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## Quality Demands of Patients with Regard to E-Consult in Primary Care

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**Background:** Ideally, e-consult systems should satisfy the quality demands and needs of groups most at risk, like the lower educated or elderly patients and those, who frequently use medication or frequently visit their general practitioner [1]. **Objective:** To examine the quality demands with regard to the use of secure e-consult of various health consumer groups that currently use internet. **Methods:** Data were collected using an internet based questionnaire. We assessed attitude to e-consult, demanded service quality and those needs that are important in the empowerment of patients by means of five point rating scales. We further assessed age, level of education, chronic use of medication (e.g. for asthma or diabetes) and frequency of GP visits. **Results:** Of 765 respondents sufficient data were available for statistical analysis, 472 females (62%) and 291 males (38%). In comparison to younger respondents, respondents older than 45 year demanded more service quality from e-consult ( $P = .01$ ), perceived a higher need of careful use of e-consult ( $P = .001$ ), a higher need to use e-consult to support direct ( $P = .001$ ) and indirect control of care ( $P = .001$ ) and a higher need to use e-consult to support control of information ( $P = .005$ ). Respondents with a lower level of education (below college level) had a significantly more negative attitude to e-consult ( $P = .001$ ), demanded a higher level of service quality from e-consult ( $P = .001$ ), perceived a higher need of careful use of e-consult ( $P = .001$ ), a higher need to use e-consult to support direct ( $P = .001$ ) and indirect control of care ( $P = .001$ ) and a higher need to use e-consult to support control of information ( $P = .002$ ). Chronic users of medication had a significantly more negative attitude to e-consult ( $P = .05$ ), demanded a higher level of service quality from e-consult ( $P = .003$ ), perceived a higher need of careful use of e-consult ( $P = .004$ ) and a higher need to use e-consult to support direct control of care ( $P = .001$ ). Patients who frequently visited their GP (at least once every three month), had a significantly more negative attitude to e-consult ( $P = .05$ ), demanded a higher level of service quality from e-consult ( $P = .002$ ) and perceived a higher need to use e-consult to support direct control of care ( $P = .04$ ). Respondents, who did not frequently visit their GP (at least once every three month), perceived a higher need to use e-consult for convenience ( $P = .002$ ).

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1. Tjora A, Tran T, Faxvaag A. Privacy versus usability: a qualitative exploration of patients' experiences with secure internet communication with their general practitioner. *J Med Internet Res* 2005;7(2):e15. URL:<http://www.jmir.org/2005/2/e15>

## Evaluation of the Lack of Quality of E-Consultation as Perceived By Experienced Patients and Providers in Primary Care

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**Background:** Despite its potential, the use of patient-provider e-consultation has not yet been widespread in primary care due to concerns about the quality of care [1]. However, there is little empirical research into the lack of quality of e-consultation. **Objective:** To determine the lack of quality as perceived by patient and providers with experience in e-consultation. **Methods:** We carried out in-depth structured interviews with 19 patients and 11 providers (GP and other care providers), who currently use secure e-consultation systems, i.e. secure internet based systems with direct consultation by email and indirect e-consultation by means of triage systems. In-depth interviews with patients and providers were conducted to assess the quality of e-consultation, using as

a framework for the discussion the quality criteria as outlined in the Institute of Medicine report [2]. Quality criteria were tailored to specific e-consultation systems and we assessed lack of quality with regard to e-health policy, implementation, usability, quality of interaction between patient and provider, control of care, and control of information. **Results:** The 19 patients mentioned 125 incidents of lack of quality and the 11 providers mentioned 105 incidents of lack of quality. Mentioned incidents were categorized independently by two observers into the quality categories. Among patients most incidents of lack of quality were related to inadequate implementation (33%), lack of ability to control information (18%), lack of good usability of the system (17%), poor e-health policy (15%) and poor quality of interaction (14%). Lack of control of care was infrequently mentioned by patients (4%). Among care providers most incidents of lack of quality were related to poor implementation (35%), poor usability of the system (28%), poor quality of interaction (15%) and poor control of care (8%). Lack of control of information was infrequently mentioned by providers (1%). **Conclusions:** It can be concluded that both among patients and providers inadequate implementation causes most incidents of lack of quality. Among patients lack of quality of control of information is frequently mentioned, but not among providers. This problem can be attributed to the use of medical terms and medical thinking in triage systems, which poorly reflect the problem solving strategies of patients. Unexpectedly, it was also found that care providers do have more problems in usability of e-consultation systems than patients. This is caused by incompatibility of e-health systems with available electronic patient record systems.

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2. Institute of Medicine. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press; Jun 1 2001. URL: <http://www.nap.edu/books/0309072808/html/WebCite>: <http://www.webcitation.org/query?id=1143540675450830> [accessed 2006 March 28]

## Health Information Seeking on the Internet in Spain: Evolution or Revolution ?

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**Background:** The Internet is currently an important source of health-related information [1]. Health information is one of the most commonly searched topics on the Internet [2] but little is known about who accesses this information in Spain and how this Internet usage is evolving.

**Objective:** To describe the characteristics of Spanish people who seek health information on the Internet and determine if there is being any change on these population characteristics.

**Methods:** We analysed Internet users data from the "Survey on the equipment and use of Information and Communication Technologies in Spanish households (ICT-H)", for year 2003 (n = 4663) and year 2005 (n = 6779). Two multivariate logistic regression models were developed (one for each year) to identify variables associated with online health information seeking. The following socio-demographic characteristics were analysed: sex, age, education level and other relevant household conditions.

**Results:** In 2003, Internet health information seeking was significantly associated with being female (odds ratio [OR] 1.33, 95% confidence interval [CI] 1.15 to 1.54), being 26 to 55 years old (OR 1.77, CI 1.50 to 2.10), having Internet access at home (OR 1.59, CI 1.36 to 1.87), attending computer courses (OR 1.52, 95% CI 1.23 to 1.67) and using Internet frequently (OR 1.52, CI 1.23 to 1.87). However education level, degree of urbanisation, and presence of children in household did not influence the health-related Internet usage. In 2005, there were significant associations with being female (OR 1.46, CI 1.31 to 1.63), 26 to 55 years old (OR 1.65, CI 1.46 to 1.88), having Internet access at home (OR 1.63, CI 1.44 to 1.84), attending computer courses (OR 1.24, CI 1.11 to 1.39), using Internet frequently (2.05, CI 1.76 to 2.39), living with children under 15 (OR 1.13, CI 1.01 to 1.27) and residing in an area with population over 10.000 inhabitants (OR 1.17, CI 1.01 to 1.36). Nevertheless, education level had no significant association with Internet health information seeking.

**Conclusions:** In Spain, adult women are the main online health information seekers similarly to other countries [3]. ICT equipment, frequent Internet usage and computer skills are basic characteristics to take advantage of health