

# STRUCTURAL STIGMA AND SEXUAL ORIENTATION DISPARITIES IN HEALTHCARE USE

EVIDENCE FROM CENSUS-LINKED-ADMINISTRATIVE  
DATA

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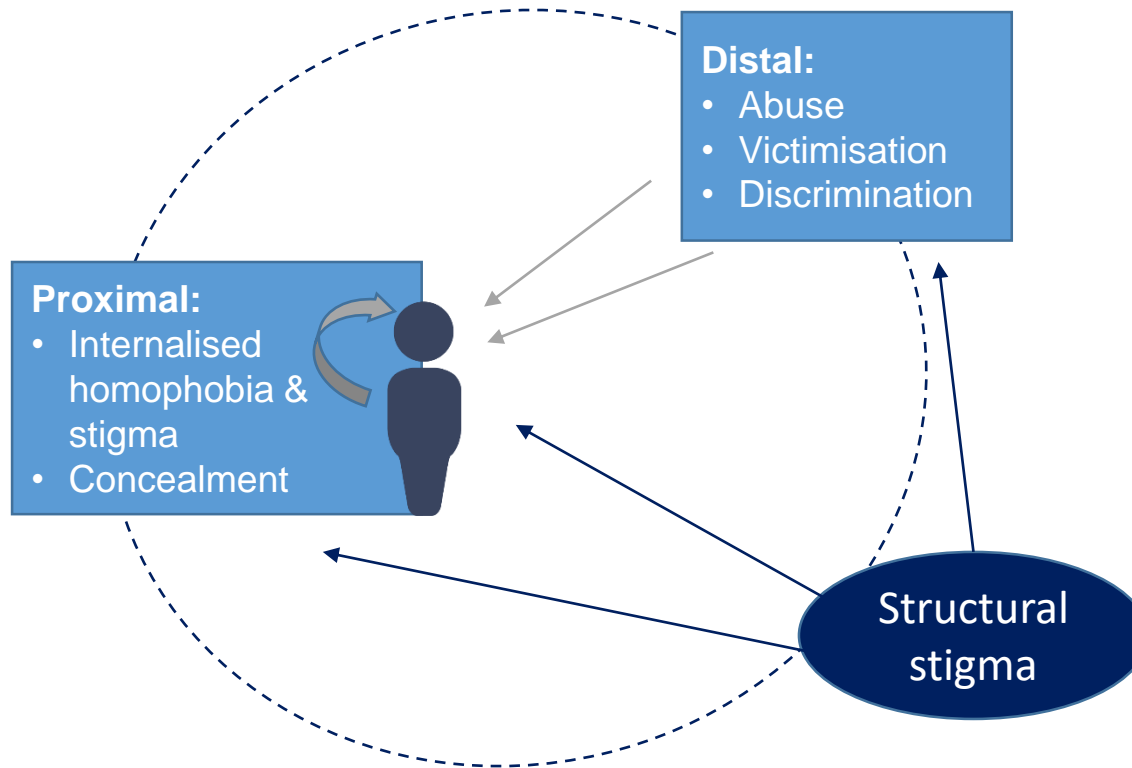


# BACKGROUND & MOTIVATION

- The sexual and gender diverse community have **worse health outcomes** than their heterosexual/cis counterparts:
  - Acute, chronic conditions & mental health (AOD, self harm, suicide)  
(Booker et al., 2017; Conron et al., 2010; Landers & Gilsanz, 2009; Sandfort et al., 2006)  
(Perales , 2016 (Soc. ind. Res); Perales & Todd (SS&M), 2018; Daraganova, 2017).
- Key contributor: **stress associated with structural stigma**
- May **contribute to these health inequalities** by inducing:
  - psychopathological stress responses
  - risky health behaviours (AOD) and
  - reduced healthcare seeking
- Numerous studies outlining the **negative health effects of structural stigma**
- **Limited population-level information** on how this stigma affects objective healthcare and medicine use

# MINORITY STRESS THEORY

- Leading conceptual framework explaining sexual minority health disparities
- Sexual minorities people experience **unique & chronic stress** because of negative social attitudes and prejudice



*Structural stigma contributes to health inequalities but what about healthcare use? → AIM*

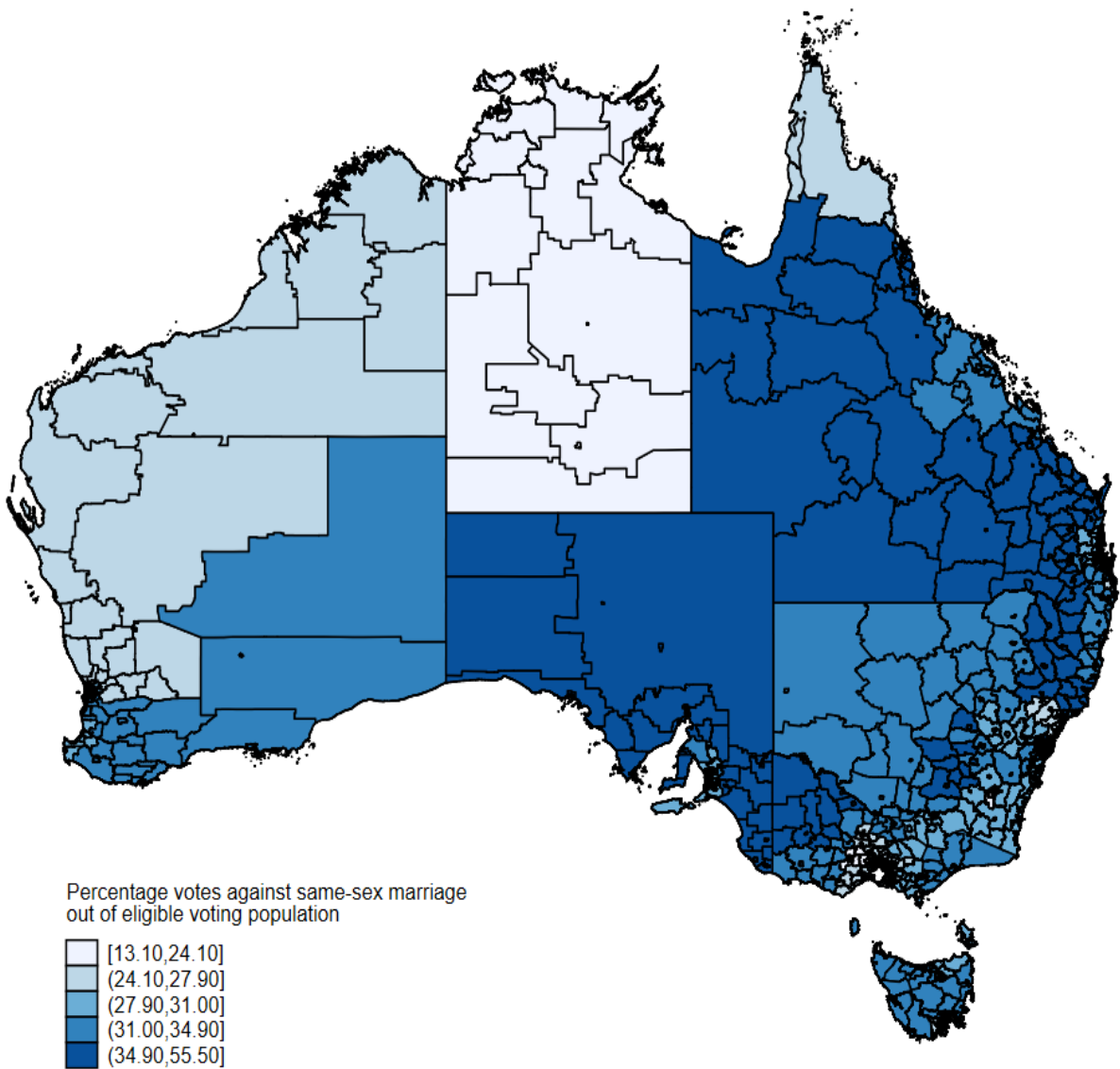
## STRUCTURAL STIGMA: MARRIAGE EQUALITY SURVEY

- Postal survey on same-sex marriage:
  - 12<sup>th</sup> September - 7<sup>th</sup> November 2017
- 80% of all eligible Australians participated in survey



**Results:** 61.6% thought the law to be changed to allow same-sex couples to marry (ABS, 2017)

# STRUCTURAL STIGMA: MARRIAGE EQUALITY SURVEY RESULTS BY SA2



# DATA:

## MULTI-AGENCY DATA INTEGRATION PROJECT, BASIC LONGITUDINAL EXTRACT 2011-2016 (2011-2016 COHORTS)

### 2016 Census linked to admin data 2011 – 2016

~75% of 2016 Australian Census population

#### Census info:

- Sociodemographic & household information → **in same-sex / heterosexual relationship**
- Location down to **SA2 level** (~10,000 per SA2)

#### Admin data (2011-2016):

- Tax, SSRI data
- Medicare data from
  - **Government subsidised medical services & prescription medicines**
  - *9 healthcare service subgroups, 14 medicine subgroups*
    - **GP**
    - **Nervous system (antidepressants)**
    - **Pathology services & anti-infectives (sexual health checks & HIV-related medication)**

# EMPIRICAL STRATEGY

- **Aim:** Extent structural stigma is associated with sexual orientation disparities in **healthcare and prescription medicine use**
- Mapping “votes against same-sex marriage” from the **2017 Marriage Equality Survey to admin data**

- **Regression model:** interact structural stigma with sexual orientation & gender

$$y_{irt} = \alpha + \beta_1 HF_i + \beta_2 SSF_i + \beta_3 SSM_i + \beta_4 (HF_i \times S_r) + \beta_5 (HM_i \times S_r) + \beta_6 (SSF_i \times S_r) + \beta_7 (SSM_i \times S_r) + \beta_l \widehat{IC}_i + \beta_k \widehat{IC}_{it} + v_t + \varepsilon_{ir} + u_r$$

Healthcare service  
OR  
Prescription  
medicine

Differences between indiv. het and  
same-sex relationships in average stigma .....

...then estimate whether these disparities  
change as regional % no votes increases

## Regional fixed effects (SA2 level)

- Unobservables specific to region

## Controls:

- age, income, labour force status
- year fixed effects

# MODEL ESTIMATION RESULTS

Average stigma

Same-sex vs.  
heterosexual



High stigma

Same-sex vs.  
heterosexual

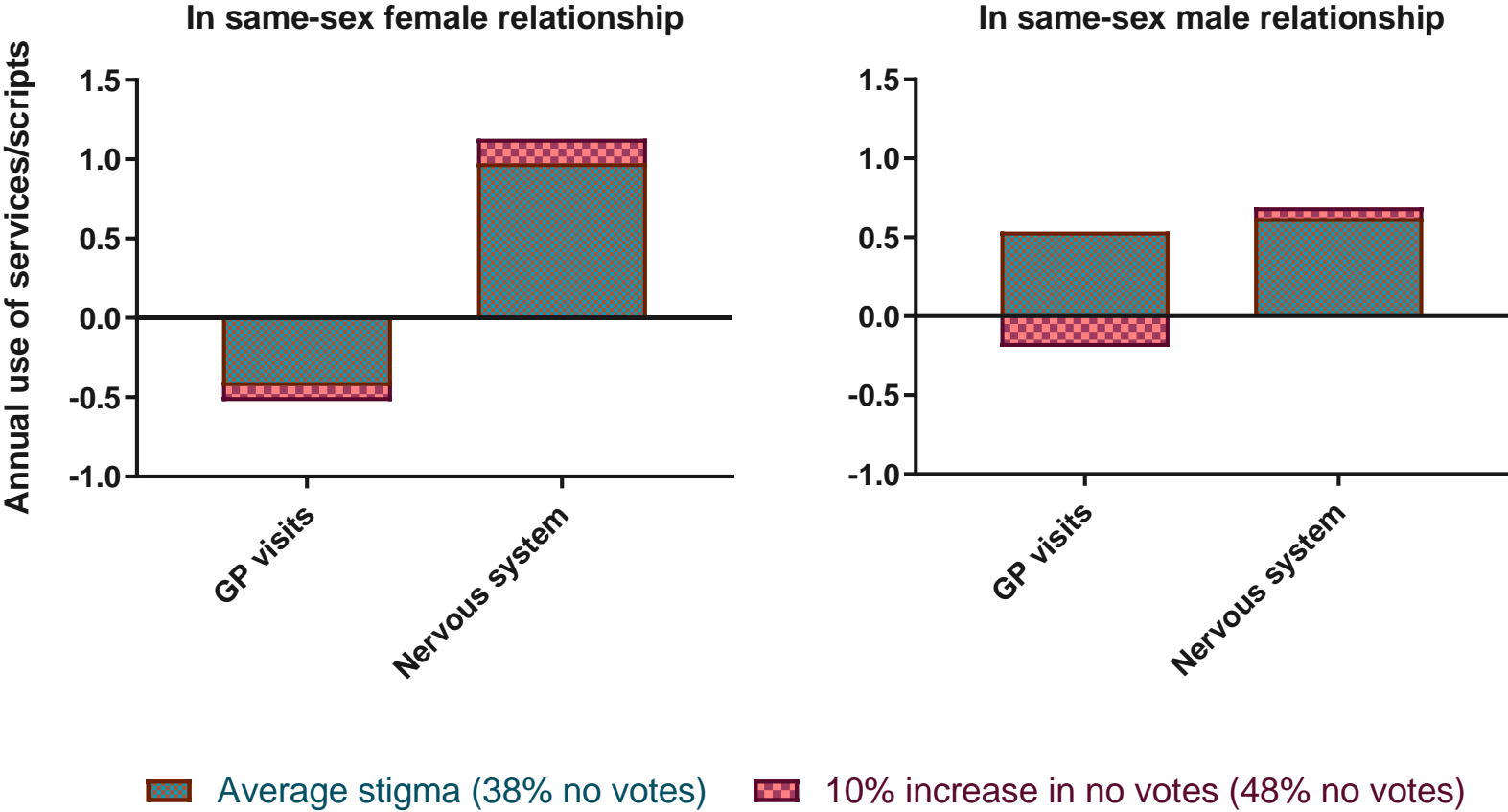
	Probability of visiting a GP
<i>In ‘average’ stigma region (38% no votes):</i>	
<b>Female in same-sex relationship (<math>\beta_2</math>)</b> (ref: Female in heterosexual relationship)	<b>-0.029<sup>***</sup></b> [-0.034;-0.025]
<b>Male in same-sex relationship (<math>\beta_3</math>)</b> (ref: Male in heterosexual relationship)	<b>0.031<sup>***</sup></b> [0.025;0.036]
<i>10% absolute increase in no votes:</i>	
<b>Female in same-sex relationship (<math>\beta_5</math>)</b> (ref: Female in heterosexual relationship)	<b>0.002</b> [-0.001;0.006]
<b>Male in same-sex relationship (<math>\beta_6</math>)</b> (ref: Male in heterosexual relationship)	<b>-0.016<sup>***</sup></b> [-0.020;-0.013]
<i>N</i>	32,956,488
<i>Mean of outcome</i>	0.803

**Controls:** age, labour force status, income, move 1 year ago / 5 years ago, education, regional and year fixed effects



# RESULTS: ANNUAL GP VISITS AND NERVOUS SYSTEM SCRIPTS

Difference in use compared to heterosexual counterparts



→ Full set of observable confounders plus region FE controlled for

## OTHER FINDINGS

- **Heterogeneity:**
  - low income, less years of education, less access to healthcare
- Men in SSR use less **pathology-related** items & **anti-infective** medication
  - HIV medication, services rel. sexual health checks
- Stigma & **worse health:**
  - Core activity limitations and DSP

# CONCLUSIONS

- LG individuals in more stigmatised regions in poorer health, use more **mental health related medications** but **use fewer primary health services**
- Men in SSR use less **sexual health related** services
- Suggest structural stigma may **impact mental health** of LG community and increased **discomfort in engaging with HCPs**
- Ongoing work to **reduce health & healthcare access disparities** in SMs
- Highlights need for interventions inclusive practices in primary care setting

# ACKNOWLEDGEMENTS

Australian Bureau of Statistics 2011-2016,  
Australian Census Longitudinal Dataset, (2011-2016).

Detailed Microdata, DataLab.

Findings based on the use of ABS Microdata.



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