Healthdirect’s After Hours GP helpline – a survey of patient satisfaction with the service and compliance with advice

Ling Li¹, Andrew Georgiou¹, Juan Xiong¹, Mary Byrne², Maureen Robinson², Johanna I Westbrook¹

¹ Centre for Health Systems and Safety Research, Australian Institute of Health Innovation, Macquarie University
² Healthdirect Australia
Centre for Health Systems and Safety Research

- Medication Safety and e-Health
- Communication and Work Innovation
- Human Factors & eHealth
- Pathology and Imaging Informatics
- Safety & Integration of Aged and Community Care Services
- Primary Care Safety and eHealth
Telephone Triage and Advice Services (TTAS) involve people with a health problem receiving assessment and advice over the telephone.

Most common TTAS services are either nurse- or physician-led.

In many countries these services have become an important part of delivering out-of-hours care e.g., Sweden, Denmark, Canada, United Kingdom and the US.
Healthdirect Australia

- Access to health advice and information using telecommunications and online technologies
- After hours GP helpline (AHGP)
  - Nurse-provided telephone triage and advice service
- Patient compliance with after hours GP advice an indicator of impact of services on health service utilisation and outcomes
  - Previous research has reported a 60-75% compliance rate with nurse triage telephone helplines
Aim

To assess patients’ overall satisfaction and compliance with advice provided by the After Hours General Practice service and to identify potential factors associated with advice compliance.
Methods

• Regular Computer-assisted Telephone Interview (CATI) surveys from Feb – Sept 2013
• 2 types of compliance data:
  • Self-reported compliance
  • Matching of patient reported actions with recommended advice as documented by GPs in the Healthdirect database
• Satisfaction rate calculated as proportion of AGPH patients/callers who reported being satisfied or very satisfied with service
• Compliance rate calculated as proportion of patients whose reported actions were fully or partly compliant with recommended advice recorded by GPs
## Results

### PATIENT AND CALL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>No. of calls (%)</th>
<th>Percentage of patients followed recommended advice*(n)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calling-for</td>
<td>Self</td>
<td>1250 (50.3)</td>
<td>85.8 (1072)</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1236 (49.7)</td>
<td>87.8 (1085)</td>
<td></td>
</tr>
<tr>
<td>Age group</td>
<td>15-29 years</td>
<td>670 (27.0)</td>
<td>86.0 (576)</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>30-59 years</td>
<td>1487 (59.8)</td>
<td>87.1 (1295)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>60+ years</td>
<td>329 (13.2)</td>
<td>86.9 (286)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>2018 (81.2)</td>
<td>86.8 (1752)</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>464 (18.7)</td>
<td>86.4 (401)</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Metropolitan</td>
<td>2032 (81.7)</td>
<td>87.4 (1776)</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>450 (18.1)</td>
<td>83.8 (377)</td>
<td></td>
</tr>
<tr>
<td>Estimated severity</td>
<td>Did not know what to do</td>
<td>435 (17.5)</td>
<td>87.1 (379)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>Over-estimated</td>
<td>658 (26.5)</td>
<td>84.5 (556)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Under-estimated</td>
<td>193 (7.8)</td>
<td>76.2 (147)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accurately estimated</td>
<td>1184 (47.6)</td>
<td>89.7 (1062)</td>
<td></td>
</tr>
<tr>
<td>AGPH advice</td>
<td>ED or see GP immediately</td>
<td>851 (34.2)</td>
<td>74.4 (633)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>See GP/AH during business hour</td>
<td>1429 (57.5)</td>
<td>93.5 (1336)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-care only</td>
<td>206 (8.3)</td>
<td>91.3 (188)</td>
<td></td>
</tr>
<tr>
<td>Satisfaction level</td>
<td>Dissatisfied/very dissatisfied</td>
<td>16 (0.6)</td>
<td>56.3 (9)</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td></td>
<td>Neural</td>
<td>55 (2.2)</td>
<td>69.1 (38)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfied/very satisfied</td>
<td>2415 (97.1)</td>
<td>87.4 (2110)</td>
<td></td>
</tr>
</tbody>
</table>

* Includes full and partial compliance with advice received
Results
SATISFACTION AND COMPLIANCE RATES OVER TIME
Results
MEASURED COMPLIANCE AND CALL CHARACTERISTICS

• Compliance did not vary greatly (range from 84% - 88%) across age, gender and location
• Level of compliance was similar between calls being made by others on behalf of patients (87.8%) and calls made by the patient themselves (85.8%, p=0.1)
• Compliance was lowest in patients who under-estimated the severity of the condition (76.2%), and highest in patients who accurately estimated the severity of the condition (89.7%)
Results
MEASURED COMPLIANCE AND CALL CHARACTERISTICS

• The highest level of compliance was achieved among patients who were advised to see a GP/AH professional during business hours (93.5%), followed by those advised to self-care (91.3%).
• The lowest compliance was among those who were advised to visit an ED or immediately visit a GP (74.4%)
• Compliance for those patients who reported being satisfied or very satisfied was 87.4% while it was 69.1% and 56.3% respectively for those who felt neutral or dissatisfied with the service
Implications

• Satisfaction with the AHGP service high overall (97.1%)
• Self-reported compliance with AHGP advice was 94.0%, but actions only consistent with documented GP advice in 86.8% of clients
Implications

• Patients/callers who were satisfied or very satisfied with the telephone consultant services were more likely to follow the GP’s advice; increasing satisfaction levels with the service may improve patient compliance
• Compliance was greatest among patients who accurately estimated the severity of their condition
Limitations

- Challenges in applying and interpreting the recommended advice
- Clinical record system only allowed for recording of one level of advice; GPs gave a spectrum of advice to cover any changes in health conditions
Conclusions

- Patients/callers were generally satisfied with the AHGP helpline and most patients complied with recommended advice.
- Non-compliance may be ascribable to resolution of health concern/s.
- Compliance with the recommended advice varied depending on overall satisfaction with the service, type of AHGP advice, and the estimated severity of the condition/s.
Thank You

andrew.georgiou@mq.edu.au

Ling Li

ling.li@mq.edu.au