

Master of Public Health
Integrative Learning Experience Report

**A GUIDE FOR UPDATING THE PAWNEE MENTAL HEALTH
SERVICES WEBSITE**

by

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submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Summary

Pawnee Mental Health Services' website provided limited information to the people whom it targeted – consumers, potential donors, and healthcare providers. During my 240-hour internship, I reviewed a number of community mental health center websites, and I identified specific website features that would be directly beneficial to an upgrade of the Pawnee Mental Health Services websites. I created PowerPoint slides to update content that the management staff could then use to create a website. In addition, I created PowerPoint slides for use by the website designer to create pages and modules. Finally, I created a suicide prevention brochure to address an important un-met need. During the internship, I attended Community Mental Health Center Advocacy Day, furthering my public health networking experience.

Subject Keywords: Mental, Health, Website, Content

Table of Contents

| | |
|---|-------------------------------------|
| Summary/Abstract | - 2 -2 |
| List of Figures | 4 |
| List of Tables | 4 |
| Chapter 1 - Literature Review | 5 |
| Chapter 2 - Learning Objectives and Project Description | 13 |
| Chapter 3 - Results | 17 |
| Chapter 4 - Discussion..... | 19 |
| Chapter 5 - Competencies | 20 |
| Student Attainment of MPH Foundational Competencies..... | 20 |
| Student Attainment of MPH Emphasis Area Competencies | Error! Bookmark not defined. |
| References or Bibliography..... | 22 |
| Appendix A | 25 |
| Appendix B | 26 |

List of Figures

| | |
|--|----|
| Figure 1.1 Pawnee Mental Health Service Area..... | 12 |
| Figure 1.2 Pawnee Mental Health Services Organizational Structure..... | 13 |

List of Tables

| | |
|--|-------------------------------------|
| Table 1.1 A Model That is Applicable to Public Health | 5 |
| Table 1.2 Health Belief Model | 6 |
| Table 1.3 HC and HIT-8.1 objective criteria and reliability requirements | Error! Bookmark not defined. |
| Table 1.4 HC and HIT-8.2 established usability measures | 8 |
| Table 3.1 Results from comparison of community mental health center websites | 17 |
| Table 5.1 Summary of MPH Foundation Competencies | 20 |
| Table 5.2 MPH Emphasis Area Competencies | 21 |

Chapter 1 - Literature Review

Public health communication provides information to help people maintain and improve their health. Effective communication can increase the self-reliance of individuals, families, organizations, and communities (U.S. Department of Health and Human Services). According to *Theory at a Glance*, productive application is reliant on using strategies that are appropriate to the situation. There are several health behavior theories that can be applied to different situations; however, health practitioners should understand the characteristics of the target community (U.S. Department of Health and Human Services).

Within Healthy People 2010, health communication is defined as “the art and technique of informing, influencing, and motivating individuals, institutions, and public audiences about important health issues... [for the] enhancement of the quality of life and health of individuals in a community” (Bernhardt). This communication cannot occur without thought to the social context with which the audience perceives the information. The World Health Organization encourages a “transmission view of communication,” where the likely characteristics and response of the audience are considered. Many factors determine the meaning people interpret from information. There are personal factors, such as prior experience, beliefs, knowledge, and macrosocial factors, such as existing relationships and societal norms that affect a person’s perspective. A model that seeks to explain this interpretive framework is the ecological model, which notes the complex levels of influence for health-related behaviors. Understanding this model leads a public health communicator to assess the population they are serving and the needs thereof (U.S. Department of Health and Human Services).

Table 1.1. A model that is applicable to public health communication(U.S. Department of Health and Human Services).

| Concept | Definition |
|---|---|
| Intrapersonal Level | Individual characteristics that influence behavior, such as knowledge, attitudes, beliefs, and personality traits |
| Interpersonal Level | Interpersonal processes and primary groups, including family, friends, and peers that provide social identity, support, and role definition |
| Community Level Institutional Factors | Rules, regulations, policies, and informal structures, which may constrain or promote recommended behaviors |

| | |
|-------------------|---|
| Community Factors | Social networks and norms, or standards, which exist as formal or informal among individuals, groups, and organizations |
| Public Policy | Local, state, and federal policies and laws that regulate or support healthy actions and practices for disease prevention, early detection, control, and management |

This model is applicable when assessing whether an individual seeks and then pursues mental health treatment. At the intrapersonal level, a person may believe that they can manage their mental illness by themselves. They may have preconceived beliefs about people who use community mental health centers. At the interpersonal level, the person may have friends who do not believe mental health treatment is important, or the person's primary care doctor may not tell them that they should seek treatment for their psychological symptoms. At the organization level, it may be hard to schedule an appointment due to limited access to a phone, or limited access to transportation. At the policy level, an individual may lack insurance coverage and therefore be discouraged to seek help and alternatives. In conclusion, the outcome -- an individual's failure to seek mental health treatment -- can result from a multitude of factors.

Another model that is applicable to this situation is the Health Belief Model, which "address the individual's perceptions of the threat posed by a health problem (susceptibility, severity), the benefits of avoiding the threat, and factors influencing the decision to act (barriers, cues to action, and self-efficacy)" (U.S. Department of Health and Human Services).

Table 1.2. Health Belief Model (U.S. Department of Health and Human Services)

| Concept | Definition | Potential Change Strategies |
|---------------------------------|--|--|
| Perceived susceptibility | Beliefs about the chances of getting a condition | <ul style="list-style-type: none"> • Define what population(s) are at risk and their levels of risk • Tailor risk information based on an individual's characteristics or behaviors • Help the individual develop an accurate perception of his or her own risk |

| | | |
|---------------------------|--|--|
| Perceived severity | Beliefs about the seriousness of a condition and its consequences | <ul style="list-style-type: none"> Specify the consequences of a condition and recommended action |
| Perceived benefits | Beliefs about the effectiveness of taking action to reduce risk or seriousness | <ul style="list-style-type: none"> Explain how, where, and when to take action and what the potential positive results will be |
| Perceived barriers | Beliefs about the material and psychological costs of taking action | <ul style="list-style-type: none"> Offer reassurance, incentives, and assistance; correct misinformation |
| Cues to action | Factors that activate “readiness to change” | <ul style="list-style-type: none"> Provide “how to” information, promote awareness, and employ reminder systems |
| Self-efficacy | Confidence in one’s ability to take action | <ul style="list-style-type: none"> Provide training and guidance in performing action Use progressive goal setting Give verbal reinforcement Demonstrate desired behaviors |

There are many barriers to seeking out mental health treatment, especially online resources. One of these barriers is the higher prevalence of low literacy in populations who used mental health services. In one study, it was found that 69% of public mental health service users in the United States read at or below the eighth-grade level (Lincoln, Adams and Eylon). We must take this barrier into consideration when evaluating how and what type of information people seek online. MedlinePlus suggests a reading level of less than eighth grade for easy-to-read health materials (Medline Plus). On the one hand, there are some benefits to using the internet to display health information, particularly mental health information. Many adults in the United States use the internet to browse health information. In fact, 33% of adults use the internet to learn about a health-related concern in the United States (Jacobs, Amuta and Jeon). The literature shows that a majority of adults in all generations are looking online for health information, and they are using the information they find to make healthcare decisions for themselves or a loved one (Devine, Broderick and Harris). Therefore, the internet can be a great resource for health centers to post information. Deborah Da Costa explains that the internet has great potential to enhance and prevent mental health, as it anonymous, highly accessible, and can be adjusted to fit different populations (Da

Costa, Zelkowitz and Letourneau). On the other hand, not everyone who needs mental health treatment seeks it. The rates for health seeking are different depending on the population. In the adolescent population, professional treatment is provided for about 25% of those with mental health problems. There could be multiple explanations for this deficit. One article explains that adolescents have low help-seeking behavior (Kaess, Ritter and Lustig). In the college student population, many students do not seek counseling services. This is likely due to a lack of knowledge about mental health problems or services (Cook), which could be overcome by providing more resources online.

A number of health communications strategies can be used to improve health outcomes in people with mental illness. Most of the communication literature is specifically addressing people seeking health information online. Findings reported in the health communication literature can be incorporated into thinking about the health resources that one provides to their consumers. Because previously it was stated that 69% of those who use mental health services may have a reading level at or below the eighth-grade level, people with more limited literacy skills can struggle with decoding words that are challenging and may find it difficult to remember their meanings. One health communication strategy would be to use simple language in explaining treatments (Colter and Summers). In addition, people with limited literacy skills have more problems with short-term and working memory, especially if accompanied by a mental illness (Baker, DeWalt and Schillinger). A second health communication strategy is to limit the amount of information on a web page and list the most important details first.

Healthy People 2020 has objectives that pertain to website quality. Health Communication and Health Information Technology objective 8.1 is to increase the proportion of health-related websites that meet 3 or more evaluation criteria for disclosing information that can be used to assess information reliability. Information reliability pertains to the authenticity and credibility of a website, along with clarity in the site's purpose and ownership.

An abbreviated table is presented below with the listed requirements.

Table 1.3. Health Communication and Health Information Technology-8.1 objective criteria and reliability requirements

| Criteria | Reliability requirements |
|----------|--|
| Identity | Name of organization responsible Street address Identified source of funding |
| Purpose | Statement of |

| | |
|---------------------|---|
| | purpose/mission |
| Content Development | Uses & limitations of services provided Differentiation of advertising from nonadvertising |
| Privacy | Privacy policy How personal information is protected |
| User feedback | Feedback form |
| Content updating | Date content created Date content updated/reviewed |

HC/HIT-8.2 is to “increase the proportion of health-related websites that follow established usability principles” (Devine, Broderick and Harris). Usability, in this sense, is categorized into three sections: site design, information architecture, and content design. Site design is how users maneuver to the information on the site. Information architecture is how the information is arranged. Content design is how one interacts with the site. Specific guidelines to achieve each of these goals are put forth in federal guidelines on website usability (U.S. Department of Health and Human Services: U.S. General Services Administration). These requirements are listed in an abbreviated table below.

Table 1.4. Health Communication and Health Information Technology-8.2 established usability measures

| Categories | Established usability principles |
|--------------------------|---|
| Site Design | Make obvious what is clickable Minimize vertical scrolling Ensure site is accessible Incorporate multimedia |
| Information Architecture | Provide easy search functionality Make pages easy to scan Make elements easy to read Visually group related topics Make sure text & background contrast |
| Content Design | Focus the writing on audience and purpose Minimize technical terms; use |

| | |
|--|---|
| | the user's language Allow for interaction with the content |
|--|---|

Other studies have suggested different criteria for categories. For example, the criteria from an article entitled *Evaluation of Greek Public Hospital Websites* was used to evaluate several community mental health centers (Patsioura, Kitsiou and Markos).

Mental Illness and Risk of Infectious Disease Rates

Increased Risk of Infectious Diseases

There is evidence that the mentally ill population has less access to healthcare services. In addition, people who are mentally ill, especially those who have a substance use disorder, are at an increased risk for acquiring an infectious disease. In fact, previous research has shown that users of mental health and substance abuse services experience symptoms and behaviors that put them at a higher risk for contracting Human Immunodeficiency Virus and other infectious diseases, namely Hepatitis C and sexually transmitted infections (Brems, Johnson and Watkins). Other studies have also found this same statistic to be true. "Over the past 8 years, more than a dozen articles have reported elevated rates of HIV infection (5.2%-22.9%) in people with severe mental illness; comparable estimates in the overall US adult population are approximately 0.3% to 0.4%" (Rosenberg, Goodman and Osher). The article continues to say that people with severe mental illness also may have increased rates of sexually transmitted diseases (Rosenberg, Goodman and Osher). A third article explains that there may be an increased mortality with those with serious mental illness due to an increased prevalence of some cancers and infectious diseases (Scott and Happell). It is possible that this is due to a reduced probability of those with an SMI to receive adequate medical attention (Robson and Gray).

Mental Illness and Social Class

The occurrence of mental illness and/or substance use disorder tends to be inversely related to social class (Perry). Forty-six percent of adults living in homeless shelters have a severe mental illness and/or substance use disorder (US Department of Housing and Urban Development).

There is little literature that directly addresses to what extent infectious disease rates relate to mental illness. From the available literature (Perry), we know that people with mental illnesses tend to live in lower social classes. Mentally ill people in lower social classes suffer disproportionately from infectious diseases. This was first established in literature from the 19th and 20th centuries, in which cholera and tuberculosis were noted more heavily in regions of poverty (Noppert, Kubale and Wilson). However, there has not been substantial progress using social epidemiological methods in infectious disease epidemiology research (Noppert, Kubale and Wilson). As Noppert explains,

social epidemiology would allow researchers to assess transmission and exacerbation disparities with respect to a social environment (Noppert, Kubale and Wilson). This would better allow us to determine what social factors contribute to an increase in disease rate.

Infectious Agents in Mental Illnesses

There are some infectious agents that cause dementia, which is listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) under Neurocognitive Disorders (American Psychiatric Association). These include the human immunodeficiency virus, prions, *Treponema pallidum*, and others. Some of the bacteria infect the brain by crossing the blood-brain barrier via tunneling through the walls of the blood vessels (Mulcahy). Dementia specifically is a reduction in brain function that impairs memory, language, judgement, and behavior. A specific bacterium that causes dementia-related symptoms is *Treponema pallidum* (Syphilis). This bacterium is spread by direct contact (90% of cases are associated with sexual contact). Untreated syphilis can lead to tremors and cognitive impairment.

Introduction to Pawnee Mental Health Services

There are 26 community-based public mental health services in the state of Kansas. These centers provide mental health rehabilitation services, such as peer support, case management, attendant care, psychiatric treatment and psychosocial rehabilitation. They also serve as the gatekeepers for state mental health hospitals and nursing facilities. A key characteristic of these facilities is that they offer services at a reduced cost and do not deny services due to the inability to pay. The centers operate under state licensing regulations and are reviewed by the Kansas Department for Aging and Disability Services. In addition, they are regulated by Medicaid and Medicare standards and audits.

Pawnee Mental Health Services was created in 1956. At that time, it was named Riley County Mental Health Center and had one staff person. In 1981, Pawnee Comprehensive Mental Health Center was merged from two organizations under a board of directors. Two board members were appointed by the Commissioners from each of the 10 counties in the service area. They are appointed to three-year terms by each County's Commissioner. The mission of Pawnee Mental Health Services is to enhance and strengthen the wellness of our communities by providing quality mental health and substance abuse services. Pawnee is region number 7 in the figure below.

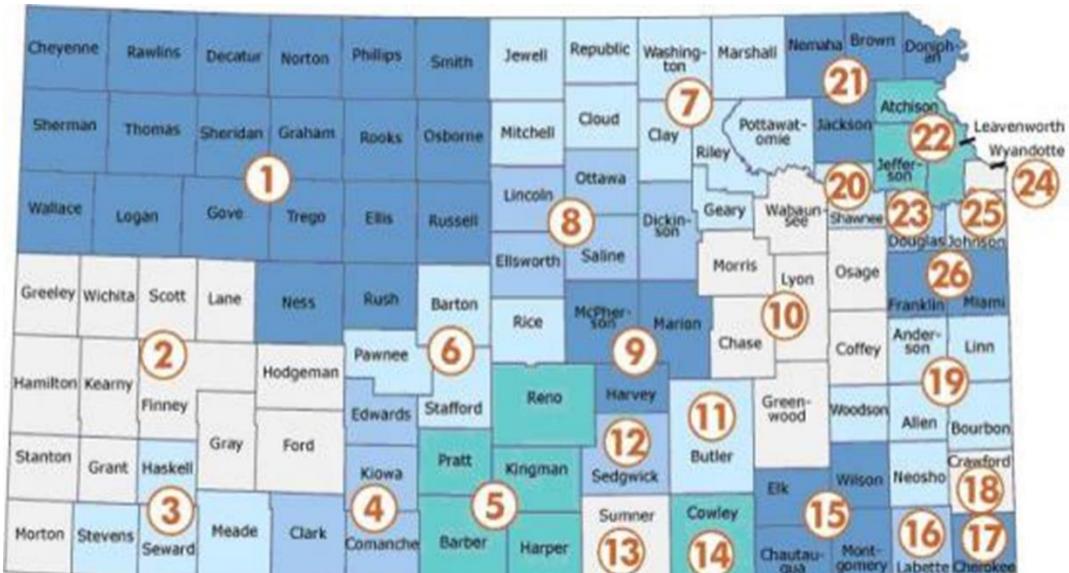


Figure 1.1 Pawnee Mental Health Services - region number seven from Craig Poe, Human Resources.

State and federal funding provide less than \$2,000,000 of the more than \$11,000,000 Pawnee budget. Client fees contribute to 69% of the income, while state, federal, county, and local funding combined provides about 27%. Pawnee is supported in part by private grants and donations. In fact, in January 2017, Pawnee hired its first full time development manager to assist the center in meeting their monetary needs through private support.

Pawnee has a structure that allows them to efficiently provide services to the community, as displayed by their organizational structure in Figure 1.2. Pawnee has about seven categories of services: mental health services, substance use services, adult rehabilitation services, youth rehabilitation services, training and education, crisis services, and medical services. Over 10,000 people were served through these various programs last year (2018).

The management team is responsible for overseeing various aspects of the organization.

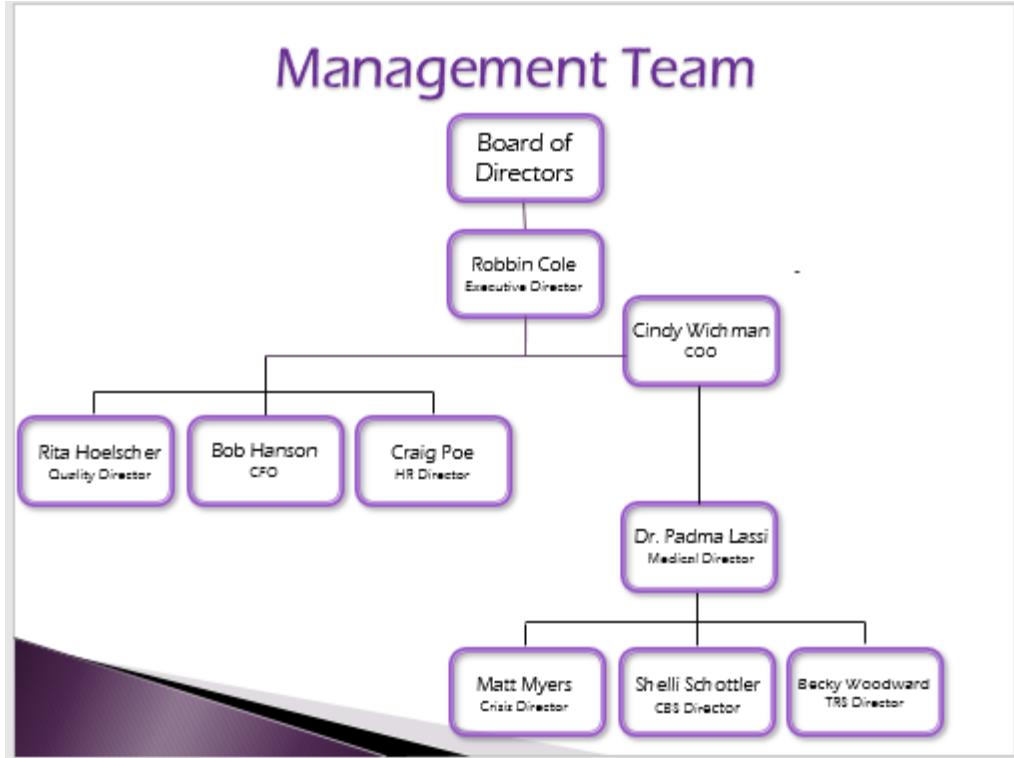


Figure 1.2 Organization chart of employee structure by Craig Poe.

In my time at Pawnee, I met several of the directors and learned a little about their role. Most of my communication was with Robbin Cole. Under the director level is the manager level. I worked directly with Diane Hinrichs, who is the development manager.

Robbin Cole is the Executive Director for Pawnee Mental Health Services. She earned her Bachelor of Art in Social Work from Kansas State University and her MSW from Kansas University. Robbin has been a social worker for over 35 years. In her undergraduate years, she worked in long term care and acute care. She then entered the mental health field when she became a therapist at Pawnee. Robbin has worked in management positions for 27 years. Her first management position was at Catholic Charities in Wichita. She then worked for two years for a managed behavioral health care organization and then returned to Pawnee as the Clinical Director. She has now been the Executive Director for 13 years. In Robbin's free time, she is a member of the Governor's Behavioral Health Planning Council and the Riley County Public Health Advisory Group.

Diane Hinrichs is the Development Manager for Pawnee Mental Health Services. She earned her Bachelor of Science in Business Administration – Marketing. Her Master of Science is in Counseling and Student Development. She will be receiving her PhD in Higher Education Administration in May 2019. Diane worked for the Kansas

State University Foundation for 16 years. She now raises funds and completes grant writing for Pawnee Mental Health Services.

Chapter 2 – Learning Objectives and Activities

Learning objectives

- Understand the function and structure of a community mental health center
- Improve communication skills by presenting to Pawnee Mental Health Services stakeholders
- Learn about the everyday processes at PMHS that create an environment for a successful community mental health center

Expectations for the projects

- Support PMHS through the development of web content that inspires and motivates clients and community stakeholders
- Develop a comprehensive report on recommendations for web content to effectively communicate the agency mission, vision, and activities to clients and community stakeholders
- Research and compare websites of other community mental health centers
- Research previous annual reports of PMHS
- Present final content recommendations to PMHS management

Common Table Meeting

Diane Hinrichs and I attended a meeting for Common Table. Many items on the agenda pertained to my public health education. Common Table was created by several churches in the community, which together provide a meal each day of the week. Everyone is invited to these meals, although the focus is on those who are homeless or food insecure.

One item that we discussed was the Hunger Summit. It was during this time that a member mentioned that they are searching for people to help others to fill out the Supplemental Nutrition Assistance Program application. It was noted that 20,000-30,000 people are no longer covered. In addition, it can be difficult to fill out the lengthy application.

Finally, we discussed the possibility of Common Table providing 10 meals to the Crisis Stabilization Unit. The members all agreed that it would be feasible to provide the meals. In this meeting, I observed the members assessing population needs that affect community members' health, as well as applying the principles of resource management. Collectively, the group fostered collaboration between the organizations to benefit the welfare of the community. They effectively worked inter-professionally, as there were many people from different sectors present.

Community Mental Health Center Advocacy Day

Diane Hinrichs, Deanna Hall, Amy Wedel, and I attended CMHC Advocacy Day at the Kansas State Capitol. During our time, we attended a meeting, talked to legislators, and worked a booth. There were many policies that we discussed in the meeting that we presented to legislators. Addressing the needs of the uninsured and underinsured was a concern, in addition to Medicaid expansion. Another topic of discussion was encouraging legislators to support Senate Bill 193 regarding social work licensure. This would make it easier for individuals licensed in other states to become licensed in Kansas. There were many competencies met during this trip. During the advocacy meeting, we proposed strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes. In meeting with the legislators, we advocated for political, social, or economic policies and programs that will improve health in the mentally ill population. By working the booth for Pawnee, I communicated audience-appropriate public health through oral presentation.

ACMHCK Marketing & Development Group

After working a booth at the state capitol with other community mental health centers, we attended a meeting with the marketing and development managers. We discussed marketing tactics among the different centers, as well as events that were coming up. Gary Henault from Kansas Department of Aging and Disability Services expressed his intent to write a proclamation for the state of Kansas for Children's Mental Health Day and encouraged participation and events from the community mental health centers present. We compared the organization and function of the public health agencies present and shared details on how to foster improvement. In this meeting, I selected communication strategies for the specific audience and sector. Finally, I applied the principle of leadership by actively participating in the meeting.

Website Discussion Meeting with Management

On February 22, 2019, I met with Craig Poe, Human Resources Director, Diane Hinrichs, Development Manager, Deanna Hall, Marketing Manager, and myself. We had three items on the agenda. (1) A discussion of the current website with its pros and cons. (2) A discussion and overview of my new design work. (3) A discussion on how to use my materials moving forward. There were additional comments on possibly researching traffic for mental health websites and identifying websites that were successful in raising money and those that were successful attracting new clients. Mr. Poe mentioned that the benefits list should be kept on the website because they are a good driver for recruiting employees for a non-profit.

Project Description

Background

A study from 2013-2017 revealed that 83.7% of households in Manhattan, KS have a broadband internet subscription, which is higher than the national average of 65% as of January 2018 (United States Census Bureau; Pew Research Center). Health purposes has been an increasing reason for use of the internet and it now serves as a key source of information for patients and families seeking medical care (Mukhopadhyay, Waller and Franklin). Health related searches make up about 4.5% of searches on the internet (Fysenbach and Kohler). In one study (Norem and Moen), it was noted that the most effective way to gain a patient's confidence is to present a website that is well-structured.

The aim of this study was to explore the characteristics and display of the contents of community mental health center websites. Healthy People 2020 has two objectives regarding health communication and health information technology. They are to HC/HIT-8.1: "Increase the proportion of health-related websites that meet three or more evaluation criteria for disclosing information that can be used to assess information reliability." HC/HIT-8.2: "Increase the proportion of health-related websites that follow established usability principles (Office of Disease Prevention and Health Promotion)." Healthy People 2020 gives criteria, usability and reliability requirements to meet these goals.

The websites were evaluated using an abbreviated version of an *ad hoc* Codebook, implemented in *Italian hospitals on the web: a cross-sectional analysis of official websites* (Maifredi, Orizio and Bressanelli). A number was calculated representing the "score" for the evaluation of each website.

Website identification and selection

Twenty-two websites were officially evaluated, 12 in Kansas, and 10 out-of-state. The out-of-state facilities were generated by a random number generator corresponding to the number of the community health center in state and state out-of-state. The first community health center that appeared when typing in "(State) community health centers" was used. The exception was Brookline, No Stone Unturned, and New Direction, which were included at request of the Development Manager. The websites were evaluated in different categories.

- 1) Technical contents, such as an internal search engine, date of last page update, credentials, general disclaimer, patient rights, privacy policy, and second language capability
- 2) Center information, such as the history of the hospital, news and announcements, insurance coverage, phone number and fax number, mission/value statement, intake forms, and frequently asked questions
- 3) Clinical services, such as the type of clinical services offered, and clinical personnel information
- 4) Interactive online services, such as a bill pay system, online appointment scheduler, contact form, possibility to sign up for a newsletter, and donation system
- 5) External activities, such as links to health information, and job opportunities

The abbreviated version of the Codebook was used to score each website by identifying the presence or absence of each of the items. A score was calculated for

each website out of 24, in order to compare the amount of information provided by each website.

Chapter 3 – Results

Table 3.1 Results from comparison of community mental health center (CMHC) websites.

| | Kansas CMHC | Out-of-State CMHC | Pawnee |
|--------------------------------|-------------|-------------------|--------|
| History | 50% | 60% | Yes |
| News/Announcements | 75% | 80% | Yes |
| Types of Clinical Services | 75% | 80% | Yes |
| Clinical Personnel Information | 58% | 90% | No |
| Insurance Coverage Information | 8% | 0% | No |
| Date of Last Page Update | 0% | 0% | No |
| Credentials Noted | 33% | 30% | No |
| Links to External Health Sites | 50% | 40% | No |
| Phone and Fax Number | 58% | 80% | Yes |
| Internal Search Engine | 25% | 60% | No |
| Includes Second Language | 8% | 40% | Yes |
| General Disclaimers Provided | 41% | 50% | Yes |
| Statements of Values/Mission | 41% | 80% | Yes |
| Patient Privacy Statement | 66% | 80% | Yes |
| Online Appointment Scheduler | 0% | 0% | No |
| Contact Form | 33% | 40% | No |
| Sign up for Newsletter | 25% | 10% | No |
| Job Opportunities Presented | 58% | 80% | Yes |
| Make a Donation Online | 50% | 80% | Yes |
| Interactive Annual Report | 0% | 0% | No |
| Payment Portal | 16% | 10% | No |
| Intake Forms | 75% | 10% | No |
| FAQ | 42% | 20% | No |

This research provides an evaluation of the performance of community mental health center (CMHC) websites through Kansas and the United States. The individual results are listed in Appendix A and B. Most notably in the study, it was found that unlike some other mental health websites, the studied websites did not have interactive annual reports. 75% of CMHC websites in Kansas had the intake forms online. In addition, many of the websites had internal search engines.

I accomplished a number of tasks during my time at Pawnee. These included the following:

- Research and comparison of community mental health center websites
- Compilation of web content that can be used as a guide to publish the website
- Design of a timeline to summarize Pawnee's history
- Attended Community Mental Health Center Advocacy Day
- Observed the interaction of the administrative staff at a public health agency
- Created a Suicide Prevention pamphlet for publication

Chapter 4 – Discussion

As a result of the study of different community mental health center websites, I recommend the following:

- Add more information on treatment options
- Pursue the use of ISSUU, an interactive document reader, for its annual reports instead of a button that links to the document
- Include an internal search engine
- Provide credible external health information and resources
- Include the names and pictures of clinical personnel
- Include links to mental health assessments
- Add a “Safety Net for the Community” page

My input has enhanced Pawnee’s understanding of a useful community mental health center website in many ways. My recommendations will make the information easier to understand and therefore more accessible by people with mental illness. In addition, the information will be easier to find with an internal search engine. Sometimes, people have problems determining which mental health websites provide credible information, so the updated Pawnee websites will include credible sources for consumers to use. The names and pictures of clinical personnel could be uploaded to the website to allow the consumers to feel more connected with the people providing information and treatment options. Finally, links to mental health assessment websites could be included to assist individuals in deciding if their symptoms could be indicative of a mental illness.

A limitation of my study is the lack of previous research investigating mental health website use. Pawnee Mental Health Services did not have Google Analytics activated, so it was hard to determine where people clicked to learn more about services and where people clicked to donate money – two major purposes of the website.

Chapter 5 – Competencies

Table 5.1 Summary of MPH Foundation Competencies

| | |
|--|--|
| 5 – Compare the organization, structure, and function of health care, public health, and regulatory systems across national and international settings | Attending marketing and development meeting, comparing the organization of different community mental health center websites |
| 7 – Assess population needs, assets, and capacities that affect communities' health | Designing web content appropriate for the population's need |
| 13 – Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes | Discussing potential policies with legislators to inform them of the importance of mental health legislation |
| 18 – Select communication strategies for different audiences and sectors | Designing web content for various functions |
| 19 – Communicate audience-appropriate public health content, both in writing and through oral presentation | Designing web content to provide mental health information and presenting at a booth at CMHC Advocacy Day |
| 21 – Perform effectively on interprofessional teams | Worked with development manager, marketing manager, executive director, and human resources professional on web content |

#5: This competency was applied through comparing the organization of each community mental health center and how they displayed that information on their website. Other public health websites were observed, such as health departments, when evaluating websites. The structure of the different community mental health centers in Kansas was discussed when assessing who was responsible for the marketing and development and how each institution went about that.

#7: This competency was completed through assessing the population that Pawnee serves and deciding what sort of information they would need on a website. The capacities of the individuals were assessed by obtaining information about the reading comprehension level recommended for public health websites.

#13: Diane Hinrichs and I attended a meeting with other community mental health center representatives where we discussed strategies to talk to the legislators about important mental health legislation. There were a few that we chose to be most important. We walked to about 10 legislator's offices and discussed the importance of the legislation to each senator, representative, or their secretaries.

#18: The Pawnee Mental Health Services website serves different functions. Mentally ill persons seek information about treatment on the website. Donors look for information on how to donate and where their donations are going to. Healthcare personnel may be looking for a place to refer their patient to. All of this was taken into account when web content was compiled.

#19: Specific audiences were taken into account when putting together web content. Additional information that was not included before was added to more appropriately provide information for the mental health consumer. Public health content was discussed at the booth that Pawnee held at Community Mental Health Center Advocacy Day.

#20: A variety of individuals were consulted when compiling information for the updated Pawnee website. The development manager provided information on donations and the foundation. The executive director gave guidance on the expectations for the project. The marketing manager guided the development of clinical personnel biographies. The human resource director helped with decisions on web design.

Table 5.2 MPH Emphasis Area Competencies

| MPH Emphasis Area: Infectious Diseases and Zoonoses | | |
|--|---|--|
| Number and Competency | Description | |
| 1 | Pathogens/pathogenic mechanisms: Understand and be able to describe the ecology and modes of disease causation of infectious agents such as bacteria, viruses, parasites, and fungi | Description of a mode of disease causation for dementia in Chapter 1 ASI 540 – Principles of Animal Disease Control; understand the ecology and modes of disease causation for several diseases in animals |
| 2 | Host response to pathogens/immunology: Describe the current understanding of host immune response to infection and understand the role of vaccination in infectious disease control | Immunology was taken. |
| 3 | Environmental/ecological influences: Understand the influence of space/geography, insect vectors, toxic plants and other toxin sources, as well as infectious agents on infectious disease and food safety | DMP 888 Globalization, Cooperation, and the Food Trade – discussed infectious agents and their potential effects on food safety DMP 710 – discussed the built environment and human behavior |
| 4 | Disease surveillance/quantitative methods: Understand how disease events and risk factors for disease are quantified and compared | Explained a few risk factors for mental illness DMP 854 – Intermediate Epidemiology – risk factors for diseases are quantified STAT 705 – Disease rates are quantified |
| 5 | Effective communication: Develop and demonstrate effective strategies to communicate public health/infectious disease issues to a variety of audiences | Communicated public health information in the form of a suicide prevention brochure AAI 801 – Interdisciplinary Processes; discussed how to communicate interprofessionally |

References

- American Psychiatric Association. "DSM-5 Fact Sheets." 2018. *American Psychiatric Association*. 5 March 2019.
<https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/dsm-5-fact-sheets>.
- Baker, D. W., D. A. DeWalt and D. Schillinger. ""Teach to Goal": Theory and Design Principles of an Intervention to Improve Heart Failure Self-Management Skills of Patients with Low Health Literacy." *Journal of Health Communication* (2011): 73-88.
- Bernhardt, Jay M. "Communication at the Core of Effective Public Health." *American Journal of Public Health* 12 (2004): 2051-2053. 12 February 2019.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448586/>.
- Brems, Christiane, Mark Johnson and Kim Watkins. "HIV and Other Infectious Disease Prevention Activities at Mental Health and Substance Abuse Treatment Agencies in Alaska." *Administration and Policy in Mental Health* 30.4 (2003): 335-359. 13 February 2019.
<http://search.proquest.com/psycinfo/docview/620123741/91E47DEE83E4C2FPQ/1>.
- Colter, A and K Summers. "Eye Tracking with Unique Populations: Low." Bergstrom, J. Romano and A. J. Schall. *Eye Tracking in User Experience Design*. 2014. 341-346.
- Cook, Linda J. "Striving to help college students with mental health issues." *Journal of Psychosocial Nursing and Mental Health Services* 45.4 (2007): 40-44. 23 February 2019.
- Da Costa, Deborah, Phyllis Zelkowitz and Nicole Letourneau. "What Do Men Want in a Website Designed to Promote Emotional Wellness and Healthy Behaviors During the Transition to Parenthood?" *Journal of Medical Internet* 19.10 (2017). 23 February 2019. <<https://www.jmir.org/2017/10/e325>>.
- Devine, Theresa, Jordan Broderick and Linda M. Harris. "Making Quality Health Websites a National Public Health Priority: Toward Quality Standards." *Journal of Medical Internet Research* 18.8 (2016). 9 February 2019.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4987491/>.
- Fysenbach, G. and C. Kohler. "What is the prevalence of health-related searches on the World Wide Web? Qualitative and quantitative analysis of search engine queries on the internet." *AMIA Annual Symposium*. 2003.
- Jacobs, Wura, et al. "Health information seeking in the digital age: An analysis of health information seeking behavior among US adults." *Cogent Social Sciences* 3.1 (2017). 12 February 2019.
<https://www.tandfonline.com/doi/abs/10.1080/23311886.2017.1302785>.

- Kaess, Michael, Sabrina Ritter and Sophia Lustig. "Promoting Help-seeking using E-technology for Adolescents with mental health problems: study protocol for a randomized controlled trial within the ProHEAD Consortium." *Trials* 20.1 (2019). 23 February 2019. <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6357507/>>.
- Lincoln, Alisa K., Wallis Adams and Mara Eylon. "The Double Stigma of Limited Literacy and Mental Illness: Examining Barriers to Recovery and Participation among Public Mental Health Service Users." *Society and Mental Health* (2017). 12 February 2019. <<https://journals.sagepub.com/doi/abs/10.1177/2156869317707001>>.
- Maifredi, Giovanni, Grazia Orizio and Maura Bressanelli. "Italian hospitals on the web: a cross-sectional analysis of official websites." *BMC Medical Informatics and Decision Making* (2010).
- Medline Plus. "How to Write Easy-to-Read Health Materials." *MedlinePlus* (n.d.). 13 February 2019. <<https://medlineplus.gov/etr.html>>.
- Mukhopadhyay, Rajlakshmi Sohini, Annalu Waller and Victoria Louise Franklin. "What do UK children's hospital websites offer patients and families?" *Archives of Disease in Childhood* 93.2 (2008). 23 February 2019. <<https://adc.bmjjournals.org/content/93/2/179.2>>.
- Mulcahy, Ellyn R. "Infectious Dementias." Lecture. 2011.
- Noppert, Grace A., John T. Kubale and Mark L. Wilson. "Analyses of infectious disease patterns and drivers largely lack insights from social epidemiology: contemporary patterns and future opportunities." *Journal of Epidemiology and Community Health* 71.4 (2017): 350-355. 13 February 2019. <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5545981/>>.
- Norem, J. and M. A. Moen. "The Websites of Norwegian hospitals: do they meet national guidelines and patient's expectations?" *Journal of Telemedicine and Telecare* (2004)
- Patsioura, Fotini, Spyros Kitsiou and Angelos Markos. "Evaluation of Greek Public Hospital Websites." *International Conference on E-business*. Milan, 2009. 223-229. 23 February 2019. <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.567.276&rep=rep1&type=pdf>>.
- Perry, Melissa J. "The relationship between social class and mental disorder." *Journal of Primary Prevention* (1996): 17-30. 13 February 2019. <<http://link.springer.com/10.1007/BF02262736>>.
- Pew Research Center. "Internet/Broadband Fact Sheet." 5 February 2018. *Pew Research Center Internet and Technology*. 23 February 2019. <<http://www.pewinternet.org/fact-sheet/internet-broadband/>>.
- Robson, D. and R. Gray. "Serious mental illness and physical health problems: A discussion paper." *International Journal of Nursing Studies* 44.3 (2007): 457-466.

- Rosenberg, Stanley D., Lisa A. Goodman and Fred C. Osher. "Prevalence of HIV, Hepatitis B, and Hepatitis C in People with Severe Mental Illness." *The American Journal of Public Health* 91.1 (2001): 31. 23 February 2019. <[https://k-state-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_gale_ofa69290550&context=PC&vid>NewUI&lang=en_US&search_scope=Entire_Library_Collection&adaptor=primo_central_multiple_fe&tab=default_tab&query=any,contains,Prevalence%20of%](https://k-state-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_gale_ofa69290550&context=PC&vid>NewUI&lang=en_US&search_scope=Entire_Library_Collection&adaptor=primo_central_multiple_fe&tab=default_tab&query=any,contains,Prevalence%20of%>)>.
- Scott, D. and B. Happell. "The high prevalence of poor physical health and unhealthy lifestyle behaviour in individuals with severe mental illness." *Issues in Mental Health Nursing* (2011): 589-597.
- U.S. Department of Health and Human Services. *Theory at a Glance: A Guide for Health Promotion Practice*. 2nd. 2005. 15 February 2019. <<https://www.sbccimplementationkits.org/demandrmnch/wp-content/uploads/2014/02/Theory-at-a-Glance-A-Guide-For-Health-Promotion-Practice.pdf>>.
- U.S. Department of Health and Human Services: U.S. General Services Administration. *Research-based Web Design and Usability Guidelines*. Vol. 2. 2006.
- United States Census Bureau. "U.S. Census Bureau QuickFacts: Manhattan City, Kansas." n.d. *Census Bureau QuickFacts*. February 2019. <www.census.gov/quickfacts/manhattancity/kansas>.

Appendix A

Table 1. Comparison of Community Mental Health Center Websites within Kansas

| | No Stone Unturned | Andrew & Associates | High Plains Mental Health | Horizons Mental Health Center | Southwest Guidance Center | Johnson County Mental Health Center | Compass Behavioral Health | Center for Counseling and Consultation | Labette Center for Mental Health Services | Valeo Behavioral Healthcare | Bert Nash | Family Service & Guidance Center |
|---|-------------------|---------------------|---------------------------|-------------------------------|---------------------------|-------------------------------------|---------------------------|--|---|-----------------------------|-----------|----------------------------------|
| History (50%) | X | X | X | X | | | | X | | | X | X |
| News/Announcements (75%) | X | X | | X | X | X | | | X | X | X | X |
| Type of Clinical Services (66%) | X | X | X | X | | X | | X | X | X | | |
| Clinical Personnel Information (58%) | X | X | X | Pics | | | X | | X | | | Names |
| Information about Insurance Coverage (8%) | | X | | | | | | | | | | |
| Date of Last Page Update (0%) | | | | | | | | | | | | |
| Credentials (33%) | | | | | | | | X | X | X | X | |
| Links to External Health Sites (50%) | X | | | | | | X | | X | X | X | X |
| Phone Number and Fax Number (58) | X | X | # | # | X | # | # | X | X | # | X | X |
| Internal Search Engine (25%) | | | | X | | | | | X | | | X |
| Includes a Second Language (8%) | | | | | | | | | | | | X |
| General Disclaimers Provided (41%) | X | | | X | | X | | | X | | | X |
| Statement of Purpose (41%) | | X | X | | | X | | | X | | | X |
| Information regarding patient privacy | X | X | X | | | X | X | | X | | X | X (66%) |
| Patient Rights (25%) | X | | X | | | X | X | | | | X | X |
| Online Appointment Scheduler (0%) | | | | | | | | | | | | |
| Suggestion/complaint form (33%) | | | | | | | X | | X | | X | X |
| Possibility to sign up for newsletter (25%) | | | | | | X | | | | | X | X |
| Details on Job Opportunities (58%) | | | X | X | | | X | | X | X | X | X |
| How to make a donation (50%) | | | | | | X | | X | X | X | X | X |
| Interactive document (0%) | | | | | | | | | | | | |
| Payment portal (16%) | | | | | | | | | X | | | X |
| Intake forms (75%) | X | X | X | X | | X | | X | | X | X | X |
| FAQ (42%) | | X | X | X | | X | | | | | | X |
| Score | 9 | 10 | 9.5 | 9 | 2 | 10.5 | 6.5 | 6 | 14 | 7.5 | 13 | 16.5 |

Appendix B

Table 1. Comparison of Community Mental Health Websites Out-of-State

| | Brookline , MA | Vera French CMHC , Iowa | The Guidance Center, Arizona | Valley Behaviora l Health, Utah | Turning Point Providence Center, NV | Memorial Behaviora l Health, IL | River Edge Behaviora l Health, Georgia | Tri-County Mental Health Services , ME | Aiken-Barnwell Mental H, SC | Appalachian Community Services, NC | Pawnee Mental Health | Not includin g Pawnee |
|---------------------------------------|----------------|-------------------------|------------------------------|---------------------------------|-------------------------------------|---------------------------------|--|--|-----------------------------|------------------------------------|----------------------|-----------------------|
| History | X | X | X | | X | X | | X | | | X | 60% |
| News/Announcement s | X | X | X | | X | X | X | X | X | | X | 80% |
| Type of Clinical Services | X | X | X | | X | X | X | X | X | X | X | 90% |
| Clinical Personnel Information | Names | | | | | Pics | | | | | | 20% |
| Information about Insurance Coverage | | | | | | | | | | | | 0% |
| Date of Last Page Update | | | | | | | | | | | | 0% |
| Credentials | | X | X | | | | | | X | | | 30% |
| Links to External Health Sites | | | X | X | X | X | | | | | | 40% |
| Phone Number and Fax Number | X | X | X | X | X | # | # | X | X | X | X | 80% both |
| Internal Search Engine | X | X | | X | X | X | | | X | | | 60% |
| Includes a Second Language | X | | | X | | X | | X | | | X | 40% |
| General Disclaimers Provided | | | X | | | X | X | | X | X | X | 50% |
| Statement of Purpose (Values/Mission) | X | | X | | X | X | X | X | X | X | X | 80% |
| Information regarding patient privacy | X | | X | X | X | | | X | X | X | X | 80% |
| Patient Rights | X | | X | X | | | | X | | | X | 40% |
| Online Appointment Scheduler | | | | | | | | | | | | 0% |
| Contact form | | | | X | X | | | X | | X | | 40% |
| Possibility to sign up for newsletter | X | | | | | | | | | | | 10% |
| Details on Job Opportunities | X | X | X | X | X | | X | | X | X | X | 80% |
| How to make a donation | X | X | X | X | X | X | X | X | | | X | 80% |
| Interactive document | | | | | | | | | | | | 0% |
| Payment portal | | | | | | | | | | X | | 10% |
| Intake forms | | | | X | | | | | | | | 10% |
| FAQ | | | X | | | | | | X | | | 20% |
| Score | 12.5 | 8 | 12 | 10 | 11 | 11 | 5.5 | 10 | 10 | 8 | 11 | |