Patient Internet Usage Characteristics of a Foot and Ankle Population

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Background

• Internet use is common and increasing \[1\]
  – 2000 - 124 million users in US (44% of pop.)
  – 2010 - 240 million users in US (77% of pop.)

• Health-related Internet use has greater growth than general Internet use \[2\]
  – 1998 - 50 million users in US
  – 2005- 117 million users in US
  – 2010 - 175 million users in US

• Patients who access health-related information online more likely to:
  – Want to be more active participants in future medical decision making \[3\]
  – Follow physician advice more closely \[4\]
  – Ask more questions during office visits \[4\]
Background

- Health-related Internet use is greater in certain populations
  - Younger [5,6,7,8]
  - Employed [5]
  - More formal education [6,9]
  - Higher annual income [8]
  - Worse health [9]
  - Living in urban location [9]
Introduction

• Primary goals of this study

  – Characterize general and health-related Internet use for patients seeking orthopedic foot and ankle care

  – Determine whether age, educational level, or language fluency correlated with Internet usage characteristics
Methods

• Study Time Frame: September 2010 to February 2012
• Subjects: All new patients of PI’s ortho. F&A surgery practice
• Instrument: ‘Patient Internet Usage’ survey.
• Surveyed information:
  – Internet use
  – Frequency of Internet use
  – Ability to access Internet alone
  – Needing help when using the Internet
  – Location using the Internet
  – Internet access at home
  – Awareness of medical information on the Internet
  – Using Internet for health-related information before visit
  – Alternate sources of health-related information
Results

- Patient population characteristics

  - 1179 subjects (response rate = 95%)
  - 66% female
  
  - Mean age = 50 yr.
  - 15% <30 yr. old, 17% >65 yr. old

  - 94% spoke English fluently
  - 11% spoke Spanish fluently
  - <1% reported speaking a language other than English or Spanish

  - 79% were college-educated
  - 31% have graduate degree
  - 5% do not have high school degree or GED
Results

- 88% of the study population used the Internet
- 92% of population were aware that there is health-related information on the Internet about orthopedic foot and ankle conditions
- 45% looked up health-related information related to their visit before arriving
Results - General

• 95% of those using the Internet were able to access and use it alone

• Of those who used alternate sources to gather information about their condition:
  • 65% used another physician
  • 54% used the Internet
  • 30% used family or friends
  • 23% used an allied/complementary health provider
  • 19% used a nurse
  • 14% used books/pamphlets
Results - Age

- Inverse correlation between age and Internet use
- Approx. 20% less of patients >65 yr old use Internet daily than those <30 yr old
Results - Age

- Age negatively correlated to awareness of health-related information
- Six times more patients <30 yr old use cell phone to access internet than patients >65 yr old
Results

Education

• Patients with at least some college education significantly more likely to use Internet than those with no college education (* p < 0.01)
Results – Spanish Speakers

- Patients fluent in Spanish:
  - Less likely to use the Internet
  - Less likely to be aware of information on the Internet about their medical condition
  - Less likely to look up medical information before their visit
  - Less likely to be able to use Internet alone
Results – Language Fluency

• Patients fluent in Spanish equally likely to use all sources of medical information EXCEPT the Internet (** p < 0.05, * p < 0.1)
Conclusions

• High rates of Internet use, frequency, home access, and online health information awareness in our population
• Usage lags in older, less-well-educated, and Spanish speaking patients
• Online resources should be rethought with older, less formally educated, and Spanish speaking patients in mind.
• Spanish translation of FootCareMD.org should help to in counteracting lower internet usage rates in spanish-only speaking population
Study Limitations

- Study subjects from a single orthopaedic F&A practice
- Catchment area as well as referral patterns led to predominance of patients from eastern Massachusetts area
- Socioeconomic characteristics of Metro. Boston may have resulted in greater English-speaking patient population with more formal education
- Potential bias: Use of interpreter for patients who did not speak English fluently causing social pressure to give what they consider proper responses
References


