Access to and use of Web 2.0 and social media applications within the NHS in England: the role and impact of organisational culture, information governance, and communications policy

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We trust our staff with patients’ lives, so why don’t we trust them with social media?  
*NHS Employers (2013, p. 9)*

Shouldn’t we be managing the risks more effectively in order to allow learners the freedom to use IT resources to better effect?  
*Prince et al. (2010, p. 437)*
Overview

• Introduction and background
• Definitions
  • Content types
• Web application blocking: earlier findings
• Perceived benefits and risks
• Research questions and issues
• Methodology and methods
• Findings
  • Availability
  • Respondent perceptions
    • Risks
    • Benefits
  • General findings
• Questions
Introduction and background

- LIS Manager in mental health NHS FT 2008-2012
- Variety of technological barriers / hindrances to information seeking, teaching and learning, clinical and management decision-making
  – ascribed variously to:
    - Information governance/ information security
    - IT infrastructure policies and practices
    - Communications policy
- Blocking of ‘legitimate’ websites
- Obstacles to use of particular content types and applications
- Social media / Web 2.0 a particular problem
- Implications?
Web 2.0 and social media - definitions

- **Web 2.0**
  - Difficult to define – not just technologies – an approach – about *values*
  - “A network platform through which end users interact with each other to generate and share information over the web” (Singh *et al.*, 2014)
  - “A collection of web-based technologies … where users actively participate in content creation and editing through open collaboration between members of communities of practice” (McGee & Begg, 2008)
  - Inherently egalitarian and unstructured – cf. ‘traditional’ IT
  - Require AJAX, Adobe Flash, RSS
  - *e.g.* mashups, start pages, folksonomies, podcasting
Web 2.0 and social media - definitions

• **Social media**
  - Subset of Web 2.0 – applications allow the creation and exchange of user generated content (Kaplan & Haenlein 2010)
  - Rapidly developing field
  - “[involve] the explicit modeling of connections between people, forming a complex network of relations, which in turn enables and facilitates collaboration and collaborative filtering processes”
    - Enable users to see what other connected users are doing
    - Enable automated selection of “relevant” information
    - Enable reputation and trust management, accountability and quality control
    - Foster “viral” dissemination of information and applications
    - Provide “social” incentives to enter, update, and manage personal information (Eysenbach, 2008)
Web application blocking

Impacts

- Online databases: 9%
- E-books*: 11%
- E-journals*: 25%
- Webmail: 35%
- Discussion forums: 69%
- Communication tools: 51%
- Wikis and blogs: 57%
- Social networking applications: 77%

SHALL IT subgroup survey of NHS librarians (2008)
Research questions / issues

• The nature and extent of restrictions on access to such applications within NHS organisations arising from organisational policies
• Their impacts on professional information seeking and sharing, and working practices in general
• The attitudes, professional norms, presuppositions and practices which bear on how social media policy is implemented within NHS trusts, in relation to overall organisational strategies

• Rationales for restrictions
• Differing stakeholder perspectives involved
• Attitudes to / assumptions about (information governance) risk
• Usage of mobile devices by health professionals to access social media
Methodology and methods

Exploratory case study

• Unit(s) of analysis
  • One or more NHS trusts of different types (district general hospital + community services, mental health, teaching hospital)

• Methods
  • Semi-structured interviews with key informants (10+ per trust)
    • selected via purposive / snowball sampling
    • representing a variety of perspectives:
      • Clinician education and staff development
      • Library and information
      • Communications
      • Information governance
      • IT management, esp. network security and PC support
      • Human resources
      • Workforce development
Methodology and methods

Exploratory case study

• Methods (cont’d)
  • Interviews with other key informants: NHS Evidence, medical school e-learning lead, secure web gateway vendor
    • Gained additional perspectives
  • Documentary analysis – selective / *ad hoc*
    • Background
    • Policies and strategies: IT, LIS, workforce development, information governance, Internet AUP
    • Codes and standards
    • Reports and reviews
    • Statements of values
    • Security device documentation
  • Thematic analysis using NVivo
## Availability: Web 2.0

<table>
<thead>
<tr>
<th></th>
<th>T1-DGH</th>
<th>T3-MH</th>
<th>T4-TH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Podcasts</strong></td>
<td>Trust starting to use podcasting on intranet</td>
<td>Sometimes unable to download from web / appear blocked owing to inadequate bandwidth – but podcast content planned for new trust intranet</td>
<td>Podcasts created by speech and language therapists for ENT training</td>
</tr>
<tr>
<td></td>
<td>Availability of external podcasts?</td>
<td>Podcasts produced internally for training purposes and used for PG medical education – but clinical tutor mentioned one being blocked</td>
<td>Respondents unclear about availability of external podcasts</td>
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<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>File storage and sharing applications</strong></td>
<td>Time quota set for use</td>
<td>Not mentioned</td>
<td>Dropbox blocked</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Google Docs available</td>
</tr>
<tr>
<td><strong>Web conferencing</strong></td>
<td>Skype blocked</td>
<td>Skype blocked</td>
<td>Not mentioned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WebEx, GoToWebinar used within trust</td>
<td></td>
</tr>
<tr>
<td><strong>Start pages / portals</strong></td>
<td>Not mentioned</td>
<td>Not mentioned</td>
<td>Accessible to users - library has several. Weebly formerly blocked</td>
</tr>
</tbody>
</table>
## Availability: social media

<table>
<thead>
<tr>
<th>Blogs / Microblogs</th>
<th>T1-DGH</th>
<th>T3-MH</th>
<th>T4-TH</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Unable to access or create – prevents library using for current awareness purposes</td>
<td>Restrictions not mentioned on general blogs</td>
<td>WordPress blogs formerly (maybe still) blocked</td>
</tr>
<tr>
<td></td>
<td>Time quota set for use of Twitter. Trust starting to use for corporate communications but individual use not encouraged</td>
<td>Twitter, Facebook: users and would-be bloggers should seek advice from Communications before using professionally</td>
<td>Issuing of Twitter handles requires permission from divisional director</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Twitter blocked by default</td>
</tr>
<tr>
<td>Collaborative projects</td>
<td>Restrictions not mentioned</td>
<td>Restrictions not mentioned</td>
<td>Restrictions not mentioned</td>
</tr>
</tbody>
</table>
| Social networking services | Facebook: time quota set for use  
Originally blocked entirely following breach of confidentiality by clinical staff member  
LinkedIn and other ‘professional’ sites accessible | Facebook blocked  
LinkedIn and other ‘professional’ sites accessible | Access to Facebook etc. blocked on PCs but not on users’ mobile devices – trust has a BYOD network and policy. Some staff approved to use social media for work purposes. LIS has Pinterest site – infographics |
| Content communities | Time quota set for use of SlideShare  
Prezi formerly blocked as presenting confidentiality risks – now has time quota set | SlideShare not mentioned  
Prezi - restrictions not mentioned – IT manager unsure of policy – Comms provides training on Prezi | Status of SlideShare unclear  
Prezi blocked                                                                                                           |
|                    | Time quota set for use of YouTube                                                                                     | Specific permission required to access YouTube - NB bandwidth limitation statement in place – 10s pauses       | YouTube reported by pharmacist as blocked but this denied by IT Manager                                           |

Classification: Kaplan & Haenlein (2010)
Perceived risks / reasons for non-use

- Breaches of privacy
  - Sharing of images via smartphone and tablet cameras
- **Breaches of confidentiality**
  - Patient information
    - *T1 – breach of confidentiality by clinician – led to clampdown*
  - Corporate information
- **Failure to maintain appropriate professional boundaries**
  - Patients, carers, students
  - Affecting reputation
    - Employing organisation, profession, individual / career
  - Time-wasting / trivial / unproductive
  - Lack of time
  - Lack of encouragement, training and guidance
Perceived benefits / existing uses

- Staff, patient, public engagement
- Professional networking and discussions
  - *e.g.* LinkedIn, Doctors.net.uk, Sermo, #WeNurses on Twitter
- Research dissemination / current awareness
  - Library portals / RSS feeds, Twitter
- Teaching
  - Podcasts, YouTube videos
- Information sharing and collaboration
  - File storage and sharing applications *e.g.* Dropbox
  - Content communities *e.g.* Mendeley, SlideShare, Prezi
- Teaching / learning administration
  - *e.g.* Facebook
General findings

• Often perceived as high-risk – especially by nurses – privacy and confidentiality concerns
• Sometimes felt to be suitable only for personal or recreational use (cf. Ward et al., 2009)
• Professional online forums favoured by AHPs
• Big generational differences in use and expectations
• Gradual process of acceptance
  • external drivers e.g. NHS Employers, professional bodies
  • starts with corporate use – T1
  • “gently washing in” – T3
  • tool for patient / public / staff engagement
  • availability of policies and guidance, e.g. NMC, GMC, HCPC, BASW
• BYOD a facilitator – T4 – relates to mobile device use
• Educational usefulness of YouTube content increasingly recognised by IT
• Hierarchy of needs? (Chretien & Kind, 2014)
Questions?

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References

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