Utilisation of Allied Health Services

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Background

- Emphasis on multidisciplinary care for people with chronic disease
- Improve access to allied health services
  - Out-of-pocket costs and system barriers
- Medicare rebates for allied health services
  - Discipline-specific evaluations
- Allied health services can be viewed as “discretionary”\(^1,2\)

Theoretical approach

- Interest in use of allied health services and influence of health insurance
- Use of health services linked to combination of factors
- Social, demographic, structural (predisposing), economic and other situational (enabling) and health–related (need) factors

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Research Aims

- Examine how key variables interact with use of allied health services among people with chronic disease

- Examine how health insurance coverage might influence use of allied health services
Methodology

1. Systematic review
   ◦ Meta-analysis and critical, narrative synthesis

2. Survey data analysis
   ◦ National Health Survey (NHS) and Australian Longitudinal Study of Women’s Health data
   ◦ Some data restrictions due to changes in question wording over time/between cohorts
Systematic review*

- Health insurance and use of allied health services
- Factors influencing use amongst people with chronic disease independently of health insurance
- How health insurance influences use
- Develop a conceptual model

*This component of the APHCRI project was led by A/Professor Terry Haines, Monash University
Figure 6. Flow chart of studies and their selection for the review

158 records identified through database searching

12 records identified through additional sources

129 records after duplicates removed

129 records screened

65 records excluded

64 full-text articles assessed for eligibility

31 full-text articles excluded

Reasons:
- Participants (all one level of insurance) n = 8
- Effect of insurance on AH use unable to be elicited n = 7
- Unable to extract meaningful data n = 5
- Did not report on insurance n = 3
- Participants (presence of an excluded chronic disease) n = 2
- Duplicate n = 2
- No allied health information n = 1
- Unable to contact author to clarify data n = 1
- Unable to source n = 1
- Inappropriate study design n = 1

33 articles included in the critical, narrative analysis

7 articles included in the quantitative synthesis

Key findings systematic review

- Social and demographic (predisposing)
  - Age and use inconsistent
  - Ethnicity and use varied (clinical population, type of service)
  - Education and use varied (type of service)

- Economic and situational (enabling)
  - Income and use inconsistent

- Health–related (need for service)
  - Comorbidity and severity
  - Physician visits linked to more frequent use
Key findings systematic review

- Features of the insurance product
  - Administrative (gate-keeper role, containment)
  - Eligibility, limits, quantity
  - Reimbursement and out-of-pocket costs
- ‘gate-keeper’ factors
  - Knowledge, perceived benefits
- Provider factors
  - Willingness to provide services
- Factors related to the patient
  - Knowledge, perceived need, cost and benefit
Survey data analysis

- NHS 2001 and 2007–08
  - Key outcome: ‘visits/use’ allied health
    - Previous 12 months
  - Descriptive analyses to explore patterning of key demographic, health status, health care variables
  - Logistic regression models to examine predictors of use of allied health service
Key finding #1

- Women more likely to use AHPs than men
- The size of the gender gap is greater post-retirement age
Age and Sex

Allied health visits 2001

Allied health visits 2007–8
Key finding #2

- Speaking language other than English at home less likely to use AHPs

<table>
<thead>
<tr>
<th>English language proficiency</th>
<th>2001</th>
<th>2007–8</th>
</tr>
</thead>
<tbody>
<tr>
<td>English only</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Well/very well</td>
<td>0.94</td>
<td>0.45***</td>
</tr>
<tr>
<td>Not well/not at all</td>
<td>0.97</td>
<td>0.49***</td>
</tr>
</tbody>
</table>
Key finding #3

- Ancillary insurance has a strong positive effect on use
- Interesting three way relationship between ancillary insurance, general health and allied health service use
Key finding #3

Allied health usage – 2007/8

<table>
<thead>
<tr>
<th>Self-reported health</th>
<th>Percentage visited allied health professional (previous year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>![Graph showing percentage for Excellent health]</td>
</tr>
<tr>
<td>Very good</td>
<td>![Graph showing percentage for Very good health]</td>
</tr>
<tr>
<td>Good</td>
<td>![Graph showing percentage for Good health]</td>
</tr>
<tr>
<td>Fair</td>
<td>![Graph showing percentage for Fair health]</td>
</tr>
<tr>
<td>Poor</td>
<td>![Graph showing percentage for Poor health]</td>
</tr>
</tbody>
</table>

- No ancillary insurance
- Has ancillary insurance
Key finding #4

Visiting a GP is associated with visiting an AHP, independently of health

<table>
<thead>
<tr>
<th>GP contact</th>
<th>2001</th>
<th>2007–8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited GP past fortnight</td>
<td>1.74***</td>
<td>–</td>
</tr>
<tr>
<td>&lt; Annual checkups</td>
<td>–</td>
<td>1.23**</td>
</tr>
<tr>
<td>6 monthly/annual checkups</td>
<td>–</td>
<td>1.29***</td>
</tr>
<tr>
<td>Monthly/3 Monthly checkups</td>
<td>–</td>
<td>1.61***</td>
</tr>
</tbody>
</table>
Key finding #5

- Musculoskeletal conditions are the most consistently associated with AHP use.
- However, diabetes has the largest effect in the 2007–8 analysis.
<table>
<thead>
<tr>
<th>Chronic conditions</th>
<th>2001</th>
<th>2007–8</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Respiratory</em></td>
<td>1.05</td>
<td>1.12</td>
</tr>
<tr>
<td><em>Other Diabetes</em></td>
<td>1.51</td>
<td>5.26***</td>
</tr>
<tr>
<td><em>Diabetes Type 2</em></td>
<td>1.24</td>
<td>3.78***</td>
</tr>
<tr>
<td><em>Arthritis and soft tissue disorders</em></td>
<td>1.46***</td>
<td>1.44***</td>
</tr>
<tr>
<td><em>Osteoporosis</em></td>
<td>1.15</td>
<td>1.36***</td>
</tr>
<tr>
<td><em>Dorsopathies and other musculoskeletal</em></td>
<td>2.68***</td>
<td>2.24***</td>
</tr>
<tr>
<td><em>Heart and circulatory</em></td>
<td>0.93</td>
<td>1.05</td>
</tr>
</tbody>
</table>
Policy message:

- High and low users of allied health services
  - Linked to need?
  - Over-use?
  - Financial hardship?

- Use by men and CALD populations
  - What is clinically significant?

- Targeted research with different population groups
Policy message:

- Importance of health professional as ‘agent’
- Potential disparities where there is poor access to GPs
- Balance discretion and guidance
- Improving evidence base and communication about benefits

Bywood et al. 2011 PHCRIS Policy Issue Review
Ancillary insurance linked to AHP use
  ◦ Use increases with both poorer health and uptake of insurance
  ◦ People in poor health with/without ancillary are high users

Extent of financial hardship – publicly v. privately funded

Complexity surrounding insurance product
Possible but unknown influence of policy environment

Diabetes suggest potential of CDM policy
- High users podiatry and dietitian services in NHS 2007–08 data
- Increased uptake CDM items and podiatry services since 2005\(^5\)

Unknown mix and shifts between public/private\(^1\)

\(^5\)Cant & Foster 2011 *Aust Health Review*; \(^1\)Foster et al (2009) *Aust J Primary Health*
Policy message

- Use of allied health services is conceptually complex
- Potential multiple factors of influence and other drivers (e.g. patient preference)

- Is it equitable use?
  - Need, severity, timing, affordability
- Is it effective and cost-effective use?
  - Limited evidence base
Policy message

- Other contextual factors impacting use
  - Programs for specific groups
  - Distribution of services, inc. public and private
  - Market forces

- Quality longitudinal data is important

- Limitations of NHS data and systematic review
Research team: Michele Haynes, Martin O’Flaherty, Geoff Mitchell (UQ), Elizabeth Skinner, Terry Haines (Monash)

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