Irish GP and patient attitudes to the doctor’s use of internet and other information sources during the consultation.

RACGP Conference
Melbourne
September 2015

C. E. McCarthy¹, N. J. Breen²,³;
¹Wanneroo GP Superclinic, Wanneroo, Western Australia.
²Greystones Harbour Family Practice, Co. Wicklow, Ireland.
³UCD School of Medicine and Medical Science, Dublin, Ireland.
“She got another Doctor to have a look too, just to confirm her diagnosis. I found that very reassuring. She’s great”. (Relative, age sixty-something)

“Before he wrote the prescription he had to look it up in some handbook thing..... ....I wouldn’t mind that, but it said 1986 on it...” (friend, age 31)

“I’ve decided to change Doctor; the last one I went to had to, like, look stuff up the internet!” (patient, age 26)

“An information-intensive specialty without patient limitations of age, gender or medical presentation” ¹

General Practice/Family Medicine

¹: Bennett et al. Family physicians’ information seeking behaviors: a survey comparison with other specialties. BMC Med Informatics and Decision Making 2005;5:9
General Practice/Family Medicine:

- Rapidly Expanding Medical Literature


?What are the Clinical features of PBC?

?What Rx for post-herpetic neuralgia has the best evidence?

?Which Glititin is safest in renal failure?
Traditional Information Sources.


Online Information Sources.

- Hoogendam A, Stalenhoef AF, Robbé PF, Overbeke AJ. Answers to questions posed during daily patient care are more likely to be answered using UpToDate than PubMed. J Med Internet Res. 2008 Oct 3;10(4)


What will the Patient think?
Aim

*Ethical Approval from ICGP Research Ethics Committee.

Methods.

GP Questionnaire.
- 25 items.
- Random Sample from ICGP Database.
- N=300 sent (11% of national database total.)
- Freepost envelope.
- Reminder after 2 weeks.
- 5 week cut off.
- Analyzed with SPSS.

Patient Questionnaire
- 19 Items
- 3 Practices; Urban, Rural, Mixed Urban/Rural.
- N=330 (110 x 3)
- Adults >18 years.
- Collected when all given out/5 weeks elapsed.
- Analyzed with SPSS.
Results

176 Returned Questionnaires.

Response rate = 59%.

GP Data.
GP Demographics

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Number Of Responses</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-29</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>30-39</td>
<td>54</td>
<td>31%</td>
</tr>
<tr>
<td>40-49</td>
<td>36</td>
<td>20%</td>
</tr>
<tr>
<td>50-59</td>
<td>70</td>
<td>40%</td>
</tr>
<tr>
<td>60+</td>
<td>15</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>176</td>
<td>100%</td>
</tr>
</tbody>
</table>

Practice Location: 40% Urban, 18% Rural, 42% Mixed

Internet Access in consulting room.

- 90%*Similar to BEACH data 2014, and to Sim et al., 2008.
GP Frequency consulting information sources

Frequent Users (≥weekly).

- Textbook 20%
- Formulary 86%
- GP Colleague 29%
- Med. Internet Site 53%
- Google/Wikipedia 27%

G.P Comfort and Perceptions.

- Comfortable/Very Comfortable
  - Textbook 70%
  - Formulary 96%
  - GP Colleague 88%
  - Med. Net Site 75%
  - Google/Wikipedia 43%
- Positive Effect on Pt Confidence
  - Textbook 37%
  - Formulary 52%
  - GP Colleague 58%
  - Med. Net Site 53%
  - Google/Wikipedia 26%
- No change in Pt Confidence
  - Textbook 34%
  - Formulary 43%
  - GP Colleague 34%
  - Med. Net Site 32%
  - Google/Wikipedia 29%
- Negative Effect on Pt Confidence
  - Textbook 29%
  - Formulary 5%
  - GP Colleague 8%
  - Med. Net Site 15%
  - Google/Wikipedia 45%

GPs Perception of Effect on Patient Confidence

- Positive Affect on Pt Confidence
- No Change
- Negative Effect on Pt Confidence
• Inform Patient when using an information source?  
  **86%**

• Has asked Pt to leave consulting room for the purpose of consulting an information source?  
  (In the last year)  
  **28%**

- Age Groups.
- Rural Vs. Urban.

**Differences between GP groups.**
So What Do The Patients Think?

- **245** Returned Questionnaires.
- Response rate = **74%**

**Patient Data.**
Patient Gender and Age.

Patient Gender
- Male: 32%
- Female: 68%

Age Categories
- 18-29: 10%
- 30-39: 20%
- 40-49: 15%
- 50-59: 10%
- 60-69: 5%
- 70-79: 2%
- 80+: 1%

Patient Internet Health Users.

Has accessed Health Information on the Internet in the last year
- Yes: 64%
- No: 36%
Importance of GP Attributes to Patients. (% ranked 1 or 2)

- 1. Thorough - 71%
- 2. Up To Date - 41%
- 3. Good Communicator - 26%
- 4. Experienced - 24%
- 5. Knows you well - 20%
- 6. Convenient opening times - 19%

Effect on Patient Confidence.

<table>
<thead>
<tr>
<th>Resource</th>
<th>More Confident</th>
<th>No change</th>
<th>Less Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbook</td>
<td>30%</td>
<td>62%</td>
<td>8%</td>
</tr>
<tr>
<td>Formulary</td>
<td>33%</td>
<td>61%</td>
<td>6%</td>
</tr>
<tr>
<td>Colleague</td>
<td>52%</td>
<td>44%</td>
<td>4%</td>
</tr>
<tr>
<td>Med. Net. Site</td>
<td>20%</td>
<td>51%</td>
<td>29%</td>
</tr>
<tr>
<td>Google/Wiki.</td>
<td>12%</td>
<td>40%</td>
<td>49%</td>
</tr>
</tbody>
</table>
Effect on likelihood of patient to see that GP again.

<table>
<thead>
<tr>
<th>Resource</th>
<th>More Likely</th>
<th>No Change</th>
<th>Less Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textbook</td>
<td>25%</td>
<td>61%</td>
<td>15%</td>
</tr>
<tr>
<td>Formulary</td>
<td>22%</td>
<td>71%</td>
<td>6%</td>
</tr>
<tr>
<td>Colleague</td>
<td>30%</td>
<td>64%</td>
<td>6%</td>
</tr>
<tr>
<td>Med. Net. Site</td>
<td>14%</td>
<td>63%</td>
<td>23%</td>
</tr>
<tr>
<td>Google/Wiki.</td>
<td>10%</td>
<td>46%</td>
<td>44%</td>
</tr>
</tbody>
</table>

- Age groups
- Gender groups

Differences Between Groups.
-90% of GPs in Ireland have access to internet.
-54% Consult Internet medical sites at least weekly- 2nd most consulted resource.
-75% are comfortable doing so.

- Patients value a GP who is up to date with latest medical knowledge.
- Patients gain confidence if their GP consults a GP Colleague, Formulary or Textbook.
- More patients lose confidence than gain confidence if their GP consults Medical internet sites or Google.

-GPs underestimate the loss of confidence that occurs.

Summary of findings.
Discussion.

Internet Medical Sites used in the consultation can improve evidence based patient care.

More patients lose confidence than gain confidence if their GP consults such a site.

- Can we use the internet to help provide best evidence based care and meet our clinical information needs, without losing the confidence of the patient?
- (Or losing the patient altogether!!)
- A new paradigm shift in the doctor-patient relationship?
- Or keep sending patients to produce urine samples?

“...it does not follow that, if a man is ignorant of a thing, he must forthwith fall into error. That is rather the fate of the man who thinks he knows what he does not know.”

St. Augustine of Hippo. 345-430 AD

Error and Ignorance.
Comments/Criticisms/Questions/Analysis

Dr. Nick Breen, GP Trainer, Greystones Harbour Family Practice.

Dr. Ray McDonnochada. Programme Directing Team, UCD/HSE GP Training Scheme.

Practice staff of Greystones Harbour Family Practice.

Dr. Phillip Sheerin Purcell and practice staff. (Ashford)

Dr. John Latham and practice staff. (Liberties)

Carol White, ICGP.

All GP’s and patients who replied to the questionnaire and left comments.

Acknowledgements
Conclusion/Recommendations.

• Education and access for GPs to reputable sources of summarized, frequently updated, peer reviewed medical information.

• Have chosen internet medical site already loaded before consultations (do not access through Google).

• GP communication with patients on reasons and benefits of accessing clinical information and evidence online during the consultation.

• Further Research into the negative associations of patients with GPs accessing medical information online.

• Willingness for GPs and patients to accept that the doctor is not all-knowing.

• Extra awareness needed with certain demographic groups?

Searching for evidence

Examples of resources:
- Computerized decision support systems
- Evidence-based clinical practice guidelines
- Evidence-based textbooks
- DARE, health evidence.co
- Evidence-based abstraction journals
- Systematic reviews (e.g., Cochrane Library)
- Evidence-based abstraction journals
- Original articles published in journals

Differences between GP groups.

X² analysis.

- **Urban GP’s consult Internet Med. Sites more often.**
  (Urban: 64% ≥weekly; Rural: 41% ≥weekly; Mixed: 47% weekly)  
  \( p = 0.045 \)*

- **Younger GPs consult Internet Medical Sites more often.**
  74% of ages 30-39 consult ≥weekly vs.
  56% of ages 40-49;
  40% of ages 50-59;
  33% of ages 60+.
  \( p = 0.0012 \)*

- **Confidence** in consulting each resource during the consultation similar among age categories and practice location.

- Younger GP’s tend to be more likely to perceive a negative affect on the patient of consulting the Internet. \( p = 0.3 \) ns.

- **Older and Wiser??**
  “The longer I practice the more confident I am consulting other resources but the less often I tend to do it” – GP, Age 40-49.

<table>
<thead>
<tr>
<th>Pt Group</th>
<th>Med Site = Increased Confidence</th>
<th>Med Site = Decreased Confidence</th>
<th>Google = Increased Confidence</th>
<th>Google = Decreased Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td>20%</td>
<td>29%</td>
<td>12%</td>
<td>49%</td>
</tr>
<tr>
<td>Age 18-29</td>
<td>10%</td>
<td>50%</td>
<td>10%</td>
<td>68%</td>
</tr>
<tr>
<td>Age 30-39</td>
<td>29%</td>
<td>19%</td>
<td>13%</td>
<td>48%</td>
</tr>
<tr>
<td>Age 40-49</td>
<td>18%</td>
<td>25%</td>
<td>9%</td>
<td>44%</td>
</tr>
<tr>
<td>Age 50-59</td>
<td>13%</td>
<td>38%</td>
<td>9%</td>
<td>56%</td>
</tr>
<tr>
<td>Age 60-69</td>
<td>26%</td>
<td>22%</td>
<td>18%</td>
<td>27%</td>
</tr>
<tr>
<td>Male</td>
<td>22%</td>
<td>24%</td>
<td>9%</td>
<td>54%</td>
</tr>
<tr>
<td>Female</td>
<td>16%</td>
<td>33%</td>
<td>9%</td>
<td>50%</td>
</tr>
<tr>
<td>Hi Rankers</td>
<td>35%</td>
<td>29%</td>
<td>8%</td>
<td>60%</td>
</tr>
<tr>
<td>Lo Rankers</td>
<td>5%</td>
<td>33%</td>
<td>5%</td>
<td>47%</td>
</tr>
</tbody>
</table>

*Green = significantly increased; red = significantly decreased \( p<0.05 \)*

\( X^2 \) Analysis: Differences between Groups in Effect on Confidence.
Internet Health Users.

Practice Location vs. Frequency consulting internet Medical Sites.
GP Age * Comfort Consulting a medical internet site.

Patient Questionnaire Responses by Location.
Patient Age * Medical Net Site.

Patient age * Accessing Health Info on Internet