The effects of a primary care clinic closure on patients:
A prospective observational study

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Statement of originality

The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to the final version of my thesis being made available worldwide when deposited in the University’s Digital Repository, subject to the provisions of the Copyright Act 1968.

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIHW</td>
<td>Australian Institute Health and Welfare</td>
</tr>
<tr>
<td>ALSWH</td>
<td>Australian Longitudinal Study of Women’s Health</td>
</tr>
<tr>
<td>ATSI</td>
<td>Aboriginal people or Torres Strait Islanders</td>
</tr>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
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<tr>
<td>BEACH</td>
<td>Bettering the Evaluation and Care of Health</td>
</tr>
<tr>
<td>CASP</td>
<td>Critical Appraisal Skills Program</td>
</tr>
<tr>
<td>CCDGP</td>
<td>Central Coast Division of General Practice</td>
</tr>
<tr>
<td>CD</td>
<td>Collection District</td>
</tr>
<tr>
<td>CI</td>
<td>Confidence Interval</td>
</tr>
<tr>
<td>CINAHL</td>
<td>Cumulative Index of Nursing and Allied Health Literature</td>
</tr>
<tr>
<td>DWS</td>
<td>District of Workforce Shortage</td>
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<tr>
<td>ED</td>
<td>Emergency Department</td>
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<tr>
<td>EMBASE</td>
<td>Excerpta Medica Database</td>
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<tr>
<td>FTE</td>
<td>Full-time equivalent</td>
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<tr>
<td>GHQ12</td>
<td>General Health Questionnaire Short-form 12</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
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<tr>
<td>HbA1c</td>
<td>Hemoglobin A1c</td>
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<tr>
<td>ICPC</td>
<td>International Classification of Primary Care</td>
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<tr>
<td>LGA</td>
<td>Local Government Area</td>
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<tr>
<td>LTH</td>
<td>Links to Health</td>
</tr>
<tr>
<td>MeSH</td>
<td>Medical Subject Headings</td>
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<tr>
<td>MS</td>
<td>Microsoft</td>
</tr>
<tr>
<td>NSCCAHS</td>
<td>North Sydney Central Coast Area Health Service</td>
</tr>
<tr>
<td>NSCCLHD</td>
<td>North Sydney Central Coast Local Health District</td>
</tr>
<tr>
<td>NSW</td>
<td>New South Wales</td>
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<tr>
<td>NWPCN</td>
<td>North Wyong Primary Health Care Network</td>
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<tr>
<td>OECD</td>
<td>Organisation of Economic Cooperation and Development</td>
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<tr>
<td>OR</td>
<td>Odds ratio</td>
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<tr>
<td>PAP</td>
<td>Pap Smear</td>
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<tr>
<td>PCP</td>
<td>Primary Care Physician</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>PHN</td>
<td>Primary Health Network</td>
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<tr>
<td>PRISMA</td>
<td>Preferred Reporting Items for Systematic Meta-Analyses</td>
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<tr>
<td>QOL</td>
<td>Quality of Life</td>
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<tr>
<td>SAS</td>
<td>Statistical Analysis System</td>
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<tr>
<td>SEIFA</td>
<td>Socio Economic Indices for Advantage</td>
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<tr>
<td>SD</td>
<td>Standard Deviation</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>USA</td>
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Synopsis

Objective
To examine the effect of a primary care clinic closure on patients’ access to health care and on patient physical and mental health.

Methods
A prospective cohort study. Within one month of the closure of a primary care clinic in the Central Coast region, NSW, Australia, all clinic patients aged 16 years or older were invited to participate in the study via completion of baseline and 6-month follow-up surveys which included items on demographics, medical history, access to health services, physical and mental health and perceived effects of the clinic closure. Univariate analyses were conducted via paired t-tests for continuous variables and chi squared tests for categorical variables. Multivariate analysis was conducted using multiple logistic and linear regression models.

Results
The baseline survey was completed by 214 participants, with 150 participants completing the follow-up survey. The majority of participants (79%) had found a new regular GP within 6 months of the clinic closure. On multivariate analysis, having not found a new regular GP was associated with reporting reduced use of primary care services and problems with access to primary care services in the six months following the closure. Participants without a regular GP reported the clinic closure having greater negative impact on their access to health services and their physical and emotional health.

Discussion
Patients without a usual source of care have reduced access to health services with associated delays in seeking health care, which could potentially have serious consequences. Patients who remain unattached to a PCP have lower self-rated general health and perceive that the clinic closure had a greater impact on their physical and emotional health.

Conclusion
The clinic closure had significant impacts on a sub-set of patients who were not able to locate a new regular GP in the following six months.
Implications
There is scope for a systems approach to facilitate patient transition between primary care practices.