Changes in Clients' Medical Expenses, Financial Status, and Agency Response: A Comparison of Data from 2007 and 2017

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Introduction

A life-altering medical event can happen to anyone, and often it occurs suddenly and without warning. Life-altering medical events include anything that causes significant impairment of an individual to the point they are unable to work or participate in activities of daily living. These medical events can include injuries, disabilities, mental illness, or any other catastrophic medical crisis.

Medical events not only affect the physical health of clients, but also the mental, emotional, and spiritual health of the individual and those around them. It puts financial strain on the household because of the increased doctors visits, medications, tests, and procedures. Many people who are diagnosed with a severe illness or have a traumatic medical crisis are unable to work because of their condition. Because of the decrease in income and increase in medical expenses, the household expenses become overwhelming and many people find themselves with large amounts of debt and depleted resources. The Floor Covering Industry Foundation was created to help provide financial relief in this time of need.

The purpose of this study is to explore the changes in medical expenses, household bills, income, and health insurance trends in 2007 and 2017. The research will also evaluate how the Floor Covering Industry Foundation has responded to these changes by analyzing the amount of applicants approved for a grant and the average grant award. This research will help illustrate the possible needs of clients, and it will help the Foundation know what other resources clients may need in addition to the grant given.

Annotated Bibliography

Himmelstein, D.U., Thorne, D., Warren, E., & Woolhandler, S. (2009). Medical bankruptcy in the United States, 2007: Results of a national study. *The American Journal of Medicine, 122*(8), 741-746. http://dx.doi.org/10.1016/j.amjmed.2009.04.012

This research studied the relationship between increased medical expenses and individuals filing for bankruptcy in the United States. The researchers found that 62.1% of all bankruptcies in the United States were due to medical issues, including $5,000 or more in medical debts or significant income loss due to illness. They used a random sample size of 2,314 people that had filed for bankruptcy, and they collected data from questionnaires, court records, and telephone interviews. In the study, they reviewed the demographics and health insurance coverage of the sample population. All the information they gathered was organized into three charts: one to categorize the demographic characteristics of the sample population and compare medical and nonmedical bankruptcy filers, the second to show medical causes of bankruptcy, and the third to compare health insurance status of the sample population. They also showed the changes in medical bankruptcy by comparing a study they previously did in 2001 and this study done in 2007. This research study is relevant as it discusses the positive correlation between medical expenses and financial struggle. The study is a mix of quantitative and qualitative data, and it is beneficial to this capstone project because it shows what types of data could be analyzed and included, as well as a layout for the data.

Wiltshire, J.C., Dark, T., Brown, R.L., & Person, S.D. (2011). Gender differences in financial hardships of medical debt. *Journal of Health Care for the Poor and Underserved, 22*(1), 371-388. doi: 10.1353/hpu.2011.0000

This research evaluated the relationships between medical debt, financial hardship and income, insurance, and health status in women. The researchers used retrospective record review as their form of collecting data, and they utilized the 2003 Community Tracking Study (CTS) Household Survey as their main tool to review. The researchers selected 4,747 participants in the CTS to evaluate and assessed questions that were answered in relation to consequences of medical bills. The findings of the study showed that overall, 94% of the respondents reported having financial struggles that were associated with medical debt. Of this 94%, "women were less likely than men to report being contacted by a collection agency, using savings, and incurring any financial hardships associated with medical debt" (Wiltshire, et. al., 2011). They also found that individuals who had poor health were significantly more likely to experience financial hardship, and men were more likely than women to be uninsured and had higher out-of-pocket medical costs. The research study discusses a wide variety of reasons for medical debt and financial hardships with men and women, and the policies that affect those reasons. The study is extremely beneficial to this capstone project because it evaluates the correlation between medical debt, insurance coverage, and financial hardships. The CTS could be used to analyze more recent data, to have a national viewpoint of medical debt and financial struggle. The type of data collected in the study could also be collected in this capstone project to determine more recent correlations.

Bharmal, M., & Thomas III, J. (2005). Health insurance coverage and health-related quality of life: Analysis of 2000 medical expenditure panel survey data. *Journal of Health Care for the Poor and Underserved, 16*(4), 643. doi: 10.1353/hpu.2005.0064

This research reviewed how having health insurance affects quality of life and availability of medical resources. The sampling frame for their study was a group of 9,396 individuals, with an oversampling of minorities. This sample population did not include people who had Medicare or Medicaid coverage. To acquire the data needed, the researchers provided a questionnaire and three interviews to each participant over one year. They utilized the SF-12 Physical Component Summary (PCS) and SF-12 Mental Component Summary (MCS) to measure participants' health-related quality of life. The design of the study was the 2000 Medical Expenditure Panel Survey, which allows correction of oversampling and non-response bias. Their findings showed that individuals who had health insurance had significantly higher PCS and MCS scores, or more physical and mental health. They also found that "people without health insurance were more likely to be younger, more likely to be male, less likely to be white, more likely to have family income below 200% of the federal poverty level, and less likely to have graduated from high school than people with health insurance" (Bharmal & Thomas III, 2005). The researchers compared the data found in this study with another study that utilized the same method in 1987 and found that the gap between having health insurance and having physical and mental health has grown. This research is helpful in showing the importance of health insurance as it relates to the wellbeing of clients. The tools utilized in the study may also provide a statistical measure for analyzing the health-related quality of life for participants in this capstone project.

Kronick, R., & Todd, G. (2002). Insuring low-income adults: Does public coverage

crowd out private. *Health Affairs, 21*(1), 225-239.

https://doi.org/10.1377/hlthaff.21.1.225

This research evaluated programs that were implemented in Minnesota, Washington, Oregon, and Tennessee to estimate the effects of the programs on low-income adults. The researchers utilized the Current Population Survey (CPS) from 1988 to 1999 to measure insurance status and demographics. The CPS is a survey provided by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics to about 60,000 households in order to accumulate labor statistics data in the United States. The researchers in this study also used a "difference-to-difference" approach to compare the insurance status for five years after the programs were implemented with the insurance status for seven years before the programs were implemented. In addition, they estimated a multivariate logistic regression to analyze demographics and employment characteristics of each participant to help control for factors such as economic conditions in the region of the study. The results of the research showed that expansion of public coverage resulted in a decline in the number of uninsured individuals with little to no effect on private insurance in individuals with below 100% of the federal poverty level, and some crowding out of private insurance among individuals between 100%-200% of the federal poverty level. This study shows that the public insurance expansion programs were mostly successful in decreasing the amount of people who are uninsured in those four states. The CPS tool utilized in the study could be used in this capstone project to determine insurance status and demographics of people from 2007 and 2017. This study is helpful in showing that expanding public insurance programs helps decrease the number of people uninsured and has little effect on the private insurance economy.

It is also useful in this capstone project by providing a comparison between states that have expanded public health insurance programs and states that have not.

Thiede, B.C., & Monnat, S.M. (2016). The Great Recession and America's geography of unemployment. *Demographic Research, 35,* 891-927. doi: 10.4054/DemRes.2016.35.30

This study analyzed the impacts of the 2007-2009 recession on different counties and regions of the United States, especially as it related to unemployment. The researchers utilized the Bureau of Labor Statistic's Local Area Unemployment Statistics (LAUS) to collect data for the study. They compared each county's pre- and post-recession social and demographic composition, industrial structure, and geographic characteristics. The data was organized in charts and maps to show the state and county unemployment rates across the United States. The researchers found a disproportion in unemployment between different counties within the United States. These disproportions showed the unemployment during the recession was more likely to occur in areas with a higher percentage of racial and ethnic minorities, low education attainment, and mostly construction and manufacturing industries. The data collected from this research study benefits this capstone project because it shows the economic status of counties in the United States in 2007. The Floor Covering Industry helps clients from all over the United States, and this data can be used to assess the financial status of clients relative to their home county. This data can provide an average baseline to compare the data collected and evaluate the need of clients during that time.

Leighton, K. (2009). Health insurance coverage and medical expenditures of immigrants and native-born citizens in the United States. *American Journal of Public Health, 99*(7), 1322-1328. doi: 10.2105/AJPH.2008.144733

This research compared the amount that immigrants and native-born citizens contribute to medical expenditures in the United States. The researcher analyzed quantitative data from the 2003 Medical Expenditure Panel Survey (MEPS), while controlling for socioeconomic factors (race, health status, insurance coverage, etc.) to obtain her results. She categorized annual medical expenditures into public, private, self-paid, and total expense. The research found that 44% of recent immigrants and 63% of established immigrants were covered by health insurance. The study also found that although immigrants paid the same amount as native-born citizens for health insurance, their medical expenditures were significantly less. Although many people believe the United States government is overspending on health care for immigrants, this study shows that immigrants actually receive fewer benefits and have less health care costs than native-born citizens. The researcher discussed in the study that insurers should take race/ethnicity into consideration when providing insurance to immigrants, and they should include language interpretation services to combat inequality in distribution of health care resources. Although this study showed disparity among immigrants and native-born citizens, it did not include undocumented citizens. The reason for this is most likely that undocumented immigrants are unable to obtain public insurance and may have very limited access to healthcare in general. Although this capstone project is unable to obtain data on the race/ethnicity of clients, this research

study is helpful in providing information to take into consideration when analyzing files on clients who may be experiencing some of these issues.

Timmons, A., Gooberman-Hill, R., Sharp, L. (2013). The multidimensional nature of the financial and economic burden of a cancer diagnosis on patients and their families: qualitative findings from a country with a mixed public-private health system. *Supportive Care in Cancer, 21*(1), 107-117. doi: 10.1007/s00520-012-1498-4

This study seeks to show how having a cancer diagnosis affects the household financial status in multiple ways. The researchers performed face-to-face semi-structured interviews with 21 oncology social workers and 20 patients from 11 different hospitals in Ireland. The researchers inquired about 3 different subjects: extra expenses incurred since the cancer diagnosis, cancer's impact on work and income, and access to financial assistance. They found that patients who were diagnosed with cancer experienced increased out-of-pocket medical (including patients with "medical cards") and non-medical costs, as well as a significant impact on employment and income. The results also showed that most of the patients stopped working because of their cancer diagnosis, and all of the patients had a decrease in income. Because of the decrease in income and increase in medical costs, patients experienced a larger financial burden in their households. One of the criteria to apply for the Floor Covering Industry Foundation is that the applicant must have a life-altering medical event; a diagnosis of cancer falls into that category. This qualitative study is helpful in showing the need to evaluate clients' medical costs and financial status. Although the study was completes in Ireland, it can be assumed that cancer patients in the United States also have increased financial burden after their diagnosis.

Mutchler, J.E., Shih, Y.C., Lyu, J., Bruce, E.A., & Gottlieb, A. (2015). The elder economic standard index: A new indicator for evaluating economic security in later life. *Social Indicators, 120*(1), 97-116. doi: 10.1007/s11205-014-0577-y.

This study reports on a new tool developed to measure the standard cost of living for older adults aged 65 and over. According to the researchers, the purpose of this study is to find a tool to evaluate programs such as Social Security and Medicare, so that they can make sure that older adults are getting the actual financial assistance that they need. The Elder Economic Standard Index is specifically used to assess the expenses of individual older adults or older adult couples who live independently. The research focuses on measuring adequacy and security of older adults, such as their ability to live on their own and not struggle financially from month to month. The study showed that many older adults who utilize Social Security earn just above the poverty threshold and are unable to receive any other government benefits. It was also shown that older adults who are at the highest risk of financial insecurity are those with unstable or low-paid work histories, divorced/widowed women, and members of racial minority groups. The researchers found that although there is a larger expenditure for older adults on basic needs and health care than younger adults, they experience a decline in financial resources as they transition into retirement-based income. The study is beneficial to this capstone project because it shows the financial struggles of a large population that the agency serves. It provides a new tool that can be utilized to collect data, as well as shows gaps in income that may be significantly impacting the elderly.

Kahn, J.R., Goldscheider, F., & Garcia-Manglano, J. (2013). Growing parental economic power in parent – adult child households: Coresidence and financial dependency in the United States, 1960-2010. *Silver Spring, 50*(4), 1449-1475. doi: 10.1007/s13524-013-0196-2

This research shows a shift in living arrangement over 50 years. In the study, the researchers utilized the U.S. Census, ACS, and IPUMS to accumulate data. They divided the data accumulated into three categories: "one-generation households", "multi-generation with parents", and "multi-generation with adult child". The results showed that younger adults over time have become more financially dependent on their parents and because of this, older adults are more likely to co-reside with their adult children. The researchers go in depth showing the multitude of reasons this has occurred, from lack of higher education to increased cost of living. But overall, it shows a shift in trend towards adult children moving back in with their parents because of different things going on in their lives. This is interesting to note with this capstone project, because it shows that co-residence has increased over time and may help in analyzing the data collected for the project. It shows how some household expenses could have increased as the likelihood of multigenerational households has increased. This research could be helpful in comparing the household size in the capstone project, as well as income earned by different household members.

Adloff, F. (2009). What encourages charitable giving and philanthropy? *Ageing and Society, suppl. Minimal Families: Childlessness and Intergenerational, 29*(8), 1185-1205. doi: 10.1017/S0144686X08008295

This research studies the reasons for people, specifically older and childless adults, to give to philanthropic organizations. The researchers analyzed social structure in Germany and the United States to compare the charitable traditions. They found that childlessness, educational level, health level, social capital, and religious affiliation all contribute to an individual's likelihood to donate to or set up a charity. They stated that social capital and financial capital seem to be the two most important resources in making a foundation effective. They also stated that giving seems to be an expression of self-identity in the elite population. They showed that there is no incompatibility between state welfare and charitable giving, and that one does not overshadow the other. These altruistic attitudes are nurtured by the agency itself, and foundations that focus on building donor relationships are more likely to get larger donations and volunteers. This study is important to this capstone because it shows how charities are effective. It can be used to find the ability of the Floor Covering Industry Foundation to reach out to others and secure the funding needed and can show if the Foundation is being as effective as possible.

Methodology

Research Question

How have clients' medical expenses and financial status changed from 2007 and 2017, and what has been the agency response?

Hypotheses

1. Household bills for individuals and families who were awarded a grant at the Floor Covering Industry Foundation consumed a higher percentage of their total expenses, as adjusted for inflation, in 2007 than 2017.
2. Medical expenses for individuals and families who were awarded a grant at the Floor Covering Industry Foundation consumed a higher percentage of their total expenses, as adjusted for inflation, in 2007 than 2017.
3. Clients who were awarded a grant at the Floor Covering Industry Foundation had more governmental financial assistance in 2007 than 2017.
4. A lower percentage of clients served by the Floor Covering Industry Foundation had health insurance in 2007 than 2017.

Variables

Independent Variables: poverty level in the United States in 2007 and 2017, sources of governmental financial assistance available, clients' financial and medical need, health insurance available, inflation amounts in the United States, individual client's income, and application to the Floor Covering Industry Foundation.

Dependent Variables: percentage of medical and household expenses over total expenses, whether clients have health insurance or not, and whether clients received governmental financial assistance or not.

Agency Setting & Services

The Floor Covering Industry Foundation is a small 501(c)(3) non-profit organization that provides financial assistance to individuals who have had a medical life-altering event, have worked in the floor covering industry for five or more years, and who have financial need. The program is located in Dalton, Georgia but serves clients in the floor covering industry footprint in all 50 states. The Foundation has a management agreement with the World Floor Covering Association (WFCA). According to the WFCA website (2017), they are "the floor covering industry's largest advocacy organization representing specialty floor retailers, manufacturers and distributors around the globe" (Humphrey, 2017). The WFCA funds the Floor Covering Industry Foundation, as well as individual and corporate donors from the flooring industry.

The Floor Covering Industry Foundation consists of three staff: a Case Manager, an Executive Director, and an Intern. The Executive Director and Intern work together to process the grants through assessment of clients' household bills, medical expenses, and financial status. They then create a letter of recommendation based on the data collected on each household to send to the Grant Review Committee. The Grant Review Committee is comprised of six senior executives of flooring manufacturers and retailers. The Foundation currently has a medical Case Manager employed who determines the medical eligibility of clients for the grant based on the records obtained from their physicians. The Case Manager also helps the Executive Director and Intern assess and create clients' case files.

Because the Foundation reaches out to clients across the nation, there is a wide diversity in applications. The grant applications provided by the Foundation do not have a place to specify race or nationality, so information regarding ethnicity in the target population is unavailable. The

average age of clients served by the agency, as assessed by the ages stated on the clients' grant applications, is between 50-70 years old.

One of the criteria to apply for a grant at the Foundation is that the individual applying or someone in the individual's household must have worked for the floor covering industry in some way for at least five years, which limits the demographics of the target population to this measure. The second criteria that applicants must meet is they must have a medical life-altering event, which according to the Floor Covering Industry Foundation website (2017), is a "catastrophic medical crisis, injury, disability, or mental illness". The Foundation focuses on low-income households and individuals with a financial need. The organization analyzes the various medical and living expenses that accumulate after the medical life-altering event to determine financial need for the household (FCIF, 2017).

Design

This study is a retrospective record review of client case files to obtain quantitative data on clients who were awarded grants from the Floor Covering Industry Foundation in 2007 and 2017. Because the population evaluated is notably heterogeneous, the sampling frame will include all clients who were awarded grants from the Floor Covering Industry Foundation in 2007 and 2017. The data collected by the researcher will be reviewed in accordance to the guidelines dictated by the Internal Review Board (IRB) at Dalton State College.

Data Collection & Analysis

The researcher will perform a secondary analysis of data archives within the agency to obtain statistical data on each client. The researcher will utilize grant applicants' case files from 2007 and 2017 to analyze how many clients are insured, the average income of clients, resources and sources of income for households, average medical expenses, percentage of income spent on

medical and household expenses, and percentage of total expenses spent on medical and household expenses. The researcher will also use statistical data obtained from the U.S. Census Bureau in conjunction with the clients' case files to help measure variables and test hypotheses. When necessary, an amortization schedule will be utilized to find monthly credit card bills for clients at 9.72% interest over 5 years. The Official USDA Food Plan was utilized to calculate cost of food per month for each household. Monthly transportation costs per household were calculated by using the IRS Transportation Expenses Standards. The U.S. Bureau of Labor Statistics was utilized to adjust for inflation, which showed a 20% increase in the value of the U.S. dollar from 2007 to 2017. The data collected from client files will be coded so that only the researcher will know the client identity. The researcher will utilize nominal, ordinal, interval, and ratio measures, as they apply, to organize the data into different charts. The overall averages of the data collected and results will be presented in the Dalton State College Social Work Department and given to the Floor Covering Industry Foundation for the benefit of improving their services.

Ethical Practice

Prior to the research study, the researcher will obtain approval from the Dalton State College Internal Review Board (IRB) and the Floor Covering Industry Foundation executive director. The researcher will utilize the National Association of Social Workers' (NASW) Code of Ethics as a guideline to establishing best practice throughout the research study. Section 1.07(c) of the NASW Code of Ethics states that "Social workers should protect the confidentiality of all information obtained in the course of professional service except for compelling professional reasons….In all instances, social workers should disclose the least amount of confidential information necessary to achieve the desired purpose; only information

that is directly relevant to the purpose for which the disclosure is made should be revealed" (NASW Code of Ethics, 2017). Since the study is a retrospective record review, written consent will not be obtained in this research study. To ensure confidentiality, the researcher will assign and utilize case numbers for each client and only the researcher will know their identity. The information and data collected will be kept in a secure location while the study is proceeding, and all irrelevant information will be destroyed at the conclusion of the study. The information will be presented only in overall average amounts; so individual client identity will be unknown in the results.

Results

The results of this study, as adjusted for inflation, showed that clients earned an average of $1,622 in 2007, and $2,196 in 2017. The sources of total income assessed included monthly wages, short or long-term disability, Workers' Compensation, alimony, child support, and governmental financial assistance programs. Clients were also found to have an average of $2,551 in household bills each month in 2007, and $2,770 in 2017. The household expenses included utilities, food, transportation, rent/mortgage, credit card bills, and loans. This showed an overall 30% increase in total income and a 9% increase in household bills from 2007 to 2017. The results are contrary to the researcher's hypotheses, because they showed that a household bills consumed a higher percentage of clients' total expenses in 2017 than in 20017.

The results also showed that clients in 2007 had an average of 0.72 sources of governmental financial assistance, while clients in 2017 had an average of 1.38 sources. This showed a 92% increase in government resources utilized to provide financial assistance from 2007 to 2017. The governmental resources utilized by clients include Medicare, Medicaid, Social Security (SSA), Social Security Disability (SSDI), Temporary Assistance for Needy Families

(TANF), Employee Assistance Program (EAP), food stamps, and Veterans' Association (VA) benefits. These results are also contrasting to what the researcher predicted because clients had more governmental financial assistance in 2017 than in 2007.

The medical expenses of clients were calculated as monthly amounts based on the dates of service on their medical bills. Clients were found to have an average of $930 in medical expenses each month in 2007, and $744 in 2017. The cost of medical care each month was calculated by using monthly prescription bills, lab bills, hospital bills, health insurance premiums, deductibles, and out of pocket maximums. Many clients stated they use credit cards for most of their medical expenses since they are unable to afford the costs of medical care, so credit card bills were also assessed. It was found that clients had an average of $469 in monthly credit card bills in 2007, and $194 in 2017. These results showed and overall decrease in medical expenses by 20% and credit card bills by 59% from 2007 to 2017.

The research found that the average amount of clients who had health insurance in 2007 was 92% and 90% in 2017. This showed only a 2% decrease from 2007 to 2017. Although there was only a slight decrease, there was a significant different in the average amount of clients with public versus private insurance. An average of 21% of clients had Medicare and/or Medicaid in 2007, while an average of 44% of clients had Medicare and/or Medicaid in 2017, which shows a 23% increase in public health insurance from 2007 to 2017. The increase in clients with health insurance from 2007 to 2017 is equivalent to what this researcher predicted, but the decrease in medical expenses from 2007 to 2017 was contrasting with what was predicted.

There are several socio-economic factors that may influence the change in income and expenses from 2007 to 2017. The United States was in a recession from December 2007 to June 2009. This could explain the significant difference in income from 2007 and 2017, and it may

also explain the difference in household bills between 2007 and 2017. Another factor that may be taken into account is the enactment of the Affordable Care Act (ACA) in 2010 by President Obama. This could account for the increase in public health insurance for clients in 2017 compared to clients in 2008.

Implications

There are many ways the results of this study can be useful for the Floor Covering Industry Foundation and the social work profession overall. This type of study can be repeated on a larger scale for a welfare agency in a specific county, state, or even nationally. The information collected from a larger study could be generalized for a larger population and find where the greatest need is for all individuals living in poverty in the United States.

This study also shows that governmental programs help clients significantly with their household and medical expenses. This could help the agency in making referrals, and it can help convince the government to continue these programs for those who are living in poverty. It helps evaluate clients' overall situations from a person-in-environment perspective so the Floor Covering Industry Foundation can find what areas clients are most financially needy in. This helps the Foundation implement programs and refer clients to other organizations as needed. It also helps the Floor Covering Industry Foundation staff know how to best utilize the grant funding for individual clients.

Lastly, collecting the results of this study showed the importance of keeping accurate and detailed records. It shows that the Floor Covering Industry Foundation has significantly improved on the policies and procedures in place, and the staff have been able to collect much more accurate information from clients. In order to have accurate results, detailed notes and specific bills must be collected from clients throughout the process of awarding a grant.

Limitations

There were a few limitations with this project that may have affected the results of the study. The Floor Covering Industry Foundation was located in California in 2007, but was in Georgia in 2017. The staff employed in 2007 were different from the staff in 2017, and they did not collect as detailed information on clients. The policies and procedures were not clearly outlined, and thus it was difficult to gather all the necessary information on clients in 2007. Some of the data collected from clients in 2007 was based on what they listed on their applications rather than direct information collected from bills.

Another limitation to the study is that clients may not have submitted all of their income and bills, thus the data may not be completely accurate. Expenses such as food and transportation were based on national standards during that year, instead of actual costs of each individual. The monthly credit card expenses were calculated with an amortization schedule at 9.72% interest over 5 years when monthly credit card amounts were not available.

The data was only collected from grant recipients, so the results of this study cannot be generalized for the entire United States population. The study was not repeated to test for validity. The applications given to clients do not include demographics for race and ethnicity or sexual orientation, therefore this information could not be accounted for in the results.

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