Can Online Systems help Consumers Make Decisions and Manage Chronic Health Conditions?

Annie Lau, PhD
Centre for Health Informatics
Australian Institute of Health Innovation
Macquarie University

3rd Annual NHMRC Research Translation Faculty Symposium
November 2014
Consumer Informatics

Seeks answers to questions on the ‘impact’, ‘design’, and ‘science’ of ICT on consumers, patients and their carers

i.e. those with the **highest stake** in our healthcare system
Developed the first PHR research platform in Australia (Healthy.me)
My Personal Record allows you to keep track of medical test results and procedures.
You can graph your results (e.g. cholesterol) and monitor whether it is on track.
A Forum in each journey allows consumers to:
- Ask a clinician questions, or
- Get advice from peers
**Poll**: participants answer simple questions, where they can then view and compare their response with others.

What's your Health like compared to others?

<table>
<thead>
<tr>
<th>Sleep</th>
<th>Vege&amp;fruit</th>
<th>Caffeine</th>
<th>Exercise</th>
<th>Absence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms</td>
<td>Stress</td>
<td>Drinks</td>
<td>Drugs</td>
<td></td>
</tr>
</tbody>
</table>

How many hours did you sleep last night?

- **Four or less**: 3
- **5-6**: 2
- **7-8**: 16
- **More than 8**: 7

*last week* | *last month*
Journeys provide information for consumers to engage with clinicians and health services in an actionable way...

**Stage 1: My Diagnosis**
In here you can write down the stage and type (pathology) of your breast cancer and the treatment post surgery that has been recommended for you, such as radiation and/or endocrine (anti-hormonal) therapy. (more)

**Stage 2: My Team**
You can note who the members of your team helping look after you are and what medications you need to take and how often. (more)

**Stage 3: My Pillbox/ My Treatment**
Browse through your medications relating to your breast cancer.

**Stage 4: My Schedule and Follow-up**
Use this section to help organise your appointments for follow-up with your surgeon, medical oncologist in charge of your endocrine therapy (if given), and your radiation oncologist (if radiation was given)...(more)
Bundle of features are required to encourage consumers to engage with health services
Significant efficacy and user acceptance with >2000 consumers across 6 clinical conditions and settings

**Flu vaccine**
Vaccination rates more than doubled among a sample of 700 participants (4.9% vs. 11.6%) ($P=.008$)

**IVF**
Supported 14 women over 8 weeks to complete their IVF cycle

**Asthma**
>300 people with asthma were invited nationwide to use Healthy.me to manage their asthma

**Sexual health**
STI testing rates more than doubled among a sample of 300 young adults (7.6% vs.15.3%) ($P=.017$)

**Mental wellbeing**
Online community for 1985 participants with healthcare professionals to address their wellbeing concerns

**Breast cancer**
Supported 50 survivors of early stage breast cancer post-treatment
Mobile Healthy.me now available (iOS, Android)
Summary

• Goal: how we can use E-Health to re-design health services for individuals to engage with clinicians and health services

• Healthy.me undergoing continuous development

• Collaborations are warmly welcome
Thank you

Annie Lau, PhD
Centre for Health Informatics
Australian Institute of Health Innovation
Macquarie University

Email: annie.lau@mq.edu.au
www.aihi.mq.edu.au