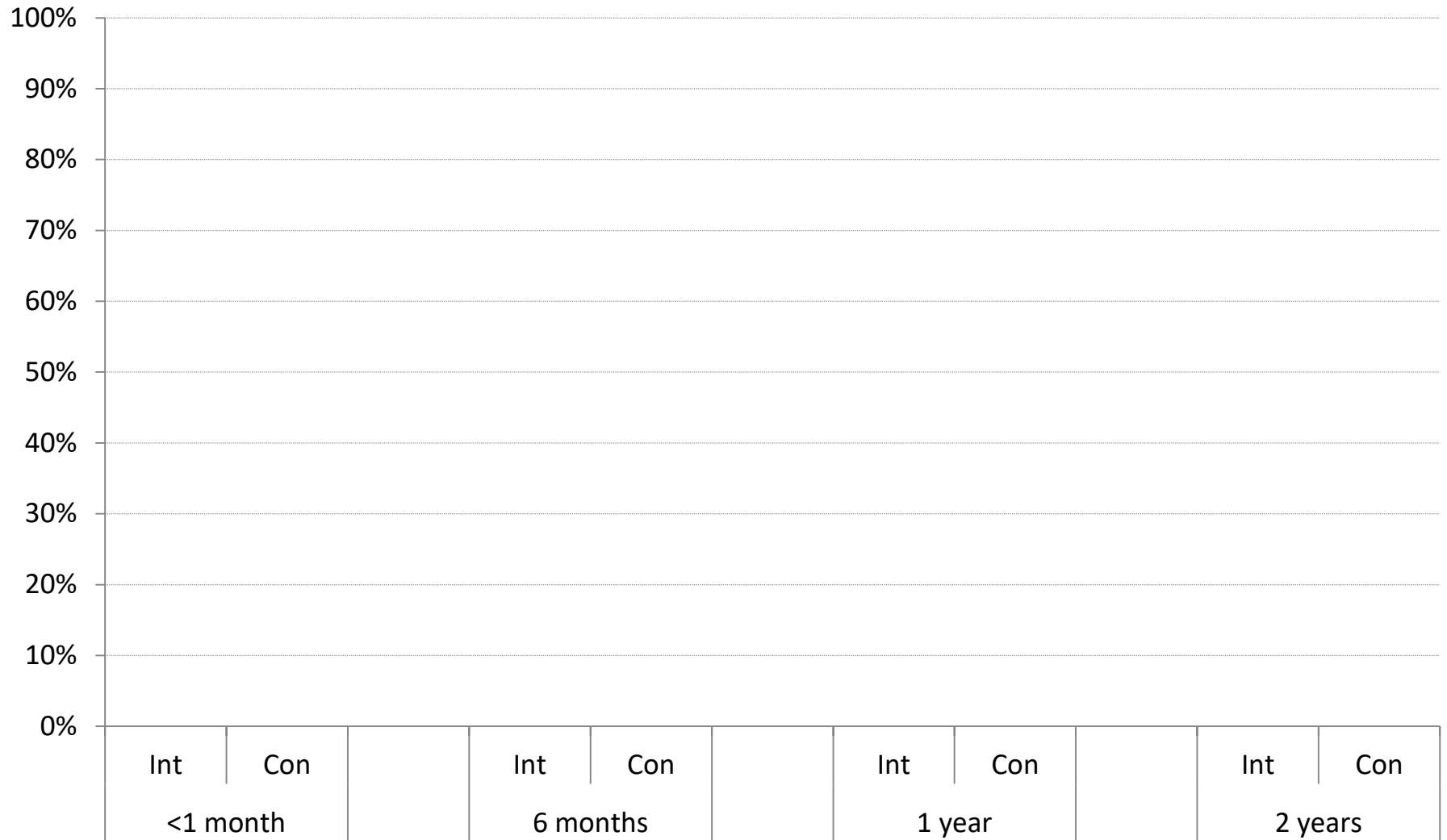
OUTCOMES AND ANALYSIS

- › Outcomes (binary):
 - › Conceptual knowledge: ‘adequate’ for benefit, FPs, ODx
 - › Attitudes to screening: ‘positive’ (≥ 24 on scale from 6 to 30)
 - › Screening intentions: intending to screen over next 2-3 years
 - › Screening uptake (cumulated throughout study)

- › To take into account repeated measurements over time:
 - › Logistic regression models with GEE
 - › Included effects of study group, time, and their interaction

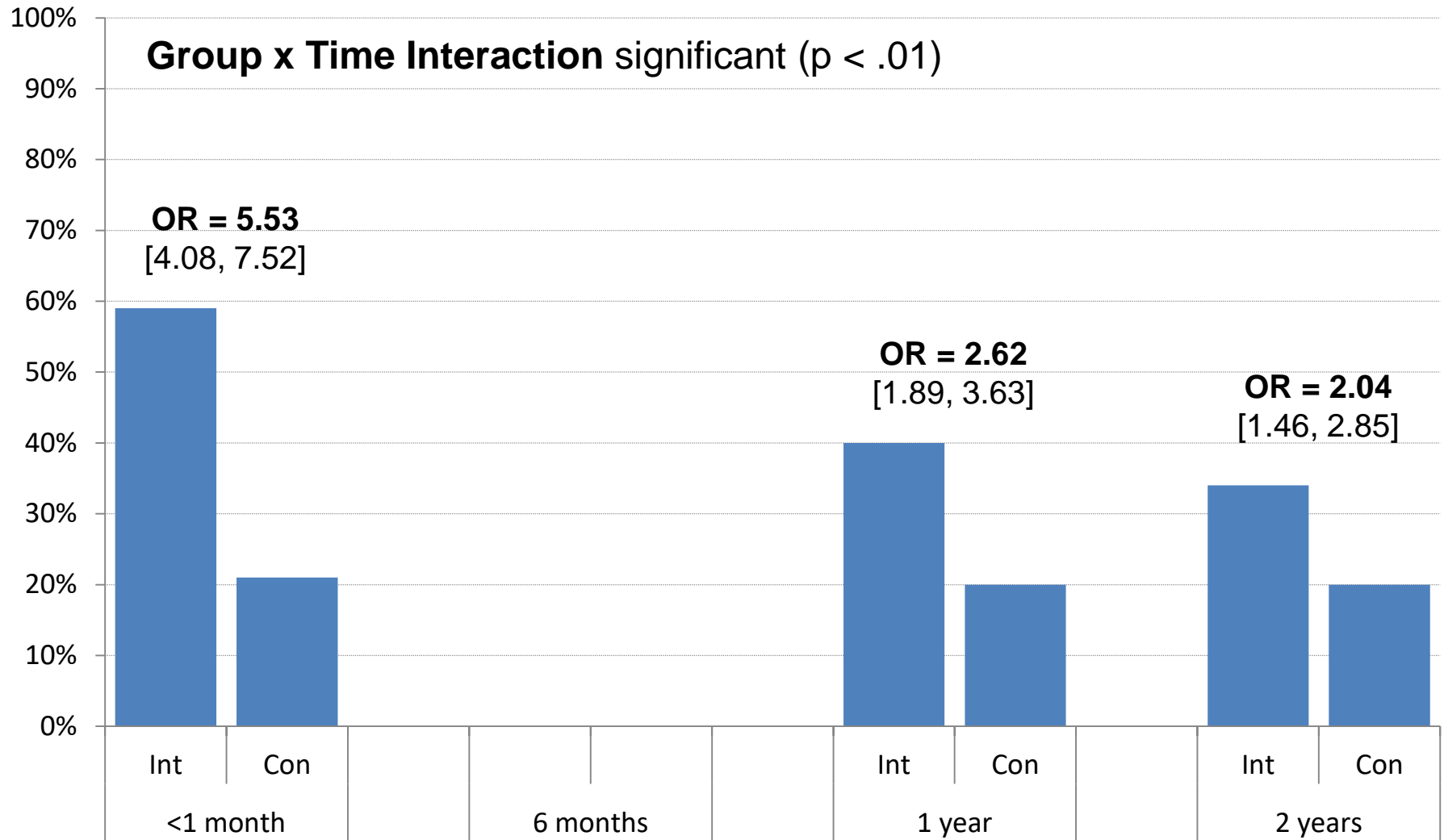


RESULTS



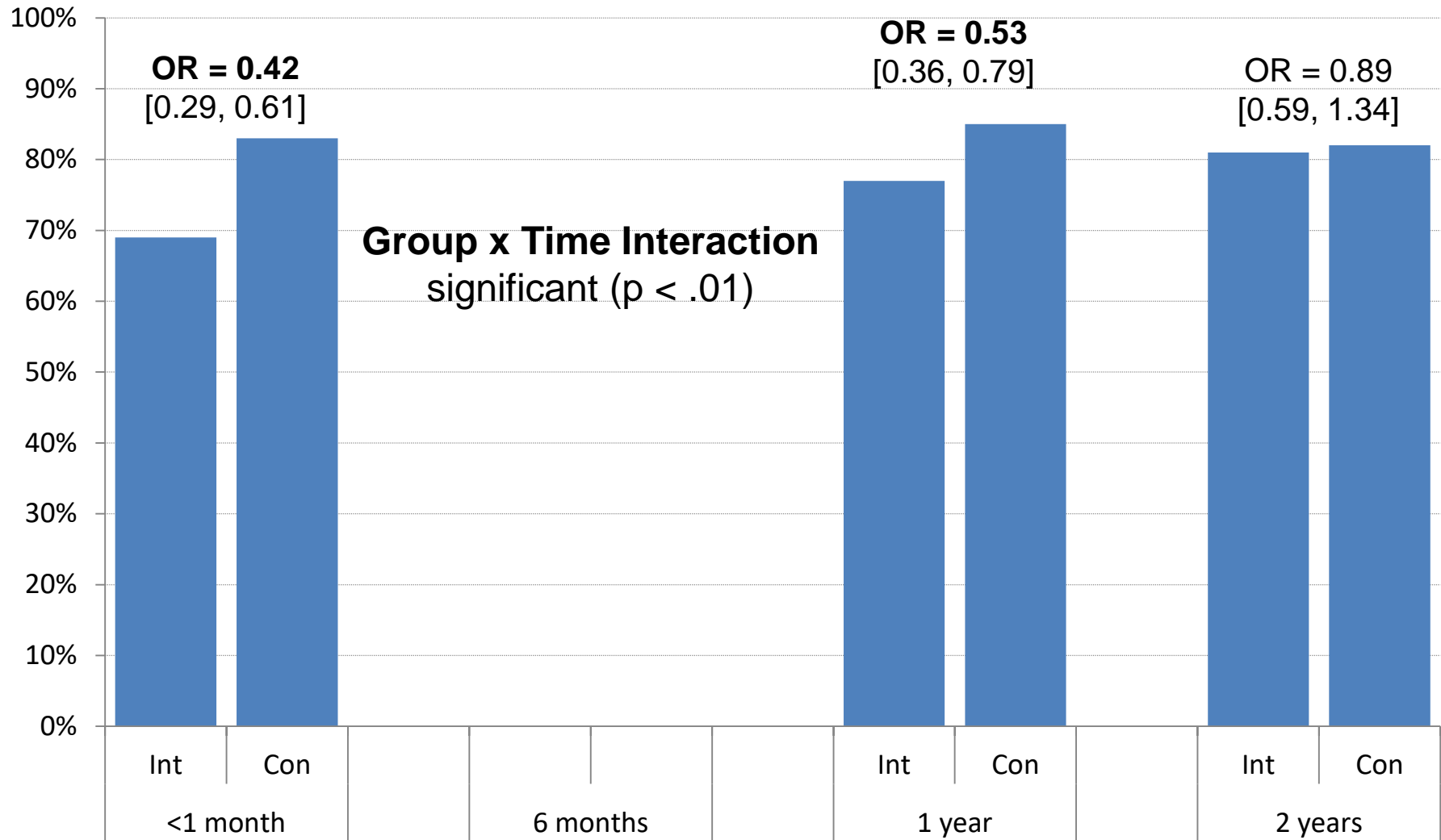


ADEQUATE KNOWLEDGE (CONCEPT)



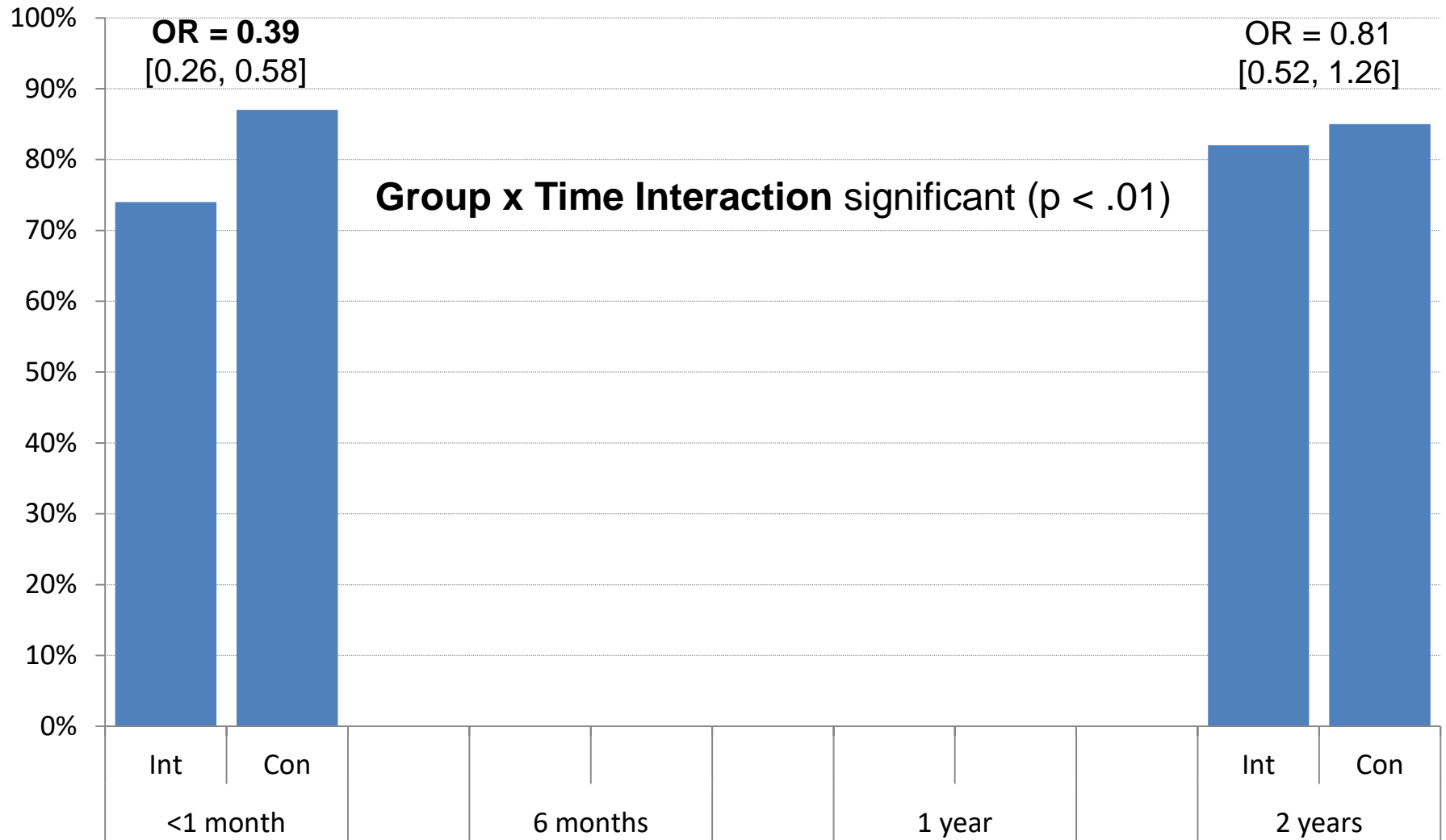


POSITIVE ATTITUDE TO SCREENING

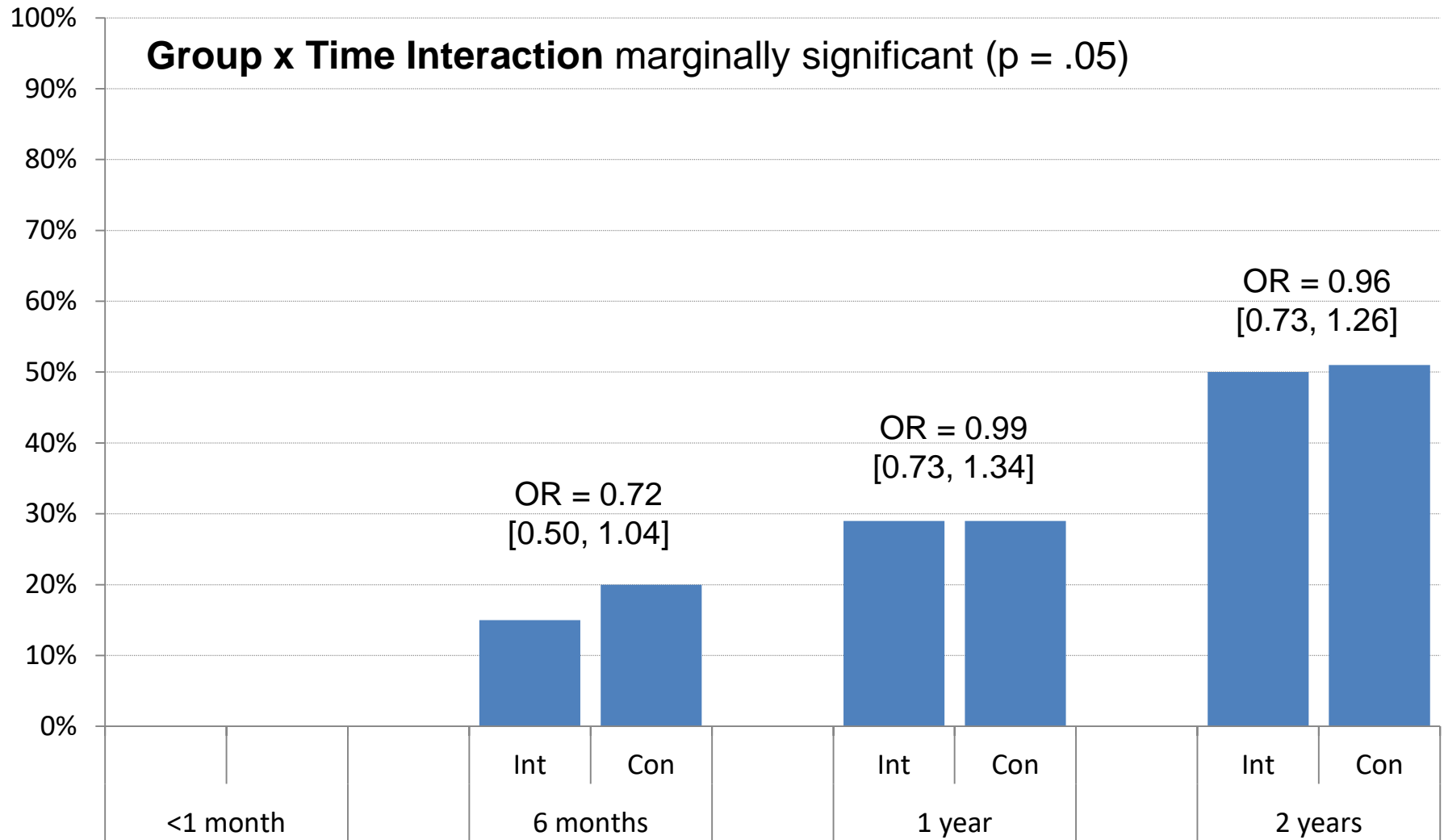




INTENDING TO HAVE SCREENING



MAMMOGRAPHY (since joining study)



SUMMARY AND CONCLUSIONS

- › A brief DA led to lasting (2-year) gains in screening knowledge
 - Few DA trials have shown impact over such a time frame
- › Though DA affected screening attitudes and intentions initially,
 - › Mammography rate over 2 years was similar across groups
 - › Effects on attitudes and future intentions dissipated over time
- › The DA was effective in helping women make a better informed decision whether to screen or not

ACKNOWLEDGEMENTS

- › Alexandra Barratt, Jesse Jansen, Kevin McGeechan, Gemma Jacklyn, Nehmat Houssami, Les Irwig, Haryana Dhillon, Kirsten McCaffery
- › National Health and Medical Research Council

Decision Aid and papers: <https://ses.library.usyd.edu.au/handle/2123/16636>