OVERVIEW OF HEALTHCARE QUALITY

HOSPITALS AND PUBLIC HEALTH TRENDS

RURAL vs. URBAN

By

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Overview of Healthcare Quality: Hospitals and Public Health Trends

Rural vs. Urban

Research Question:

How does the quality of healthcare compare in rural versus urban areas?

Introduction:

I will be researching and analyzing the quality of healthcare in rural versus urban areas. I'll also be looking into how patients choose hospitals and the differences in reputations and specialties of a top hospital in a rural and urban county. I will address the question - What are the key features patients look for when selecting a hospital for their care? Two California counties, rural San Luis Obispo, and urban Los Angeles will be the subjects of my research. I will compare the differences in demographics, income and size of San Luis Obispo and Los Angeles County and determine how these differences affect the hospitals, hospital leaders' decisions and focus of the public health departments in each county. I will examine these factors as well as some other likely parameters that may influence overall healthcare quality, such as common illnesses, ability and proximity to research universities, credentials and backgrounds of doctors, nurses and hospital administrative staff, the quantity of patients, or those in need of healthcare and funding allocations and styles – community grassroots versus federal government funding.

Methods:

I will be using personal observations of my work with the Los Angeles County Public Health Department during summer 2011, peer reviewed academic articles, published statistical data in *U.S. News & World Report* magazine, and articles found

online. The official public health department websites for each county are also viable and helpful sources to conduct my research.

Limitations:

My research may be limited if I am unable to access funding information for each county. The allocation of funding may not be available to the public due to privacy concerns and political purposes. Furthermore, I may only use a few of my observations since they were made prior to writing my paper – was unsure of the questions to ask and observations to make at the time being.

Annotated Bibliography:

Baldauf, Sarah, and Lindsay Lyon. "America's Best Hospitals." *U.S. News & World Report* 28 July 2008: 32-104. Print. Baldauf and Lyon address the question, what makes a hospital a "best"? It addresses the best of the best in various medical categories, lists performance achievements and performance awards. The rankings provided judge performance not in routine procedures but in difficult cases across a specialty. They list the top three factors in choosing a "best" hospital as reputation, mortality index and other care-related factors such as technology. This work is beneficial to my project because it supports and strives to answer my research question exactly. Also, because rankings are separated by care, I can easily focus on geriatrics. It lists the top 50 geriatric hospitals in the U.S., their reputation, mortality index, discharges, nurse staffing, advanced technologies, patient services and the top ailments of aging. It's extremely helpful because it's listed for me in an ordinal and organized manner making it easy to compare and contrast the data on geriatric care.

"City of San Luis Obispo - Demographics." Web. 31 Oct. 2011. <http://www.slocity.org/economicdevelopment/demographics.asp>. This website provides vital information on the city of San Luis Obispo's economic development. The city of San Luis Obispo acts as the governmental center of San Luis Obispo County. This information is helpful for researching the demographics of the city and county.

Comarow, Avery, and Megan Johnson. "When a Hospital Is Bad for You" (*Yahoo! Health* U.S. News & World Report, 28 July 2010). Comarow and Johnson investigate what signs steer patients toward choosing a certain hospital and what resources make it top-notch. They have found that there are surprisingly little differences between hospitals when it comes to postsurgical complications. They state that what makes a good hospital is being able to catch problems and respond quickly. They address five signs patients should think twice about before choosing a hospital. This article will be helpful in weeding out factors that do and don't matter when patients look for hospitals. It addresses what makes a bad hospital, so in order to support my research, I should make sure the hospitals I choose to research do not fall under any of those signs and categories that point toward a bad hospital.

"Economic Vitality Corporation - Community Profiles." *Economic Vitality Corporation - Keeping SLO County Business Vital*. Web. 31 Oct. 2011. <http://www.sloevc.org/community-profiles/>. This website is a useful source for researching information on the economy of both the city of San Luis Obispo and San Luis Obispo County as a whole.

"French Hospital Medical Center Geriatrics Rankings – US News Best Hospitals." *Health News Articles – U.S. News Health.* Web. 5 May 2011. <http://health.usnews.com/best-hospitals/french-hospital-medical-center6933270/geriatric-care>. Information provided by the American Hospital Association, this source is an overview of French Hospital Medical Center in San Luis Obispo, CA. An overview of the hospital, patient satisfaction, patient recommendation rates, and rankings (specifically for the geriatric branch) are provided. This is important information for my research because it allows for a specific and detailed overview of French Hospital, a hospital I'm focusing my studies on, and one of the best geriatric hospitals in San Luis Obispo County.

Glazer, Sarah. "Rating Doctors" (*CQ Press Electronic Library,* 5 May 2000). Glazer discusses the more recent hype and demand for public knowledge in regards to doctors' information – things such as the number of operations performed, their death rates, surgery rates, etc. She states that the trend toward public ratings seems unstoppable and that we will be seeing much more public reporting in the near future. This publicity seems to have caught doctors' attentions and have galvanized hospitals to improve their quality and services. She questions whether public report cards rating doctors and hospitals actually improve care and/or if they sway doctors from treating those that are more ill, possibly due to the fear of lowering their mortality rates. She talks about the inevitability of going public due to the Internet nowadays and she emphasizes the importance of high-tech hospitals. Glazer considers all the pros and cons of public reporting and how it affects the quality of care. This work will be useful for my project because it helps at answering my research question – what makes a good geriatrics hospital? This article addresses factors that consumers can and have used as a reliable way to distinguish good from bad in both doctors and health care quality. Glazer covers

some likely parameters that I mentioned might influence hospital quality, such as technology and the background of doctors.

Grant, Jim. *Budget-In-Brief*. San Luis Obispo, CA: County Administrative Office. PDF. This PDF file contains the Budget-In-Brief for San Luis Obispo County. It's the proposed budget for the fiscal year of 2011-2012. It was prepared by Jim Grant, the County Administrative Officer. The Budget-In-Brief provides a budget calendar with spending per month, and four charts – source of revenues ($449.6 million budget), property tax distribution by government, 10-year staffing history and expenditures by functional area ($449.6 million budget). This is extremely helpful when looking to find how much of the budget in San Luis Obispo County is allocated toward their Public Health Department.

Harder, Ben, and Avery Comarow. "How to Find the Best Hospital Near You" (*Yahoo! Health* U.S. News & World Report, 28 Mar. 2010). Harder and Comarow discuss how to find the best hospitals in various cities within the United States. They talk about how healthcare consumers and patients have faced a lack of reliable or helpful information when it comes to how hospitals compare in the overall scheme of things. This article is beneficial because it explains how U.S. News ranked these as "best" hospitals, which ultimately helps to define my study and answer my research question.

"LA County Announcements." *Los Angeles County.* Web. 01 Nov. 2011. <http://lacounty.gov/wps/portal/lac>. The lacounty.gov website provides basic county announcements and information regarding public works and county services. This is extremely useful for researching the budget and financial allocations for health services in Los Angeles County.

"Los Angeles County QuickFacts from the US Census Bureau." *State and County QuickFacts*. U.S. Census Bureau. Web. 31 Oct. 2011. <http://quickfacts.census.gov/qfd/states/06/06079.html>. The Census Bureau of Los Angeles County provides facts on the population, demographics and racial makeup, income, education history, business establishment and ownership, the economy and the

geography. This source is helpful in finding up-to-date hard and quick facts that are from a reliable source.

Los Angeles County Department of Public Health. Web. 31 Oct. 2011. <http://publichealth.lacounty.gov/index.htm>. The Los Angeles County Public Health Department website provides information on the county's health services focus, goals and main topics of concern in regards to the wellbeing of residents in Los Angeles County. It provides resources for residents in regards to various topics such as testing, treatment, prevention centers, hotline services, etc. It also provides information on health services funding and how it plays into the budget of the county. This article is helpful in establishing the main issues and the focus of the county's Public Health Department. It's a reliable source with updated and current information.

Mullins, Luke. "Best Places to Live." *U.S. News & World Report* 146.6 (2009): 30-33. *Academic Search Elite*. EBSCO. Web. 30 Oct. 2011. Mullins' article looks at several places for retirees to live. Of the cities discussed, San Luis Obispo, California happens to be one of them. Mullins discusses and comments on activities available, the art in public places, and the healthcare industry. Having San Luis Obispo a popular place for retirees to live shows that there is a larger elderly population than most other cities. Other cities discussed include St. Augustine, Florida and Albuquerque, New Mexico. This article is helpful because it explains the reasoning behind why the elderly population is drawn to San Luis Obispo in regards to healthcare.

"San Luis Obispo County QuickFacts from the US Census Bureau." *State and County QuickFacts*. U.S. Census Bureau. Web. 31 Oct. 2011. <http://quickfacts.census.gov/qfd/states/06/06079.html>. The Census Bureau of San Luis Obispo County provides facts on the population, demographics and racial makeup, income, education history, business establishment and ownership, the economy and the geography. This source is helpful in finding up-to-date hard and quick facts that are from a reliable source.

"Public Health Services." *San Luis Obispo County*. Web. Oct.-Nov. 2011. <http://www.slocounty.ca.gov/page8402.aspx>. The Public Health Department website

of San Luis Obispo County provides information on the county's health services focus, goals and main topics of concern in regards to the wellbeing of residents in San Luis Obispo County. It provides resources for residents in regards to various topics such as disease, prevention, etc. It also provides information on health services funding and how it plays into the budget of the county. This article is helpful in establishing the main issues and the focus of the county's Public Health Department. It's a reliable source with updated and current information.

Schwenk, Thomas L. "Regional Variations in Medical Care Decisions and Costs" *(Journal Watch General Medicine,* 30 Dec. 2010). Schwenk discusses several measures of quality of care for patients and how it varies with cost for different diseases, regional variations in care, and how these are mainly attributable to physician and patient factors such as lifestyle and socioeconomic status. This article is especially helpful because I'm studying two different counties and Schwenk really emphasizes the importance and influence of regional discrepancy. Instead of focusing on the actual practices of medicine and the success rates of procedures, perhaps patients choose hospitals based on cost-effectiveness, politics and personal/religious values. This reading was helpful in opening up my eyes to a new perspective on factors beyond the obvious.

"The Healthcare Imperative: Lowering Costs and Improving Outcomes - Workshop Series Summary - Institute of Medicine." *IOM Home - Institute of Medicine*. Institute of Medicine. Web. 31 Oct. 2011. <http://www.iom.edu/Reports/2011/The-Healthcare-Imperative-Lowering-Costs-and-Improving-Outcomes.aspx>. The Institute of Medicine provides articles on various healthcare topics and concerns on a global perspective. This source was extremely useful when searching for articles pertaining to United States healthcare. It provides articles with facts on healthcare management, such as Public Health Departments, in the United States.

Outline:

I. Introduction
II. Healthcare Systems – Overview
    a. Financial Resources
    b. Management (Institute of Medicine 2011)
III. Public Health Departments
    a. San Luis Obispo County: focus and funding (Public Health Services, Grant 2011, Economic Vitality Corporation)
    b. Los Angeles County: focus and funding (LA Department of Health)
IV. San Luis Obispo County
    a. Overview: demographics, income, size, etc. (Census Bureau, Economic Vitality Corporation)
V. Los Angeles County
    a. Overview: demographics, income, size, etc. (Census Bureau)
VI. Comparing Counties – Regional Variations of Rural vs. Urban (Mullins 2009)
    a. Public Health Department Comparison; Vitality City Internship
VII. Hospitals
    a. UCLA/USC Hospitals
    b. French Hospital
    c. Focus, research university proximity, etc.
VIII. How to choose a "good" hospital/Specialties
    a. How to determine when a hospital is good/bad (Comarow, Johnson 2010)
    b. Factors to consider before choosing a hospital (Comarow, Johnson 2010)
    c. UCLA/USC Medical Centers specialties
    d. French Hospital specialties ("US News Best Hospitals - French Hospital")
    e. Differences in specialties/patient services
IX. Urban vs. Rural Compare and Contrast
X. Future for Health Care
XI. Conclusion

How does the quality of healthcare compare in rural versus urban areas of California? Do Public Health Departments in either area have a different focus or goal dependant on factors such as demographics and size? Or perhaps the funding allocations and styles differ? How are hospitals affected by being located in either a rural or urban location – ability and proximity to research universities, facilities and size of the hospital, the quantity of patients, common illnesses, reputations and specialties? So which area holds the best hospital, rural or urban areas? Every hospital varies and every opinion does as well – one may look for certain features while another may not even bother. Bottom line is, there is no magic formula or facet that constitutes a "best" hospital. Majority of the time, many can agree that a "best" hospital consists for a variety of variables, but which are the most common or most agreed upon? Amongst the variables, one distinguishing and prominent aspect is an internal culture of and aspiration for pure excellence. There are pros and cons to every hospital regardless of location – rural or urban areas. Medical standards are extremely high and what's critical is a focus not only on doing well but more importantly, aiming to always do better.

Within the healthcare industry, there are various forms of management. I will be focusing on the state-level Public Health Department. I will be concentrating on two counties in California – rural San Luis Obispo County, located on the central coast, and urban Los Angeles County, located in southern California. Through thorough research and analysis of French Hospital and UCLA and USC Medical Center, the top hospitals within San Luis Obispo and Los Angeles County respectively, I will address and be able to answer the question of how patients choose hospitals in these areas and the differences in reputations and specialties of a top hospital in a rural and urban county.

San Luis Obispo County and Los Angeles County are two very different places that differ in size, physical geography, income, demographics and much more. All these variables contribute to distinctive statistical data and inquiry when comparing and contrasting the hospitals and healthcare in each individual county. This research will examine the differences in Public Health Departments of each county and how patients choose certain hospitals for care dependent on their specific location. This research will also show whether there's a correlation between county differences and the health

departments' focus and key features that may influence patients when selecting a hospital for care. For a long time, healthcare consumers have faced a lack of reliable information about how hospitals near them measure up. Those looking for a good hospital in either San Luis Obispo County or Los Angeles County will find this study particularly viable and useful.

The basis for this research is because of the eventual demand for healthcare in the near future. Our generation will be experiencing baby boomers' inevitable aging. We are slowly but surely reaching the swelling of the elderly population and the need for providing healthcare will rise dramatically in coming years. Financing and delivery of good healthcare for future generations will be in great demand for our society as we are entering a new era of revitalization and change in our healthcare system.

Healthcare Systems

A healthcare system is composed of people, institutions and resources to deliver quality healthcare services to the needs of populations. Whether it be individual health professionals, self-employed or working within a hospital or clinic, and whether it be a government operated, private-for-profit, or private non-profit, the main goal is to provide good healthcare for the people, and all with fair financial contribution. Here in the United States, healthcare is provided by separate legal entities that are largely owned and operated by the private sector. There are five general financial resources or methods of funding healthcare systems – general taxation to the state, county or municipality, social health insurance, voluntary or private health insurance, out-of-pocket payments, and donations to charities (http://www.iom.edu). Although the United States leads the world in spending on healthcare, "it is the only wealthy, industrialized nation that does not ensure that all citizens have coverage" (http://www.iom.edu). Our lack of health insurance here in the United States is a controversial issue; it causes roughly 18,000 unnecessary deaths yearly. In order to control and supervise expenditure, there are different forms of healthcare management such as health policy, and health and disease management. The management of healthcare systems is typically directed through

policies and plans selected by government, private sector business and other groups in areas such as public health – for this study, I will be focusing solely on the Public Health Departments per county ("Quality Improvement Services for Healthcare").

Public Health Departments

Public Health Departments are critical in reducing the frequency of disease, per county, researching the effects of ageing, wellness and healthy living, and ensuring and protecting environmental health. Public Health Departments are concerned with risks to the overall health of a community based on population health analysis; therefore, each department per county varies greatly in needs and goals (http://www.cdph.ca.gov/Pages/DEFAULT.aspx).

San Luis Obispo Public Health Department

The mission of the San Luis Obispo Public Health Department is to "promote, preserve and protect the health of all San Luis Obispo residents through disease surveillance, health education, direct services, and health policy development" ("Public Health Services"). There are programs and services including emergency preparedness, environmental health services, family health services, health promotion, a public health laboratory and also a San Luis Obispo Health Commission. The Health Commission serves as an advisory board to the County Board of Supervisors and the County Public Health Agency on matters of healthcare in the San Luis Obispo County. The Commission meets monthly in a public venue and works in a cooperative effort with consumers and both direct and indirect providers of healthcare services. The Commission consists of a total of 11 San Luis Obispo County resident volunteers – six consumer representatives, three direct providers (i.e., physicians, nurses, etc.) and two indirect providers (i.e., hospital administration staff, medical office managers, etc.) (http://www.slocounty.ca.gov). The Public Health Department website includes easy access to information about the Commission and membership applications making it easy

for the San Luis Obispo community to partake. The site also has an online Health Commission survey on the homepage in order for residents to have their voices heard. The healthcare issues of concern are listed as – Autism, Cost of Medications, Disposal of Medications, Fluoridation, Medi-Cal/Cen-Cal, Universal Healthcare, Vaccine Safety and an option to specify other issues. Residents are asked to rank each and in result, issues are discussed at the monthly Health Commission meetings. Because rural San Luis Obispo is considered to be a smaller county in comparison to other counties in the state of California, it may be easier to have more of a community-oriented focus and to rely on resident involvement and participation to obtain information on issues and concerns to examine.

The county's Public Health Department website emphasizes mainly environmental health concerns which seems to be a priority in San Luis Obispo. As a largely agricultural region, residents are further concerned to protecting and ensuring environmental services. The county's homepage showcases bolded information regarding mosquitoes and Lyme disease as important health information. There is also a component for recycling and beach advisories, which include ocean water samples on a weekly basis. The site is updated weekly when results become available and if needed, beach closures occur when there is a high health risk in the water content. The Public Health Department homepage also promotes tobacco control programs to encourage smokers to quit, which falls under the health promotion category. Also within health promotion is the San Luis Obispo Aging Commission, which includes resources for seniors and similarly to the Public Health Commission, monthly meetings to address concerns regarding San Luis Obispo County's elderly population. In regards to funding, according to the "Budget-In-Brief" prepared by the County Administrative Office, the total budget for the San Luis Obispo County is $449.6 million with majority coming from state/federal aid, 43%, and taxes at 32% (*Budget-In-Brief* County Administrative Office PDF file). The majority of the county's budget is allocated to health and human services, 39%, which encompasses the Public Health Department.

Los Angeles County Public Health Department

The Los Angeles Public Health Department's mission is to "protect health, prevent disease and promote the health and well-being for all persons in Los Angeles County" ("Los Angeles Public Health Department"). The Los Angeles Public Health Department emphasizes the use of their network of public health professionals in the community. Several matters are addressed and for organizational purposes, highlighted topics are split into ten categories. There are listings for Public Health Centers that provide immunizations, and testing and treatment for STDs and Tuberculosis. Inspections for restaurants, beaches, homes, swimming pools and nursing homes are provided. Basic information on diseases is listed ranging from common illnesses like the flu, to more unusual or severe diseases like AIDS or West Nile virus. Environmental Health concerns such as air pollution and drinking water quality are addressed. The Department also provides information and assistance on topics regarding injury, violence and safety, including child abuse, falls, fires, poisoning, suicide, youth violence and cooling centers. Birth and death certificates are available through the Public Health Department website as well as the ability to file a report on foodborne illnesses, restaurants, animal bites and disease, dead birds, lead or mosquito breeding. There's guidance and support for pregnant women, seniors, infants and children, and information on healthy living, such as alcohol and drug treatment, smoking prevention or ideas, and guides and pamphlets on various physical activity options available in the area. Lastly, the Los Angeles Public Health Department provides emergency preparedness and response information that includes topics like bioterrorism and emergency kits for Los Angeles residents. All of these issues are addressed on the home page of the Public Health Department website (http://publichealth.lacounty.gov/index.htm). Each topic is clickable and leads you to various resources – whether it's a hotline, research, reports, articles, data, publications or links to organizations and programs in the county that support and pertain to each topic, i.e. a link to PCG Prenatal Care Guidance Program, which provides information for high-risk pregnant women to assure access to appropriate prenatal care (http://publichealth.lacounty.gov/mch/PCG/pcg.htm), or the Department of Public Works, which is responsible for the construction and operation of roads, building safety, sewerage and flood control in Los Angeles County (http://dpw.lacounty.gov/).

The Public Health Department website also notifies viewers of health alerts, for example, currently it is influenza season. The health alert provides resources for low-cost flu vaccines at local pharmacies and supermarkets, basic and vital knowledge of influenza – symptoms and causes, and clinic schedules. The Public Health Department offers free flu vaccines at their clinics for individuals without health insurance or another source of health care. Alongside current health alerts, there's a section that showcases press releases featuring the Los Angeles Public Health Department. Publications and reports are also provided on the website for matters such as the profile of HIV & AIDS or the annual morbidity report. Although the main priority of the Los Angeles Public Health Department is to protect, prevent and promote healthy lives for residents of Los Angeles county, the website also provides external resources for residents living in the entire state of California, also on a national and federal level and even on a global level, including concerns such as Japan's radiation concerns from their recent radiation leakage and exposure.

Financing Public Health Departments

In regards to financing the Public Health Department, Los Angeles County operates on a fiscal year, which begins July 1 and ends June 30 of the following year. According to *lacounty.gov* the 2011-12 recommended budget is $23.303 billion and about one-fourth of the budget and nearly 30 percent of its 100,000 employees are devoted to health and mental health care, which encompasses the Public Health Department. The Mental Health Department is the largest in the world and the Health Services Department of Los Angeles operates the second largest health system in the nation. Urban Los Angeles is much bigger than rural San Luis Obispo, which explains the major difference in their budgets. As a bigger county, more funding is provided and allocated for health services (<http://www.ruralhealthweb.org/go/left/about-rural-health>).

San Luis Obispo County Overview

San Luis Obispo County, a much smaller county is located in Central California directly in between Los Angeles and San Francisco. As of the 2010 census, the county's population was 269,637, which showed an increase from the population of 246,681 at the 2000 census. There are a total of seven cities within the county, but with 46,000 residents, San Luis Obispo acts as the county seat of San Luis Obispo County. The total land area in square miles is 3,298.57, with 81.7 people per square mile (<http://www.slocity.org/economicdevelopment/demographics.asp>). Being distanced away from large metropolitan areas like San Francisco and Los Angeles has helped it to retain its rural character. As previously stated, San Luis Obispo County is more rural and agricultural, especially when compared to other coastal regions in the state of California. With small communities scattered along beaches and mountains, the ecology supports many outdoor activities like fishing, agriculture and tourist activities – hiking, biking, swimming, etc. With about 20,000 students at California Polytechnic State University, much of the economy stems from the student population, tourism and agriculture. The county is also notable for wine, being the third largest producer in California behind Sonoma and Napa (http://www.slowine.com/cm/Home.html). With wine grapes being the largest agricultural crop in the county, wine production creates a direct economic impact and a large wine country vacation industry. San Luis Obispo County as a whole tends to lean toward the Republican Party and has a fairly uneven distribution in racial makeup. 222,756 persons or 82.6% of the population is White, 5,550 persons or 2.1% is African American, 2,536 persons or 0.9% is Native American, 8,507 persons or 3.2% is Asian – with a break up of 1.0% Filipino, 0.6% Chinese, 0.4% Japanese, 0.3% Indian, 0.3% Korean and 0.2% Vietnamese. 389 persons or 0.1% is Native Hawaiian or Pacific Islander, 19,786 persons or 7.3% of the population is from other races and 10,113 or 3.8% being from two or more races. 55,973 persons or 20.8% are of Hispanic or Latino origin – 17.7% Mexican, 0.3% Puerto Rican and 0.2% Salvadoran. Of the population, 15.8% spoke another language other than English at home, 87.9% were high school graduates and 30% received a Bachelor's degree or higher. 4.9% are persons under 5 years of age, 18.9% are under 18 years of age and 15.2% are persons 65 years and over. In comparison to the state of California as a whole, there's a lower quota for younger

persons under age 18 and a higher quota in comparison to those age 65 and over. California as a state has a total of 31.8% persons under 18 years of age and 23.8% for San Luis Obispo. California has a mere 11.4% that are 65 years and older. San Luis Obispo County has a larger elderly population with 3.8% more persons 65 years of age at 15.2%. The median age is 37 years with a median household income at $55,638 and the per capita income for the county being $29,098 and 13.2% of persons living below the poverty line ("San Luis Obispo County QuickFacts from the US Census Bureau").

Los Angeles County Overview

Los Angeles County on the other hand, is much larger than San Luis Obispo County with a total population of 9,818,605, making it the most populous county in the United States ("Los Angeles County QuickFacts from the US Census Bureau"). Los Angeles County alone is more populous than 42 individual states. Los Angeles, the largest city in California and second-largest city in the United States, acts as the county seat of Los Angeles County. The county also includes two offshore islands – San Clemente and Santa Catalina and has a total area of 4,752.32 square miles. With all six major film studios located within the county, Los Angeles is commonly associated with the entertainment industry. Beyond motion picture and television production, aerospace and professional services such as law and medicine contribute as big economical factors, alongside international trade supported by the Port of both Los Angeles and Long Beach. As one of the largest counties, there are many recreational activities, including multiple beaches, sporting events, museums, shopping centers, theatres and a large food industry with many top-rated, five-star dining options (http://www.tripadvisor.com/Attractions-g32655-Activities-Los_Angeles_California.html).

Over a quarter of all California residents call Los Angeles County home. Located in Southern California, the county is divided west-to-east by the San Gabriel Mountains. There are a total of 88 cities in Los Angeles County with the top five most populous being Los Angeles, Long Beach, Glendale, Santa Clarita and Lancaster respectively. Los Angeles County has voted mostly Democratic within the past few decades, and the racial makeup of Los Angeles County is fairly diverse. 4,936,599 or 50.3% of persons is

White, 856,874 or 8.7% of persons is African American, 72,828 or 0.7% Native American, 1,346,865 or 13.7% Asian – with a break up of 4.0% Chinese, 3.3% Filipino, 2.2% Korean, 1.0% Japanese, 0.9% Vietnamese, 0.8% Indian, 0.3% Cambodian, 0.3% Thai, 0.1% and Pakistani. 26,094 or 0.3% of persons is Pacific Islander (0.1% Samoan), 2,140,632 or 21.8% from other races and 438,713 or 4.5% from two more races. 4,687,889 persons or 47.7% were of Hispanic or Latino origin with 35.8% Mexican, 3.7% Salvadoran, 2.2% Guatemalan, 0.5% Puerto Rican, 0.4% Cuban, 0.4% Honduran, 0.4% Nicaraguan, 0.3% Peruvian, 0.3% Columbian, and 0.2% Ecuadorian. 6.6% of the population is persons under 5 years of age and 24.5% are under 18 years. Of the population, 56.1% speak another language other than English at home, 75.5% are high school graduates, and 28.4% carry a Bachelor's degree or higher. Persons 65 years and over constitute 10.9%. The median age is 32 years with a median household income at $54,375. The per capita income for Los Angeles County is at $26,983 with 16.0% of persons living below the poverty line ("Los Angeles County QuickFacts from the US Census Bureau").

Comparing Counties

The disparities between rural San Luis Obispo County and urban Los Angeles County explain the contrast in the focus and goals of their individual Public Health Departments. In comparison to San Luis Obispo, the Los Angeles Public Health Department covers a wider range of health concerns and topics, and inspections go far beyond San Luis Obispo's ocean safety and beaches. The Los Angeles County Public Health Department website alone is a lot more intricate and professional versus the simpler and a more dull website of San Luis Obispo's Public Health Department. As a larger county with more funding and resources, it makes sense that a wider range of topics and issues are addressed and covered. Having a larger, more diverse racial makeup than San Luis Obispo's static demographic may also contribute to bringing more topics and concerns to the forefront. Los Angeles County may also be more financially inclined to be able to provide a more sophisticated website. The Los Angeles County Public Health Department carries a more global perspective on health and well being,

tending to more people with a bigger variety of illnesses or concerns. San Luis Obispo County seems to solely focus on their small population and does not address any other issues that do not pertain to its community at that moment in time. For instance, Los Angeles notifies residents through health alerts of upcoming "seasons" whether it's flu season or influenza season. Los Angeles doesn't have a large elderly population like San Luis Obispo, which could explain why there is also more of an emphasis on children, alerting families in regards to the flu, vaccinations and immunizations, especially in schools.

One aspect I found interesting was that the Los Angeles County Public Health Department covers testing and treatment of STDs, HIV and AIDS whereas the San Luis Obispo Department doesn't mention anything on these diseases, there is however, a referenced link to the 'Planned Parenthood' website which many college students may utilize as it is more student or young generation friendly with anonymity and reasonable, reduced or often times free treatment, i.e. birth control, pap smears, etc. (http://www.plannedparenthood.org/ppsbvslo/). With a more diverse population in demographics and economical status in Los Angeles County, there may be a greater number of people utilizing the testing and treatment of these types of diseases (i.e. STDs, HIV, AIDS). Unlike the San Luis Obispo County Department, the Los Angeles County Public Health Department also has links to top-notch and highly ranked hospitals with various specialties within the county.

San Luis Obispo being big on agriculture and with a larger elderly population, leads me to believe that the Public Health Department highlights issues that are of concern to the environment and the elderly population for a reason – mosquitoes and Lyme disease, water sampling, recycling, tobacco control programs, and the San Luis Obispo Aging Commission. According to the National Rural Health Association, abuse of alcohol and use of tobacco is a significant problem among rural youth, which leads me to believe the strong need or urgency for tobacco control programs because these issues start at a much younger age in rural areas (http://www.ruralhealthweb.org/go/left/about-rural-health). Having a smaller population makes it easier for the Public Health

Department to rely on community involvement and participation in order to better the well being of residents – grassroots community style and focused organization.

From personal experience of having lived in San Luis Obispo for the past three years, I have noticed that many locals make an effort to do their individual parts in order to take care of themselves, their environment and community. San Luis Obispo County prides itself on clean air, recycling, promoting sustainability, a close tight-knit neighborhood, and most recently being the "Happiest Place on Earth." According to Mullins' article *"Best Places to Live"* San Luis Obispo is an affordable community that has a strong economy and is ideal for retirees/retirement, which explains the large elderly population. As a small town, it's easier to implement rules such as not allowing drive-thru's for fast food chains, which forces residents to park and walk – more physical activity or perhaps less consumers for fast food chains. Being a small town, there are also a limited number of large corporation fast food restaurants and more mom and pop type eateries that locals adore. Many of these restaurants offer healthy options and embrace the rural lifestyle by buying fresh and organic products from local farmers to support their businesses. In my opinion, San Luis Obispo is a wonderfully healthy town on its own without much needed government involvement or large grants to promote healthier lifestyles.

The Los Angeles Public Health Department website showcases on every page that Los Angeles recently won a $32 million award to focus on obesity and tobacco prevention. Being a much larger county in comparison to San Luis Obispo, Los Angeles holds more power and is more likely to receiving grants and awards to help improve the health and well being of its people and community. Los Angeles County holds more hierarchy in the sense of their population serving more people, building scenarios of human capital, density, urbanization and expertise. It's also much more difficult to manage fast food corporations versus healthier dining options because the county itself is on such a larger scale. This past summer, I was invited to intern for the Los Angeles County Beach Cities Health Initiative Program titled Vitality City. The Los Angeles County Department of Public Health received a two-year grant from the U.S. Health and Human Services and the Centers for Disease Control and Prevention's *"Communities*

Putting Prevention to Work Initiative" (http://www.cdc.gov/communitiesputtingpreventiontowork/) for public health efforts addressing chronic disease in Los Angeles County. The Vitality City projects focus on making policy, systems, and environmental changes that will positively impact an individual's access to safe places to exercise and the ability to purchase healthy, nutritional foods, and an individual's right to smoke-free living, working and social spaces (https://www.vitalitycity.com/). The Vitality City initiative is just one example of a community intervention currently being implemented in a local partnership with the Beach Cities Health District – a public agency dedicated to promoting health and wellness in the three beach cities of Los Angeles County, Redondo, Hermosa and Manhattan Beach. This initiative is currently ongoing and engages citizens and develops leaders and innovations strategies based on local research to motivate residents to adopt and maintain healthier lifestyles in order to "live longer, better" – Vitality City's motto. Vitality City policies support safe, walkable neighborhoods, clean air, and access to nutritious, affordable foods, making the healthy choice the easy choice. By maintaining a healthy lifestyle, Los Angeles County can drastically reduce risk for chronic disease and community residents can live well as they age.

From my personal experience with working at Vitality City, I learned that many of the beach residents were extremely excited for the upcoming improvements in their communities. It was a much-needed change that residents yearned for. The stereotype of an individual living in a beach community perceived as being healthier than most was proven wrong. There are many opportunities for advancements in order to positively impact the lives of beach cities residents and to promote and sustain healthier lifestyles for those living now and in the future. I worked with the Public Health Department of Los Angeles for a specific event hosted by Vitality City. As a larger county better known and with more financial resources, the Public Health Department was able to bring in Dr. Brian Wansink, former Executive Director of the USDA's Center for Nutritional Policy and Promotion (http://www.brianwansink.com/). The Public Health Department made it known to be a priority to bring in notable guests such as Dr. Wansink to inspire their communities. The Health Department strived for only the greatest and biggest name with much prestige, because as a large county, those were the only types of people that had

enough power to grasp the attention of residents. We hosted a public event for restaurateurs to attend a free seminar where Dr. Wansink provided strategies on ways to sell more healthy foods while increasing sales. As an expert in consumer behavior and nutritional sciences, the seminar provided valuable information for restaurateurs who were looking to make healthier changes that were budget and consumer friendly. A win-win situation for a business making profits and for community residents, they are given more nutritious options when dining out. When working with Dr. Wansink during my internship experience, we did speak of my college career and the city of San Luis Obispo. He addressed it as a very healthy and enjoyable place to live.

Hospitals

The difference in county size also influences aspects such as the number of hospitals, the quality of doctors, proximity to research universities, etc. Funding, expertise and specialties of hospitals in rural San Luis Obispo and urban Los Angeles differ greatly due to location. Rural areas face a unique combination of factors that create disparities in healthcare not found in urban areas. According to the National Rural Health Association, "there are 60 dentists per 100,000 population in urban areas versus 40 per 100,000 in rural areas, and rural residents are less likely to have employer-provided healthcare coverage or prescription drug coverage, and the rural poor are less likely to be covered by Medicaid benefits than their urban counterparts" (http://www.ruralhealthweb.org/go/left/about-rural-health). Those who live in rural areas rely more heavily on the federal Food Stamp Program, which leads me to believe that there are large economic factors that lead to differences in healthcare quality. Economic factors, cultural and social differences, lack of recognition by legislators, isolation of living in remote rural areas and educational shortcomings all conspire to impede rural Americans in their struggle to lead healthy lives. While San Luis Obispo is home to the notable French Hospital, Los Angeles County holds an advantage when it comes to medical research institutes housing both highly rewarded University of Southern California and University of California Los Angeles.

Los Angeles County Hospitals

University of Southern California's Keck School of Medicine is the oldest medical school in all of Southern California. It's a major center for education, patient care and medical research. The Keck School of Medicine has risen to nationwide prominence among the best in the United States within specific departments including ophthalmology, urology, neurosurgery and neurology, pulmonology, gynecology and orthopedics. *U.S. News and World Report* ranks the Keck School of Medicine of USC at #36 in research among the most prestigious 135 medical schools in the United States. The USC doctors consist of more than 500 physicians and specialists who are full-time faculty. Of the faculty, 199 physicians are ranked on the "Best Doctors" and "America's Top Doctors" lists. The faculty's private medical practice has recently built new clinics increasing their reach and services for patients with various and complex medical needs from all over Southern California. Among its specialized facilities and services is a state-of-the-art burn center, a Level III neonatal intensive care unit, a Level I trauma service, a National Institute of Health-funded clinical research center and a HIV/AIDS outpatient center. Faculty of the Keck School of Medicine are also staffed by USC University Hospital, a private 400-bed acute care center that is advanced in neurointerventional radiology, cardiac catheterization and interventional cardiology. Surgical specialties include organ transplantation and neurosurgery, alongside cardiothoracic, bariatric, orthopedic, esophageal and plastic and reconstructive surgeries. Part of the Keck School of Medicine, USC also holds the Norris Comprehensive Cancer Center & Hospital, a leader in cancer research and care. There are close to 200 researchers investigating origins and progression of cancer, developing prevention strategies and caring for patients, all while searching for cures. The National Cancer Institute designated USC Norris Comprehensive Cancer Center & Hospital as one of the nation's 40 comprehensive cancer centers. The Keck School of Medicine receives more than $275 million annually in sponsored program awards with research priorities to cancer, genetics, preventive medicine, stem cell and regenerative medicine, neuroscience, bioengineering, obesity and diabetes (http://keck.usc.edu).

Located in downtown Los Angeles, Keck School of Medicine is adjacent to the Los Angeles County+USC Medical Center (LA+USC), one of the largest public and teaching hospitals in the United States. LA+USC is jointly operated by both Los Angeles County and the University of Southern California. The staff is composed of more than 450 full-time faculty members of the Keck School of Medicine, and over 900 medical residents in training at LA+USC. Annually, the facility treats over 800,000 patients (http://www.lacusc.org/).

Although collegiate rivals, the University of California, Los Angeles is also a notable resource and research institute that contributes greatly to the healthcare industry in Los Angeles County. The David Geffen School of Medicine provides public funding of research and the Ronald Reagan UCLA Medical Center is part of a larger healthcare system, UCLA Healthcare. UCLA Healthcare operates seven care clinics throughout the county and one hospital in Santa Monica (http://health.usnews.com/best-hospitals/ronald-reagan-university-of-california-los-angeles-medical-center-6931755).

The Ronald Reagan UCLA Medical Center, or UCLA Medical Center is located on the University of California, Los Angeles campus and is the most technologically advanced hospital in the world (http://www.uclahealth.org/homepage_med.cfm?id=264). With research centers covering nearly all major specialties of medicine, it ranks in the Honor Roll category as #5 out of 17 in *U.S. News & World Report* magazine's "Best Hospitals" of 2011-12 (http://health.usnews.com/health-news/best-hospitals/articles/2011/07/18/best-hospitals-2011-12-the-honor-roll). It is one of three California hospitals to make the list. According to *U.S. News & World Report*, "a place on the "Best Hospitals" Honor Roll is reserved for medical centers that demonstrate unusually high expertise across multiple specialties, scoring at or near the top in at least six of 16 specialties. Just 17 of the nearly 5,000 hospitals evaluated for the 2011-12 rankings qualified. Hospitals with the highest scores in a given specialty received 2 Honor Roll points; those with slightly lower scores received 1 point. Honor Roll standing was determined by the total number of Honor Roll points across all 16 specialties" (http://health.usnews.com/health-news/best-hospitals/articles/2011/07/18/best-hospitals-2011-12-the-honor-roll).

The David Geffen School of Medicine uses two public hospitals in Los Angeles County, Harbor-UCLA Medical Center and Olive View-UCLA Medical Center, as well as the largest private nonprofit hospital on the West Coast, Cedars-Sinai Medical Center, as teaching hospitals. Harbor-UCLA Medical Center is a 570-bed public teaching hospital funded by the County of Los Angeles. It serves as a Level I Trauma Center for the South Bay area, a region of the southwest peninsula of Los Angeles County where the beach cities of my Vitality City internship stand. As a public sector, an integrated health care system at Harbor-UCLA, residents of Los Angeles County are provided high quality and cost-effective care regardless of ability to pay (http://harbor-ucla.org/). Olive View-UCLA Medical Center, another hospital funded by Los Angeles County is a 377-bed facility that cares for medically needy, low income and uninsured residents of Los Angeles County. The hospital is active in clinical research and has been endowed countless government grants to study emerging infections (http://www.uclaoliveview.org/ovmc.html). Also within the UCLA Health System is the Santa Monica-UCLA Medical Center, best known for orthopedics and internationally for its Rape Treatment Center and for care of sexually abused children (http://www.uclahealth.org/homepage_sanmon.cfm).

Cedars-Sinai Medical Center, a 958-bed and multi-specialty academic health science center located in Los Angeles County staffs over 2,000 physicians and 10,000 employees. Cedars-Sinai houses over 350 residents and fellows that participate in 60+ graduate medical education programs. With a focus on biomedical research and technologically advanced medical education, the facility accommodates research centers for cardiovascular, genetics and gene therapy, gastroenterology, neuroscience, immunology, organ transplantation, stem cells, biomedical imaging and cancer (www.cedars-sinai.edu). In *U.S. News & World Report* magazine's 2009 ranking, Cedars-Sinai listed 11 specialties with the top three in digestive disorders - gastroenterology, the disorder of the stomach and intestines, cardiology - heart and heart surgery, and neurology and neurosurgery. For over 20 years, Los Angeles County residents have named Cedars-Sinai their "most preferred hospital" and according to *HealthGrades,* Cedars-Sinai is named on its lists of 50 best hospitals and distinguished hospitals, which recognize hospitals in the top 5 percent of the nation for clinical

excellence (http://www.beckershospitalreview.com/lists-and-statistics/americas-10-best-hospitals-and-20-best-community-hospitals.html).

San Luis Obispo County Hospitals

San Luis Obispo County has a total of four hospitals, French Hospital Medical Center and Sierra Vista Regional Medical Center in San Luis Obispo, Twin Cities Community Hospital in Templeton and Arroyo Grande Community Hospital in Arroyo Grande. Recognized as one of the top 100 hospitals in the nation for cardiac care two years in a row, having won six awards by *HealthGrades*, one of the nation's top healthcare rating organizations, and given the 2008-2009 Consumer Choice Award in San Luis Obispo County by the National Research Corporation for the third consecutive year in a row makes French Hospital Medical Center the most distinguished of the four in San Luis Obispo County. French Hospital is part of the Catholic Healthcare West (CHW) not-for-profit public benefit corporation. CHW operates hospitals in California, Arizona and Nevada and is exempt from income taxes, both federal and state. It acts as the fifth largest hospital system in the nation and the largest not-for-profit hospital provider in the state of California (http://www.chwhealth.org/Who_We_Are/index.htm). According to *HealthGrade*, French Hospital is known to be the best in the region for cardiology, has a 5-star rating for the treatment of heart attack (the only hospital in the region for this recognition), has a 5-star rating for total hip replacement (for eight years running), is ranked among the top 15% in the nation for treatment of heart attack (two years running), received the "Joint Replacement Excellence Award" being ranked among the top 10% in 2010, and is ranked among the top 15% in the nation for joint replacement for eight years running (http://www.ksby.com/news/french-hospital-receives-top-honors-from-national-organizations/). Most recently, within this past 2011 year, French Hospital Medical Center was awarded the "Greatest California Hospital Award." Based on assessment, data and review, French Hospital was chosen as the most high-rated hospital in San Luis Obispo County by *AdvisorMed,* a web-based company that aims to help consumers with healthcare choices. The site delivers healthcare guides and assessments for nursing homes, healthcare agencies and hospitals.

A 112-bed hospital with close to 500 employees and more than 330 active medical staff, French Hospital emphasizes the importance of the tight-knit communities in the surrounding area and prides itself on its loyalty to residents in San Luis Obispo County. It was awarded the "Avatar Five Star Service – Loyalty and Endorsement – Emergency Award" in 2009 and 2010 by *Avatar International*, a leading survey firm to the healthcare industry (http://www.avatar-intl.com/about). This award is given to the hospital with the highest patient satisfaction score of Emergency Services in Avatar's national database (approximately 400 hospitals). French Hospital was also honored to receive the "Exceeding Patient Expectations Award" in 2005, 2006, 2008, 2009 and 2010. This award is given to facilities whose patient's expectations of service and excellence are exceeded. "These awards are due to great collaboration between the physicians, nurses, technicians and other support staff. Specific to the Emergency Department Award, Linda Riggie, French Hospital Medical Center's Chief Nursing Executive said, 'French Hospital's Emergency Department is consistently given a 98% satisfaction score from our patients. Our time to be seen by a physician is under 20 minutes and we never charge a pre-registration fee. Our nursing and physician interaction and process model is fundamental in reaching this level of care'" (http://www.frenchmedicalcenter.org/Who_We_Are/Press_Center/215398).

As a small rural town, San Luis Obispo County takes pride in community ties, which may explain a big priority in loyalty to residents and satisfaction of patients. With a larger elderly population, *AdvisorMed* may favor or be more familiar with San Luis Obispo County as it is a leading source for assessments in nursing homes. Also, as an economically friendly and primarily agricultural town, hospitals in the county may put precedence on issues relating to environmental health. French Hospital, for example, was awarded a "Making Medicine Mercury Free Award" in 2009. This is an award given to health care facilities that are committed to environmentally responsible operations. It designates exceptional efforts to rid the health care sector of the harmful chemical mercury, commonly used in medical care. For each award presented by *Practice Greenhealth*, a national organization, they sponsored a planting of 100 trees in Haiti (http://practicegreenhealth.org/).

Compared to Los Angeles County's hospitals, San Luis Obispo County lacks in resources of research universities and institutes. The only large and notable university in San Luis Obispo County is California Polytechnic State University (Cal Poly). In 2010, *Forbes' Magazine* ranked Cal Poly #27 out of the nation's 100 best Public Universities and in the most recent *U.S. News & World Report* academic rankings, Cal Poly ranked as the #7 under the Regional University West Rankings – Universities that offer a full range of undergraduate programs and some graduate programs, but few doctoral programs (http://colleges.usnews.rankingsandreviews.com/best-colleges/cal-poly-1143/academics). As a polytechnic university, technical skills and subjects are of focus. The most distinguished majors including Engineering, which makes up about 28.5% of total undergraduate and graduate students, and Architecture and Environmental Design, approximately 9.7% of total undergraduate and graduate students. Unlike UCLA and USC, research opportunities, especially in regards to Medicine, are few at Cal Poly. Unlike UCLA, the hub or focal point of many studies is not in the College of Science and Math, about 14% of the total student population, both undergraduate and graduate students (http://calpolynews.calpoly.edu/quickfacts.html). *U.S. News & World Report* magazine's academic ranking ranks UCLA as 2nd best Public University. It's also ranked #25 in National Universities – schools that offer a full range of undergraduate, master's and doctoral degrees, also colleges committed to producing ground breaking research. As part of the University of California system, UCLA directly supports and gives students more opportunities to become directly involved with research. UCLA provides undergraduate research centers and courses with the opportunity to participate in cutting edge research that in return, benefits Los Angeles County and the university (http://www.ugeducation.ucla.edu/ugresearch/). UCLA students, both undergraduate and graduate, have a more science-oriented focus with 12% of undergraduates studying Biology and with the David Geffen School of Medicine consistently ranked among the top ten in the United States, luring in the best talent with over 700 enrolled medical students. UCLA's David Geffen School of Medicine is ranked #13 for Best Research – universities with the best medical programs (http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-medical-schools/university-of-california-los-angeles-geffen-04010). USC ranks at #23 for

National University by the most recent *U.S. News & World Report*. Although the university's most popular undergraduate majors aren't in Science fields, and rather Business, Management and Marketing degrees, what differentiates USC from both UCLA and Cal Poly is that it is a private university. With a private university comes more funding and freedom. The additional funding is put toward newer and nicer facilities, the latest technology, and sophisticated research centers. The Keck School of Medicine at USC is ranked #36 for Best Research (http://colleges.usnews.rankingsandreviews.com/best-colleges/university-of-southern-california-1328/academics). Majority of the research done at USC is focused on medicine and health (http://research.usc.edu/centers/subject/health/). Proximity to large research universities and institutes are limited in San Luis Obispo County. A different focus of studies at the major universities in each county explain why urban Los Angeles County is provided with more resources in regards to medicine and healthcare over rural San Luis Obispo County. Because UCLA and USC have top-notch doctoral programs and research facilities, more power, money and energy are put forth to bring results and revolutionary findings, hence making the large metropolis of Los Angeles County one of the highest rated areas for exceptional healthcare.

Although having won a multitude of awards, French Hospital Medical Center isn't classified as a "Best Hospital" by preeminent sources such as *U.S. News & World Report* or the "50 Best Hospitals and Distinguished Hospitals" by *HealthGrades*. Why so? It is clear that the hospitals that have been covered so far are fairly reputable, but what additional factors do hospitals in Los Angeles County have that San Luis Obispo County hospitals do not? How do we consumers choose the "best" or "right" hospital for us and how does location, rural and urban, play a role in regards to resources and reputation? According to the article licensed from *U.S. News & World Report*, "How to Find the Best Hospital Near You," healthcare consumers have faced a lack of reliable information about how hospitals near them stack up. In principle, selecting and approaching a renowned medical center nationally ranked by *U.S. News & World Report's* "Best Hospitals" is a solid and ideal option. Although some people are fortunate enough to live a block, or even down the street from a world-class hospital, there are also those that may find it a bit more difficult to get to. Many times, large urban

areas are crowded and swarming with hospitals that offer varying degrees of knowledge and expertise across a wide range of medical specialties. The problem is most acute in the smaller rural areas. *U.S. News & World Report* drew its latest evaluation of the nations hospitals and the majority of the top-tier lay in urban areas with a population of one million or more, such as Los Angeles County. In the Los Angeles County specific ratings, one out of five hospitals were previously mentioned medical centers – 1. Ronald Reagan UCLA Medical Center 2. Cedars-Sinai Medical Center 3. USC University Hospital, and 5. Santa Monica UCLA Medical Center. These rankings, of course, take into account whether a hospital is among the best nationally in any medical specialty but also whether the hospital performs well in just one specialty, several, or many specialties. The factors that distinguish a "best" hospital include "a hospital's breadth of expertise and whether it's among the nation's best" ("How to Find the Best Hospital Near You").

Differentiating Good and Bad Hospitals

If a hospital is not listed as a "Best Hospital" should it be avoided? How do you know if a hospital is "bad" for you? Is there such a thing as a hospital being bad for you, or is that considered an oxymoron? Rankings of hospitals can help guide you to a top-notch or "best" hospital when a procedure or condition demands exceptional skill. In regards to general or routine care, such as immunizations or even repairing a torn rotator cuff, most hospitals will suffice. However, according to the article "When a Hospital Is Bad for You," sometimes a particular hospital can indeed be the wrong one. There aren't many that are so terrible that they're labeled lethal, however, the article points out red flags we consumers should acknowledge and be aware of. "Rates of postsurgical complications such as bleeding, infection, and sudden kidney failure vary surprisingly little, according to a recent study of nearly 200 hospitals across the country. What does differ are deaths from some complications, says John Birkmeyer, a professor of surgery at the University of Michigan Medical School and the study's coauthor" ("When a Hospital Is Bad for You"). Mortality rates at some hospitals "were almost twice as high as at others" states the article. The main difference is that a "good" or "best" hospital will catch problems and respond urgently. Red flags to watch out for in hospitals are low

hospital volume, low surgeon volume, no intensivist, not enough nurses and too many readmissions.

Hospitals with low volume and surgeon volume may mean that a surgeon's skills are not quite as sharp. Operations in demand require a surgeon to stay on point, the surgeon is also more likely to have performed and practiced a greater number of procedures. The surgeon is a greater factor than a hospital when determining complications and length of stay. The article states that "complications were significantly lower and length of stay shorter with surgeons who did 60 or more prostatectomies a year than for surgeons who did fewer than 60" ("When a Hospital Is Bad for You"). Practice makes perfect. Typically, surgeons and physicians are in charge of patients. However, studies show that death rates drop by at least 25% in intensive care units (ICU) where patients are under watch and care by intensivists, specialists in critical care (http://managedhealthcareexecutive.modernmedicine.com/mhe/Hospitals+%26+Providers/Intensivists-bring-experience-to-critical-care-med/ArticleStandard/Article/detail/522498). Intensivists spend majority of their time inside the ICUs, therefore, with ICU patients tended to by at least one intensivist, more surgeons can be in the operating rooms. Having no intensivists could potentially lead to an increase or at most, leveled death rates. Intensivists allow surgeons and physicians to do their expertise work in the operating room ("When a Hospital Is Bad for You"); it's also better because when an intensivist is completely responsible for care they become more familiar with patients and their needs. Not having enough nurses can affect death rates as well. "A 2002 study in the Journal of the American Medical Association found that a patient's risk of dying was much higher in hospitals where nurses on surgery floors had eight or more patients during an average shift as opposed to four or fewer. Hospitals whose RNs have four-year degrees also have a lower rate of surgery-related deaths than in hospitals with two-year RNs" ("When a Hospital Is Bad for You"). California is also the only state that limits a nurses' patient load. By law, a surgical nurse can only care for a total of five patients at a time. Lastly, a high rate of readmissions may suggest "inability to coordinate care after discharge" says Harlan Krumholz, cardiologist at Yale University ("When a Hospital Is Bad for You"). The same article states "readmission

rates across U.S. hospitals tend to be fairly similar, so the best way to use those numbers is to see if rates at the hospital of interest are radically worse than those at other hospitals you might choose."

Rankings in *U.S. News & World Report* and other resources work to steer consumers in the right direction. However, a "best" hospital is only the right hospital if it outshines and excels in the specific kind of care you need. Therefore, the number one hospital is not necessarily the best for all patients. Other hospitals may outperform the number one hospital in other specialties. Often times, hospitals located in urban areas cover a broader range of specialties. It may be difficult for a patient in a rural area to be treated if a local hospital does not offer particular care, or a patient has a challenging medical case and treatment requires expensive travel. Consequently, a "best" hospital's rank will not merely indicate the hospital patients must choose. One must consider a hospital's overall rank combined with its expertise in the specialty relevant to the needed care. One must choose well to get well. So how do the hospitals in Los Angeles County compare to San Luis Obispo County in medical specialties, reputations, doctors and expertise?

Hospital Specialties

Some of the most common specialties in the medical field include cancer, cardiology and heart surgery, otolaryngology or ENT (ear, nose and throat), orthopedics, diabetes and endocrinology and geriatrics. Ronald Reagan UCLA Medical Center ranks at #10 on the Cancer Score Card in the most recent *U.S. News & World Report* magazine's Hospital Ranking (http://health.usnews.com/best-hospitals/ronald-reagan-university-of-california-los-angeles-medical-center-6931755). Listed as doing "much better than expected" in the Survival category, there are fewer deaths reported after 30-days of admission for patients. Within the cancer specialty, there is high patient volume, high nurse staffing and at least one intensivist care unit staffed. Three of the "red flag" warnings from the "When A Hospital Is Bad for You" article are addressed. Ronald Reagan UCLA Medical Center also scored a 7/7 in the Advanced Technologies category

– a medical center with important technologies available to patients in a specialty. For Cancer patients and treatment, full-field digital mammography, image-guided radiation therapy, PET/CT scanner, robotic surgery, shaped-beam radiation, stereotactic radiosurgery, and transplant services that include bone marrow and other tissues are available. It's also designated by the National Cancer Institute as a clinical or comprehensive cancer hospital. UCLA Medical Center ranked #9 in cardiology and heart surgery with a medium patient volume but still high nursing staff and at least one intensivist care unit staffed. Advanced technologies include cardiac intensive care unit, multislice spiral CT, PET/CT scanner, robotic surgery, single-photon-emission CT, and heart transplants. Ear, nose and throat ranked #11 with high patient volume, nurse staffing and intensivists. Stereotactic radiosurgery is available for patients within ear, nose and throat care. For orthopedics, UCLA ranks #19 with low patient volume but high nurse staffing and intensivists. Computer-assisted orthopedic surgery and transplant services are available. Diabetes and endocrinology is ranked at #7 with high patient volume, the high nursing staff and intensivists. Advanced technologies in this specialty include diagnostic radioisotope services, image-guided radiation therapy, PET/CT scanner, and stereotactic radiosurgery. Lastly, geriatrics is ranked at the #2 best hospital. There is high patient volume, high nurse staffing and intensivists. UCLA is designated by the National Institute on Aging, as of March 1, 2011, as Alzheimer's Disease Center – indicating high quality of research and clinical care. 80% of patients rated the UCLA Medical Center overall as "highest or very high" in quality and 85% would recommend the hospital to friends and family (http://health.usnews.com/best-hospitals/ronald-reagan-university-of-california-los-angeles-medical-center-6931755/patient-satisfaction).

The USC University Hospital, ranking #3 in Los Angeles, is ranked in the specialties of orthopedics (#24) and geriatrics (#30). For both specialties, there is low patient volume for geriatrics and unlike UCLA, is not recognized by the American Nurses Credentialing Center as meeting high standards for nursing excellence. 74% of patients ranked USC Hospital overall as "highest or very high" and 79% would recommend the hospital to friends and family (http://health.usnews.com/best-hospitals/usc-university-hospital-6930042/patient-satisfaction). USC Norris Cancer Hospital, ranking #7 in Los Angeles, is also ranked #48 on the national cancer scorecard.

There is low patient volume and nurse staffing but intensivists, advanced technologies including full-field digital mammography, image-guided radiation therapy and stereotactic radiosurgery, and it is designated by the National Cancer Institute as a clinical or comprehensive cancer hospital (http://health.usnews.com/best-hospitals/university-of-southern-california-norris-cancer-hospital-6931585/details). LA+USC, ranked #33 in Los Angeles, does not have any notable rankings in the specialties discussed. However, 67% of patients rated the overall hospital as highest or very high quality and 69% of patients would recommend the hospital to friends and family (http://health.usnews.com/best-hospitals/lac-university-of-southern-california-medical-center-6931580/patient-satisfaction).

San Luis Obispo County's French Hospital Medical Center does not hold a national ranking with *U.S. News & World Report*. However, the hospital does specialize in Ear, nose and throat, orthopedics and geriatrics – most likely orthopedics (Arthritis) and geriatrics due to the high elderly population. There is low patient volume and high nurse staffing and intensivists in all three specialties. The orthopedics, ear, nose and throat department are not certified by state to provide advanced trauma care. Orthopedics at French Hospital offers a low number of advanced technologies whereas ear, nose and throat has a higher number of technologies available for treatment and care. Geriatrics scored an 11.2/100, which was not a high enough score to attain a national ranking. French Hospital, unlike UCLA, is not designated as an Alzheimer's Disease Center by the National Institute of Aging. 71% of patients rated French Hospital Medical Center as "highest or very high" quality, and 80% of patients would recommend the hospital to friends and family (http://health.usnews.com/best-hospitals/french-hospital-medical-center-6933270).

Patient Services

According to *U.S. News & World Report,* patient services scores seem to all generally be higher in Los Angeles County than in San Luis Obispo County. UCLA Medical Center carried high scores for patient services in cancer, cardiology and heart

surgery, ear, nose and throat, orthopedics, diabetes and endocrinology, and geriatrics. Services include genetic testing/counseling, pain-management program, patient-controlled analgesia, translators, infection isolation room, and cardiac rehabilitation. The orthopedics department provides an Arthritis treatment center and geriatrics patients have access to the Arthritis patient center but also have an Alzheimer's center (different from the National Institute of Aging-designated) and a psychiatry-geriatric service. USC University Hospital's orthopedics and geriatrics scored high on patient services including Arthritis treatment center, pain-management program, translators, palliative care and a geriatric psychiatry. The USC Norris Cancer Hospital also has a high score for patient services – there is a pain-management program, translators and an infection isolation room. LA+USC includes genetic testing/counseling, pain-management program and translators to serve patients. French Hospital scores low on the patient services scorecard in all three specialties – ear, nose and throat, orthopedics and geriatrics. Higher patient services scores in urban areas may indicate that they are able to afford more staff and physicians to house extra services for their patients. Also, an issue of space may arise. Perhaps there are exponentially more patient services available in larger and more populated urban Los Angeles than rural San Luis Obispo because of the geographic land usage and design. San Luis Obispo County, 3,304.32, is smaller in square miles but is more spread out in regards to land use than the county of Los Angeles (4,060.87 square miles), where buildings are closer together. The majority of land in San Luis Obispo County is primarily used for agriculture. Expanding hospitals for additional patient services may cause issues with building on agricultural lands in rural area.

Hospital Funding

Finding funding for capital projects is often a major concern for many rural healthcare providers and facilities. Capital funding is the funding used to expand or renovate a building, purchase major equipment (possibly to house additional patient services), or construct a new facility for a rural health provider. Unlike urban Los Angeles County, where grants are continually presented through affluent charities, nation-wide and preeminent organizations such as the National Institute of Cancer (NIC)

or National Institutes of Health (NIH), the government, and UCLA and USC alumni, rural San Luis Obispo County may have trouble securing funding private sources. Rural healthcare facilities may use public grants and loan programs, as well as private sources such as foundations and donations from local residents in order to help with financing (http://www.nal.usda.gov/ric/ricpubs/capital_assistance.htm). Larger sums of money are traditionally presented to Los Angeles County (http://articles.latimes.com/2010/aug/15/local/la-me-county-health-20100815), as it is the most populous county. Therefore, it treats and cares for a vast amount of Californians. With a reputation for excellence, Los Angeles County may also be more trusted to serve, excel and ensure successful outcomes. An esteemed reputation reels in the only the top talent in doctors and scientists, resulting in high quality of research and experienced surgeons and physicians. Reputation is also constantly bringing a number of patients in and out of the top Los Angeles County hospitals from all over the world. More patients lead to more procedures and continual success rates keep adding to the respect and prominence.

Notable Discoveries and Research

Many notable discoveries and procedures have been made in the past few decades that have allowed these hospitals to build up esteem and have helped shape the healthcare industry and world we live in today. According to *uclahealth.org*, scientific groundwork for CAT scans and MRI's along with the first open heart surgery in Western United States was performed at UCLA. UCLA researchers developed techniques for nerve transplantation and in the 1970's, the first total shoulder replacement was performed at UCLA, and the first durable artificial hip called the "Chamber Cylinder Design Surface" was developed at UCLA Medical Center. In the 1980's, UCLA developed the first functional PET system for scanning of patients, and performed the first heart-lung transplant in all of Los Angeles. A UCLA researcher and colleagues were the first to identify, clone and characterize brain-derived HIV-1, and UCLA surgeons also performed the first liver transplant. Dr. Irvin Chin was the first to molecularly characterize the human T-cell leukemia virus, resulting in a test that's now used routinely

in blood banks around the world to screen for the presence of his virus in human blood donations. In the 1980's, UCLA physicians also identified the world's first cases of AIDS. The first multi-generational bone marrow transplant took place at UCLA, and UCLA cancer researchers demonstrated the benefit of giving AZT to HIV-infected pregnant women in order to prevent fetal infection during pregnancy in the 1990's; this regimen has become a national standard of care, reducing the mother-to-fetus transmission rate from 24% to less than 5% (http://www.uclahealth.org/body.cfm?id=26). More recently, surgeons at Ronald Reagan UCLA Medical Center performed the first hand transplant in the Western United States – a surgery that took a 17-member team and nearly 15 hours to complete. *Uclahealth.org* also states "Stem cell researchers at UCLA discovered a pattern in DNA methylation, an event that affects cell function when gene expression is changed by the altered DNA. The study has implications for future work on cancer and stem cell lines."

There has also been groundbreaking research by the Keck School of Medicine of USC. In the 1960's, USC developed the first academic department of emergency medicine in the nation. USC discovered the first cancer-causing gene and developed the world's first double lobar lung transplant from living-related donors. More recently, USC broke through with development of the first retinal implant – part of the revolutionary research to restore sight to patients blinded by degenerative retinal diseases. USC also contributed to the development of HIV-resistant blood stem cells (http://keck.usc.edu/Research.aspx).

Dr. Edison French, the founder of French Hospital Medical Center was the first surgeon in San Luis Obispo to use intravenous anesthesia to first perform a lung resection and the first to do a collapsed lung therapy. Dr. French also acted as the first specialist to actively encourage other specialists to settle in the area of San Luis Obispo County (http://www.frenchmedicalcenter.org/Who_We_Are/History/index.htm).

The focus and goals of hospitals in Los Angeles County and San Luis Obispo County differ not only in the healthcare management – Public Health Departments and funding, but are also diverse in history and findings. French Hospital Medical Center has not noted any major discoveries in its history. Confining to its small rural close

community feel, the acknowledgement of founder Dr. French is prioritized and highlighted as he started the community of medicine in San Luis Obispo County. The emphasis is more so on an individual who shaped the San Luis Obispo County community, whereas the Los Angeles County hospitals underline worldwide research even referring to physicians as "UCLA researchers and surgeons." Urban areas do seem to hold an advantage, as they are more widely known to house higher quality hospitals and research centers. In a study found on *hsrd.research.va.gov*, investigators reviewed 102 studies to answer questions regarding disparities in healthcare service and needs in rural versus urban areas. According to "HSR&D Health Services Research & Development Service" urban residents tended to receive more medications, but the evidence was limited. Also, there were no consistent differences in the receipt of or adherence to medication. The study stated that office visits, medical procedures and diagnostic tests were less frequent in rural settings, and cancers were also more likely to be un-staged at diagnosis in rural areas. Rural residents were less likely to see specialists but were as likely as urban residents to have a usual source of care (i.e., particular clinic, regular general hospital, etc.). However, rural residents were more likely to have better continuity of care with a specific provider, which ties in with the priority and emphasis of physicians being loyal and committed to residents of the communities in San Luis Obispo County. Data on quality of care were only available for a few conditions, with some evidence suggesting that there was lower quality of care in rural areas for patients with HIV or cancer – more challenging and serious illnesses on a global scale are more likely to be treated for at major hospitals in a rural area (i.e. Los Angeles County).

As a metropolis, Los Angeles County aims to cure and examine global diseases that affect a larger number of people. Urban areas tend to have a more diverse population; therefore hospitals in these areas need to be able to care for a greater number of diseases that affect people of all ages, gender and racial makeup. Hence the reason why Los Angeles County hospitals are nationally ranked for a greater amount of specialties than French Hospital in rural San Luis Obispo County. Rural areas, often times less diverse and smaller in size and population, which in the case of San Luis Obispo County and Los Angeles County is true, explains why the three specialties of San Luis Obispo County's top hospital, French Hospital, adheres and relates specifically to

their larger population – the elderly. Rural hospitals can afford to focus solely on their communities' needs rather than trying to cure major diseases and save the world.

Future for Healthcare

If a hospital hasn't discovered some great revelation or performed notable surgeries, it doesn't mean a hospital is not doing what it's supposed to do. Ultimately, any hospital is doing its job and is "best" if it excels in the specific kind of care you need and successfully treats you regardless of the number of major achievements or location. With continual advances in medical technology, location may not matter in the future. Advancements in technology may streamline the healthcare system improving services in areas all over the world, and helping save money for those whose insurance may not cover travel costs to larger hospitals that specialize in their specific needs. Just as physicians identified the first case of AIDS 30 years ago, new technologies will continue to permit diagnoses of diseases in years to come. In result, we will continually improve our healthcare systems and increase the power to treat conditions that were previously untreatable.

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