Research Article

Healthcare Tendencies of Insured Versus Uninsured Patients: Implications for Educational Initiatives

Magnus JM*
University of North Carolina Wilmington, Cameron School of Business, USA

*Corresponding author: Jessica M Magnus, University of North Carolina Wilmington, Cameron School of Business, Undergraduate International Programs Coordinator, International Business Concentration, North Carolina, USA

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Introduction

Lack of health insurance results in extensive negative health consequences at the individual, community, and societal levels [1,2]. Studies have demonstrated that uninsured adults are significantly less likely to get treatment for chronic illnesses (e.g., diabetes, arthritis, hypertension) or get needed preventive care services (e.g., screening for breast, cervical, and colorectal cancers; [1,3,4]) than their insured counterparts. Uninsured individuals are also more likely to have mental/psychiatric health issues than insured individuals, making their lack of health insurance all the more problematic as they cannot typically afford the regular medical and prescription care that would be needed to manage their mental health [5]. Uninsured children face barriers to adequate care due to insufficient provider access, lack of continuity with primary care providers, and inadequate visit time [6]. Such barriers are magnified for those uninsured children who have special health needs. Statistics indicate that 70% of the uninsured children in the US are eligible for health insurance coverage through Medicaid or children’s health insurance programs provided through the state, but their parents fail to seek these insurance options due to difficulties navigating the health systems and a perception that the resources weren’t sufficient to warrant the trouble [6]. Individually, being uninsured results in lower general health and higher mortality rates, though more broadly this can be a community and societal problem when failure to seek treatment increases the prevalence of communicable disease as well as increased healthcare costs to the general population to cover the costs of medical treatment for those unable to pay.

Despite recent legislation in the United States (e.g., Obamacare) many Americans are still without insurance or are under-insured. According to the US Center for Disease Control and Prevention, in 2017, 28.2 million Americans or more than 12% of adults were uninsured (i.e., the Affordable Care Act; ACA). Although this is a significant decrease from the 44 million that were uninsured prior to the passing of the ACA, a significant portion of the US population remains uninsured [7]. Many more Americans are underinsured and are unable to pay copayments/coinsurance so they choose not to seek care [7]. Estimates by the CDC suggest lost productivity associated with sick employees exceeds $260 billion in the US annually [8], which is just one metric by which we can assess the economic impact of poor health coverage. Given that insurance coverage for everyone (universal) in the population seems currently unlikely (at least in the United States among the developed countries), it is important to understand the differing perceptions of general health and healthcare tendencies of those who are insured versus uninsured so as to inform future educational, ethical, and healthcare reform initiatives targeting these populations. In this study, we examine differences between insured and uninsured Americans in terms of (1) general health perceptions, (2) healthcare tendencies/perceptions, and (3) use of alternate (non-doctor) sources of health information.

Method

Analyses are based upon telephonic survey data collected for the 2010 United States Health Tracking Household Survey performed by the Inter-University Consortium for Political and Social Research. Data was collected from April 2010 thru March 2011, and includes responses by 16,681 people representing 9,165 families in the US drawn from the civilian noninstitutionalized population. The sample is nationally representative based upon random digit dialing. A family informant reported information related to insurance coverage, health...
care use, usual source of health care, general health status, and family income of all family members. Each adult in the family (including the family informant) responded through a self-response module regarding questions about perceived quality of care, use of health information, and general health questions. The family informant also provided data on behalf of the family’s children regarding these same outcomes. A Spanish version of the instrument was engaged whenever needed. Responses reflect data from 7,747 males and 8,924 females. The majority of respondents were age 35 and older (65.6%), with 18.5% of respondents age 65 or older. 13.6% of responses were about children under the age of 18. Insured respondents reported having private insurance (53.5%), Medicare or Medicaid (31.7%), or military insurance (1.2%). The sample was comprised of 70.7% white non-Hispanics, 11.8% African American non-Hispanics, 10.9% Hispanics, and 6.6% other non-Hispanics.

Five sets of questions were analyzed. First, respondents were asked to rate their “satisfaction with healthcare” and their “satisfaction with choice of doctor”. Second, respondents were asked to rate their “general health”, “tendencies to go to the doctor when they feel bad”, perceptions that “they feel healthy enough they don’t need insurance”, and perceptions that “health insurance isn’t worth the costs”. Third, respondents rated the extent to which seventeen reasons for putting off seeking health care were relevant for them (e.g., worried about the cost, couldn’t get an appointment soon enough, cannot be at the clinic when it opens, etc.). Fourth, respondents were asked to assess the extent to which they used alternate (non-medical/doctor) sources for health information, including Internet, friends, TV/radio, newspaper/books/magazines, etc. Finally, respondents were asked to rate the extent to which information gleaned from these alternate sources of health information affected their health and approach to healthcare management.

Results

Results are presented in Tables 1-4. Table 1 reports the general health and healthcare tendencies and perceptions by insurance status.

Table 1: General health and healthcare tendencies and perceptions by insurance status.

|                                | Insured Mean (SD) | Uninsured Mean (SD) | T     | p-value |
|--------------------------------|-------------------|----------------------|-------|---------|
| Satisfaction with healthcare (1-high; 5-low) | 1.56 (.97)        | 2.35 (1.44)          | -29.46| 0       |
| Satisfaction with choice of doctor (1-high; 5-low) | 1.42 (.86)        | 2.01 (1.26)          | -26.6 | 0       |
| General health (scale of 1-excellent; 5-poor) | 2.32 (1.11)        | 2.60 (1.16)          | -11.07| 0       |
| Tend to go to the doctor as soon as feel bad? (1 = strongly agree; 4 = strongly disagree) | 2.50 (1.05)        | 2.75 (1.10)          | -9.5  | 0       |
| Tend to do anything to avoid going to the doctor (1 = strongly agree; 4 = strongly disagree) | 2.89 (1.11)        | 2.41 (1.18)          | 17.67 | 0       |
| Feel healthy enough don’t need insurance (1 = strongly agree; 4 = strongly disagree) | 3.61 (.78)         | 3.05 (1.06)          | 27.43 | 0       |
| Health insurance is not worth the costs (1 = strongly agree; 4 = strongly disagree) | 3.00 (1.08)        | 2.31 (1.10)          | 25.69 | 0       |
| Annual family income            | 68723.11 (45617.91)| 40336.79 (32761.89)  | 28.48 | 0       |

Results suggest significant differences in perceptions across groups. Compared to their insured counterparts, uninsured respondents reported significantly lower (1) satisfaction with healthcare ($t= -29.46$, $p<0.01$), (2) satisfaction with their choice in doctor ($t= -26.6$, $p<0.01$), (3) general health ($t= -11.07$, $p<0.01$), and (4) tendency to go to the doctor when they are feeling sick ($t= -9.5$, $p<0.01$). The uninsured respondents were also more likely to (5) do anything to avoid going to the doctor ($t= 17.67$, $p<0.01$) and (6) report being healthy enough that they don’t need insurance ($t= 27.43$, $p<0.01$). Uninsured respondents were also significantly more likely to think health insurance isn’t worth the costs ($t= 28.48$, $p<0.01$), though this could at least partially be related to the fact that uninsured respondents earned significantly less annual income than did insured respondents (uninsured mean = $40,336.79 versus insured mean = $68,723.11; $t= 28.48$, $p<0.01$).

Table 2 reports reasons for putting off needed medical care by insurance status, and reveals significant differences in reasons for putting off care. Chi-square tests reveal uninsured respondents were significantly more likely to put off getting needed medical care (Chi-Square = 408.75, $p<0.01$) as well as not getting medical care they needed (Chi-Square = 625.52, $p<0.01$). Uninsured respondents were more likely than insured respondents to report putting off getting needed medical care due to (1) worry about cost (Chi-Square = 413.81, $p<0.01$), (2) not being able to get an appointment soon enough (Chi-Square = 30.13, $p<0.01$), (3) not being able to be at the clinic when it is open (Chi-Square = 33.09, $p<0.01$), (4) it taking too long to get to the doctor (Chi-Square = 12.79, $p<0.01$), (5) not being able to get through on the telephone (Chi-Square = 4.16, $p<0.05$), (6) being too busy to take the time (Chi-Square = 136.92, $p<0.01$), (7) not being able to get off of work (Chi-Square = 4.43, $p<0.05$), (8) being too busy caring for family members (Chi-Square = 5.50, $p<0.05$), (9) being too sick (Chi-Square = 9.20, $p<0.01$), (10) having a bad experience with a doctor in the past (Chi-Square = 5.31, $p<0.05$), (11) not thinking the problem was serious enough to warrant a trip to the doctor (Chi-Square = 46.13, $p<0.01$), (12) being too lazy or simply procrastinating (Chi-Square = 18.72, $p<0.01$), and (13) not being able to afford a
needed prescription (Chi-Square = 687.34, p<0.01). Importantly, uninsured respondents did not report as barriers to getting needed care (1) not being able to get a referral, (2) not knowing where to go, (3) thinking wait time at the doctor would be too long, or (4) having transportation problems.

Table 3 reports insured versus uninsured respondents’ tendencies in seeking medical information and advice from non-physician sources. Interestingly, insured respondents were significantly more likely to seek information from internet (Chi-Square = 40.04, p<0.01) and print (newspaper, books, magazines; Chi-Square = 17.85, p<0.01) sources than were uninsured respondents. Insured and uninsured respondents were equally likely to seek medical information from friends and equally unlikely to seek medical information from tv/radio sources.

Table 4 reports the extent to which seeking medical advice/information from non-physician sources affected their healthcare approaches. Insured respondents who sought medical advice/information from non-physician sources reported a greater tendency for this information to affect their approach to (1) treating their illness or condition (Chi-Square = 26.01, p<0.01), (2) maintaining their health (Chi-Square = 6.29, p<0.01), (3) asking questions of their doctor (Chi-Square = 70.17, p<0.01), and (4) diet, exercise, or stress management (Chi-Square = 9.22, p<0.01). Insured and uninsured respondents reported a similar tendency to use this information in coping with a chronic condition, deciding when to see a doctor, and whether they sought a second opinion.

Discussion

Overall, this study’s results provide useful insights and directions...
for future research into the health and healthcare perceptions of uninsured Americans as well as reasons they fail to obtain insurance or medical care, even when seemingly affordable options exist. First, uninsured Americans report being more dissatisfied with their healthcare options and facing more barriers to seeking health care than their insured counterparts. Although this is not a completely new insight, the reasons underlying these perceptions may be different from what researchers have thought. For example, Kamimura et al. [9] cited long wait times at appointments and inability to get needed referrals to specialists, and Myers [10] cited transportation problems, as being reasons the uninsured do not seek medical care. However, our sample indicated no difference between insured and uninsured respondents in their perception of wait time, access to needed referrals, or transportation problems as being barriers in getting needed care, despite the fact the uninsured report being in poorer health than the insured. Rather our results suggest uninsured respondents do not perceive value in having insurance because even with more affordable premium options available, the copayments/coinsurance are often still cost prohibitive. Our results suggest this population also does not see the value in preventative care, so they are more likely to seek medical care for emergency rather than non-emergency situations.

Second, our results suggest the uninsured are not seeking health information from outlets that have been traditionally used for communicating service availability and health literacy information (e.g., internet, print, TV/radio sources, etc.), so programs aimed at promoting health care prevention need to employ new avenues for communication and educational campaigns need to be redesigned and deployed in order to reach this population. Ideally the educational campaigns will speak to the underlying reasons the uninsured do not seek insurance even though seemingly affordable options exist.

Health, Healthcare Access, and Healthcare Satisfaction

One important takeaway from our study is that uninsured Americans are less healthy than their insured counterparts and are also significantly less satisfied with both their past experiences, as well as their current access to healthcare. Kamimura and colleagues [4] surveyed uninsured patients who attended free or low-cost clinics to determine their experiences and perceptions about their healthcare experience; respondents reported needing more specialty services and health education programs than could be offered by the clinics they currently had access to and were continuously frustrated by long wait times when making appointments as well as in the waiting room. Research also finds the (uninsured) patients of free clinics tend to suffer from a number of significant health problems, including respiratory diseases, circulatory diseases, and mental disorders [11,12]. These individuals also tend to be in poor physical and mental health and have lower health-related quality of life [9,13,14]. Lower income patients tend to express significantly lower satisfaction with healthcare availability and provision than do middle income patients [13,15]. According to Becker and Newsom [13], lower income patients are also more likely to seek health care infrequently and then only in emergency scenarios [13]. Even higher-income uninsured adults are significantly less likely to get adequate health and preventative care because they see them as cost-prohibitive and/or they do not see the value/importance in preventative care [1].

These findings suggest the need for greater access to healthcare both for acute and chronic-care patients as well as preventive and specialty medical care for uninsured patients. While clearly concerns about the cost of these services combined with lower perceived value of healthcare and health insurance are contributing factors to uninsured patients’ poor health and tendency to seek medical care, research also suggests nonmedical personnel (e.g., reception/administrative staff) play a significant role in determining whether uninsured patients are given access to medical personnel [16]. Future research is needed to determine training and education programs that may target such nonmedical personnel so they better understand the importance of uninsured patients receiving needed care as well as the options available to these patients for access to such care.

Similarly, patient perceptions of communication in healthcare settings vary dramatically based upon insurance status, which raises concerns that healthcare providers need training to improve communication with groups which may misinterpret healthcare information [17]. Future research should also explore the role of language barriers in the healthcare tendencies of the uninsured given evidence suggesting there is an underutilization in interpreter services [14]. Finally, compared with their insured counterparts, uninsured and lower socioeconomic patients tend to believe that racial and ethnic biases affect the quality of health care they receive (e.g., unfair or disrespectful treatment; Stepanikova & Cook, [18]). Good physician-patient communication has been found to reduce
perceptions of racial and ethnic biases in the quality of medical care for uninsured and underinsured patients [18]. And given their role in providing access to medical providers, non-medical support staff would benefit from such training as well.

Our results also suggest that uninsured patients face unique barriers to accessing healthcare, including not having access to convenient care and inability to take time off work or away from family obligations in order to go to the doctor. These findings suggest policy makers might consider the convenience of their office hours to uninsured and underinsured patients, and that policy makers might consider the importance of providing support services to such patients which meet their needs for paid medical leave and family/dependent care.

Access to Health Information

A second important takeaway from this study is that uninsured patients are not accessing healthcare information using traditional channels (e.g., internet, print, TV/radio sources, etc.), which suggests policy makers and medical educators and providers need to engage alternate communication channels to reach this population. Indeed, knowledge about the Affordable Care Act as well as available health information programs targeted toward uninsured and underinsured residents has been reported to be much lower than among the insured population [19]. These findings along with those reported in the extant literature stress the importance of finding effective ways to provide information and access to health education opportunities for uninsured patients [9]. Our results suggest the uninsured are unlikely to seek health information from TV/radio sources, print sources, and internet sources. The most commonly reported non-physician source of medical advice/information by uninsured respondents were friends and family (with 28.50% of uninsured respondents indicating they sought information and advice from these individuals). This finding suggests that adopting a social network approach to distributing health and health insurance information may be beneficial [20]. Indeed, social media, which is one way to engage social networks, has been found to be an effective and efficient means of sharing health information [21].

Perceived Value of Healthcare and Health Insurance

A third important takeaway from this study is that although uninsured patients are in greater need of health care (as evidenced by their overall poorer health status), they see less value in preventive care and do not consider health insurance worth its cost. Indeed, Ross and colleagues [1] found that uninsured patients often believe the recommended health care services are not necessary, or at least not vital enough, to make purchasing health insurance a priority. Further, uninsured adults are also more likely to believe that preventive and chronic care does not sufficiently reduce the risk to death and disease to justify the cost of health insurance or medical care services [1] (Ross et al., 2006). This highlights the importance of educational initiatives directed to educating the uninsured regarding the importance of preventive and chronic care. Such educational programs will be more effective to the extent they address the concerns and perceptions that are specific to the uninsured population.

Importantly, Kamimura and colleagues [4] reported that the uninsured free clinic patients report being interested in learning more about healthy lifestyles, but claim they do not have access to sufficient information. Although the Internet has become a major source of health-related information seeking, Internet access by the uninsured is significantly lower than the national average [22], and there is concern this population may not know how to utilize the information due to low health-related literacy [23] and/or cultural differences associated with the perceptions of seeking of health information online (e.g., Hispanics are more likely to perceive that health information sought over the Internet may negatively affect physician/patient relationships; Pena-Purcell, [24]). As such, health education programs for uninsured patients should focus on both enhancing health knowledge and improving health-related behaviors [14], and should be relevant to the constraints and concerns of the target audience.

Limitations and Directions for Future Research

A potential limitation of this study is that the results are based on a dataset that was collected before the passing of the Affordable Care Act. It is likely some of the uninsured respondents from this sample have since acquired insurance through related programs. However, although the ACA has substantially reduced uninsurance rates in America, there are still as significant portion of the population that are uninsured or underinsured. Regardless of the timing of this data collection, understanding how uninsured respondents think about health, healthcare, and health insurance is helpful in informing our knowledge of the values and motivators of the uninsured population so future health education programs and social policy can adequately designed. Future research might consider additional factors that affect healthcare decision making among the insured and uninsured.

Another direction for future research is the use of social networks in health education. Our results suggest nearly 30% of respondents reported having asked friends or family members their opinion/advice on healthcare, including how to treat an ailment, how to cope with chronic conditions, or decisions regarding diet, exercise, and stress-management. A profitable direction for future research is to explore how a social networking approach to health education could be leveraged to reach the uninsured population [20,25]. Social networking campaigns have been successful in changing attitudes and behaviors in ways traditional campaigns have not [26]. Exploring how they may be used in healthcare is an important step for future research.

Conclusion

Widespread use of preventive and chronic medical care brings important benefits both to the individual (via improved health, wellness, and life expectancy) as well as the broader society (via reduction in transmission of communicable diseases and the reduction of future health care costs; [1]). Further, as recent healthcare reforms associated with the Affordable Care Act as well as vehicles like high-deductible insurance plans, cost sharing plans, and health savings accounts are often associated with an increase in out-of-pocket costs, additional education on the value/importance of chronic and preventive health care becomes even more important [1].

Understanding the differences in perceptions of health, wellness,
and healthcare by uninsured versus insured patients is an important step in designing health policies and health education programs targeted to benefit this population. Failing to access needed medical care not only negatively impacts individual patients and their families, but society at large. The healthcare costs of uninsured and underinsured patients is passed along to other entities which raises the health costs for everyone. Further, not accessing care in a timely fashion ultimately increases the costs of treating patients when they finally do access medical care. This study identifies several practical implications and profitable directions for future research on the health and healthcare tendencies of insured versus uninsured patients.

References
1. Ross JS, Bradley EH, Busch SH. Use of health care services by lower-income and higher-income adults. JAMA. 2006; 295: 2027-2036.
2. Washington DL, Bean-Mayberry B, Riopelle D, Yano E. Access to care for women veterans: Delayed healthcare and unmet need. Journal of General Internal Medicine. 2011; 26: 655-661.
3. Ayanian JZ, Weissman JS, Schneider EC, Ginsburg JA, Zaslavsky AM. Unmet health needs of uninsured adults in the United States. JAMA. 2000; 284: 2061-2069.
4. Kamimura A, Ashby J, Trinh H, Prudencio L, Mills A, Tabler J, et al. Uninsured free clinic patients’ experiences and perceptions of healthcare services, community resources, and the Patient Protection and Affordable Care Act. Patient Experience Journal. 2016; 3.
5. Sturm R, Wells K. Health insurance may be improving—But not for individuals with mental illness. Health Services Research. 2000; 35: 253-262.
6. Fry-Johnson Y, Daniels EC, Levine R, Rust G. Being uninsured: Impact on children’s healthcare and health. Current Opinions in Pediatrics. 2005; 17: 753-758.
7. Key Facts about the Uninsured Population. 2018.
8. Preventative Health Care. 2017.
9. Kamimura A, Ashby J, Trinh H, Prudencio L, Mills A. Uninsured free clinic patients’ experiences and perceptions of healthcare services, community resources, and the Patient Protection and Affordable Care Act. Patient Experience Journal. 2016; 3: 12-21.
10. Myers A. Non-emergency medical transportation: A vital lifeline for a healthy community. 2015.
11. Notaro SJ, Khan M, Bryan N, Kim C, Osunero T, Senseng MG, et al. Analysis of the demographic characteristics and medical conditions of the uninsured utilizing a free clinic. Journal of Community Health. 2012; 37: 501-506.
12. Kamimura A, Christensen N, Tabler J, Ashby J, Olson LM. Patients utilizing a free clinic: physical and mental health, health literacy, and social support. Journal of Community Health. 2013; 38: 716-723.