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Increasing Accessibility to Key Social Determinants of Health in Monterey County

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Abstract

Monterey County Health Department's Planning, Evaluation, and Policy Unit provides agency-wide support in promoting health equity. Obesity and diabetes rates in Monterey County are too high and there needs to be an increase of accessible data, which may help increase targeted prevention services. A health brief was developed for the purpose of increasing access to county-wide obesity and diabetes data and increasing knowledge of the role of how social determinants of health may affect health outcomes. A survey was conducted to measure the effectiveness of the health brief with results demonstrating that 100% of respondents agreed that the brief was effective in displaying data and was easily understandable. Recommendations for the agency are to continue developing health briefs and make them accessible through a centralized website to help increase targeted services and meet the needs of the community by addressing health inequities, thus, improving the health of the community.

Keywords: *Lack of centralized health data, health indicators, health disparities, Diabetes, Obesity, Monterey County, health brief*

Agency and their Partnerships

Monterey County Health Department (MCHD) mission states that it "...exists to enhance, protect and improve the health of the people in Monterey County." (MCHD, 2019). MCHD is a public agency that is organized in seven bureaus. This capstone project is sponsored through the Planning, Evaluation, and Policy Unit (PEP) which is a department within the Administrative Bureau.

PEP is primarily funded by state and federal grants, a health foundation grant, and a small portion is funded by Monterey County General Fund (PEP, 2019). Based on the projects and funding sources, PEP is divided into four different units. For the purpose of this report, only a few of the projects the Accreditation and Evaluation team (AE) works on will be highlighted. The AE team is comprised of four staff: PEP Program Manager, Accreditation and Evaluation Manager, Epidemiologist, and Evaluation Coordinator (PEP, 2019).

One of the projects is Striving to Reduce Youth Violence Everywhere (STRYVE), the Centers for Disease Control and Prevention (CDC) funded $4.5 million 5-year (2016-2021) grant. The AE team provides internal program evaluation services for STRYVE (MCHD, 2019). The grant is focused on reducing teen dating violence and teen violence in Salinas, CA. Another program the unit collaborates with is Whole Person Care (WPC), AE provides administrative oversight for the WPC program, a five 5-year (2016-2021) $34 million grant. Half of the funds were granted by the Department of Health Care Services (DHCS) and the other half were county matched funds. PEP is responsible for submitting quarterly, mid-year, and annual reports related to utilization of services, program enrollment, enrollee health outcomes, subcontracts, and finance (WPC, 2019).

The AE team also words on the development of the Monterey County Health Department Community Health Assessment (CHA). CHA is a measurement of the county's' overall health (Impact Monterey County, 2018). CHA is funded through the health department's own budget and is required for public health accreditation (MCHD, 2019). The purpose is to highlight the areas of population health that need to be addressed to contribute to creating equitable health outcomes in the community. PEP provides research and data analysis to create the report (MCHD, 2019).

Communities Served by the Agency

The PEP unit works to serves the entire population of Monterey County in support of MCHD's mission and strategic goals. More specifically, as a part of the Administration bureau, the PEP unit serves the seven MCHD bureaus and other county departments with administrative support and services. The 7 MCHD bureaus: Public Health, Clinic Services, Behavioral Health, Environmental Health, Animal Services, Administration/Public Guardian, Emergency Medical Services, and Administration. The AE team provides services ranging from external and internal evaluation, community assessments, grant writing, quality improvement, population health data management, accreditation, and administrative program oversight.

Problem Description

The "micro-level" agency-specific problem is the lack of accessible data on health disparities[1] in Monterey County. The impact of the micro-level problem primarily affects government agencies, such as MCHD, since health disparity data is not easily accessible this affects missed target populations and directed services in the community. This is important in the efforts toward creating new initiatives and policies that can contribute in addressing health disparities found within the community. At this level, by having a central website that displays the countywide health indicators, can target those in charges of creating upstream determinants to work towards health equity. At a secondary level it also affects nonprofit organizations in the community the data set could be beneficial to organizations in identifying services for vulnerable populations in the area to provide equitable services through programs created. Overall at the tertiary level, the lack of accessible data affects the general community because without easy access to data that is translated in an understandable manner, health disparities in communities becomes an issue that is unknown due to the lack of knowledge surrounding the issue that the members of the community face.

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[1] Health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. Retrieved from https://www.cdc.gov/healthyyouth/disparities/index.htm

Being that there is a lack of accessible data on health disparities in MC, a contributing factor is there is no central website location with data information of health indicators in the county. E. Pantoja explained that currently PEP access data with the use of secondary sources, such as California Health Information Survey (CHIS) and Census, and for communicable diseases and mortality data, a request is made to the public health epidemiologist. In terms of community members wanting to access data, it would have to be done through an email request submitted through the Monterey County Health Department (MCHD) website. As of now, the MCHD website does not have a dedicated link for data requests, but they plan on adding one soon (personal communication, December 8, 2019). This contributes to the problems because agencies and organization are not able to quickly access data information that is needed.

Leading to the next contributing factor that is the data is complex and not accessible in terms of easy to understand, interpret and locate within a website. Members of the community and community-based organizations who are unaware of how to request data from MCHD can access health indicator information through general data websites, such as CHIS which provides survey responses for the 58 counties in California to identify health and healthcare needs (CHIS, 2018). However, the data is not easily interpreted if an individual is not knowledgeable about how to retrieve and interpret data on secondary data sources, which complicates accessing invaluable data.

If an agency or organization has invaluable data that have been utilized and gained through program services, there is no centralized website to share data and information gained. This is the last contributing factor to the "micro-level" problem, which the lack of data sharing between agencies. Organizations currently share their data on their own websites and or send out to partners, if applicable. Agencies do not have a central website to share data results for health indicators relating to the services provided or have retrieved data for others to see, creating a barrier to share information easily and effectively that may be beneficial to promoting health equity.

Consequently, the community is unable to see and understand the health disparity being experienced in surrounding neighborhoods, along with the health priorities and social issues in MC to work on.

Another consequence is that there is poor collaboration of data sharing to address health disparity problems between agencies and organizations. Agencies and programs may not be collaborating as effectively if there was a central data website to see the needs and utilize the services and programs directed to health targeted populations achieve better health outcomes. Therefore, there is an inability to effectively and efficiently identify target populations within MC. Leading to and reduced resources to identify targeted populations within MC and adding health disparity issues that could be addressed by providing equitable services and programs. Not having a central website leads to agencies and organizations having less accessibility to an information on a website to see and understand what needs and problems are occurring in the community. Therefore, the needs of cities within the county may not be fully addressed, and targeted populations go unseen due to the lack of information that relays the health problems in an understandable manner.

The lack of accessible data on health disparities in MC plays a role in the broader "macro-level" problem that is rates of chronic health conditions (i.e., obesity and diabetes) in MC are too high. Not being able to access health disparity information affects the rates at which chronic diseases are experienced in different locations within the county. Table 3 illustrates the significant differences in obesity[2] and diabetes[3] rates at the state, county and city level. The state of California, in addition to the MC, has a lower rate of individuals ever diagnosed with diabetes in comparison with Salinas and Greenfield. However, the city of Monterey has a rate that is significantly lower. The rates for obesity in adults aged 18 ≥ years and older in California is lower than in MC, with the rate nearly doubling for the cities of Salinas and Greenfield. The same trend appears for obesity rates for the city of Monterey where the rate is significantly lower.

Table 3. Comparisons of Chronic Diseases in Monterey County of adults aged 18≥ years, 2016

[2] Obesity is described as having a body mass index (BMI) greater than 30. Retrieved from https://www.empoweryourhealth.org/obesity-treatment

[3] Diabetes mellitus is a disease that occurs when your blood glucose, also called blood sugar, is too high. Retrieved from https://www.niddk.nih.gov/health-information/diabetes/overview/what-is-diabetes

	California	Monterey County	Salinas (93905)	Greenfield (93927)	Monterey (93940)
Ever diagnosed with Diabetes (18+)	9.7%	9.6%	11.2%	11.6%	6.0%
Obese (BMI >30) (18+)	28.0%	37.9%	50.6%	47.9%	22.5%

Data Source: 2016 AskCHIS Neighborhood Edition Retrieved from http://askchisne.ucla.edu/ask/_layouts/ne/dashboard.aspx#/

The demographics of the populations affected by diabetes and obesity vary between national, state, county, and city levels. Table 4 shows differences in the demographics between cities in MC that play a significant role in how social determinants of health[4] affect health outcomes for obesity and diabetes. The per capita income for MC is substantially higher than the cities of Salinas and Greenfield that have a per capita income that is at approximately half in comparison, and these are the cities where diabetes and obesity rates have a much higher prevalence. This is similar when comparing the number of people living below the poverty level where the percentage is significantly higher for individuals of Salinas and Greenfield than that of MC and the city of Monterey. Another factor that contributes to social determinants of health is educational attainment. In MC the percentage of the population that has achieved a higher level of education is lower in Salinas and Greenfield compared with the city of Monterey where the educational attainment of a higher school degree or greater is nearly 94%. These populations are directly affected by the macro-level problem due to these factors that are considered social determinants of health and the outcomes contributed by social and economic factors that ultimately create health disparities within a community.

Table 4. Population Characteristics by geographical location, 2018

	United States	California	Monterey County	Salinas (93905)	Greenfield (93927)	Monterey (93940)
Median Age	38.2 years	36.7 years	34.7 years	27.4 years	26.8 years	38.5 years

[4] Social Determinants of health are the economic, social and environmental factors that contribute to health status of and individual or a group. Retrieved from https://www.cdc.gov/socialdeterminants/index.html

Per Capita Income	$33,831	$37,124	$30,674	$14,162	$16,283	$48,311
Persons below poverty line	13.1%	12.8%	13.4%	21.9%	18.5%	10.3%
High School grad or higher	88.3%	83.8%	72.4%	37.9%	49%	93.3%

Data Source: U.S. Census Bureau (2018).

A contributing factor to high rates of obesity and diabetes may include individual level health behaviors. According to the CDC (2019) maintaining a healthy weight includes eating a variety of healthy foods and participating in physical activity that can help decrease the risk for obesity (CDC, 2019). Participating in positive healthy behaviors play a significant role in becoming diagnosed with either obesity or diabetes. However, in order to eat healthy, socioeconomic status contributes in doing so, validating socioeconomic status as another cause. Artiga, S., & Hinton, E (2018) added "there is growing recognition that social and economic factors shape individuals' ability to engage in healthy behaviors (p.2). To explain, socioeconomic status plays a role in diabetes and obesity, individuals who work long hours in order to maintain an adequate income at times are not able to access or afford nutritious foods or needed health care. Due to insufficient income, many times individuals are food insecure and can be an added cause for high rates of chronic diseases. O'Connor, N., Farag, K. and Baines, R (2016) stated "food poverty is the insufficient economic access to an adequate quantity and quality of food to maintain a nutritionally satisfactory and socially acceptable diet" (para. 3). Economic factors contribute to food insecurity, it affects the choices of foods for many. Resulting in choosing cheaper food rather than healthy foods due to cost. Geographical locations are another cause as an environmental factor. Many cities are located in areas where grocery stores may be miles away so the access to fresh foods are limited leading to food desserts in areas of lower socioeconomic status. As well as, rural cities are in food desserts that have more "fast food" options rather than healthier choices. Another cause is many individuals are without a primary care provider. Primary care is an important factor in preventative care, especially in diabetes (Kandula, N. R., Moran, M. R., Tang, J. W., & O'Brien, M. J., 2017). Geographical, social and

environmental factors continue to the disparity demonstrated in different racial and ethnic groups that calls for the need to create equitable outcomes.

Due to the causes of obesity and diabetes, as a consequence there may be a delay in receiving health care considering the lack of a primary care provider that could aid in addressing health concerns and providing preventative health care. Often times one of the determining factors, especially in cases where social determinants of health are prevalent, there is no primary prevention set in place, so there is a delay in care that contributes to these diseases becoming preventable is detected earlier with health and lifestyle management and increase of preventable emergency visits. Another consequence is an increase of incidence and prevalence rates of obesity and diabetes. Due to the lack of focus on the impact these diseases, and the lack of programs and services that strive to improve social determinants of health incidence and prevalence rates can continue to increase over time. If rates increase, however individuals are unaware of their chronic condition due to not having a primary care provider, an increase of preventable emergency visits may occur. With frequent visits to the emergency room and the cost related expenses of managing a chronic health condition comes and increase in healthcare costs. This consequence can increase the susceptibility of exposure to other life-threatening diseases. Garg, A., Boynton-Jarrett, R., & Dworkin, P. H. (2016) stated “Some health policy makers have embraced screening of social determinants as the next hope for achieving the triple aim of better health, improved health care delivery, and reduced costs because social and environmental factors are thought to contribute half of the modifiable factors that influence health” (para. 2). Health care cost increases is a consequence that can be prevented, individuals suffering from diabetes and obesity are faced with increases healthcare costs due to medication, frequent visits to the doctors office and emergency room visits that are a result of managing these conditions. The consequence it can have on an individual’s health is overall health status may decline since chronic health conditions increase the probability of being diagnosed with another disease. Or one may easily get sick from the flu or common cold as a result of the body function working differently as a cause of the conditions. Comorbidities can occur with individuals that are already dealing with these diseases as a result of the impact it has on the health status. Comorbidities are prevalent among

individuals with diabetes, especially the burden increases as age increases and is higher for men than women. The comorbidity[5] burden tended to increase in older age groups and was higher in men than women (Iglay, K., et al., 2016).

Figure 1. Problem Model Template (Updated)

CAUSES TO AGENCY PROBLEM	AGENCY-SPECIFIC "MICRO-LEVEL" PROBLEM ADDRESSED BY PROJECT	CONSEQUENCES TO AGENCY
No central location with health disparities data	Lack of accessible data on health disparities in Monterey County	Community is unable to understand the health disparity proprieties in Monterey County
Lack of communication between agencies on data sharing of health indicators		Poor collaboration of data sharing to address health disparity problems between agencies and organizations
Complex data not accessible in terms of easy to understand, interpret and locate within a website		Inability to identify target populations within Monterey County
		Lack of equitable services to address problems in MC
CAUSES/RISK FACTORS TO BROADER PROBLEM	**BROADER "MACRO-LEVEL" HEALTH/SOCIAL PROBLEM**	**CONSEQUENCES TO SOCIETY**
Health behaviors	Rates of chronic health conditions (i.e., obesity and diabetes) in Monterey County are too high	Delay in receiving health care
Food insecurity		Increase of incidence and prevalence rates of obesity and diabetes
Socioeconomic status		Increase of preventable emergency visits

[5] Comorbidity means more than one disease or condition is present in the same person at the same time. Conditions described as comorbidities are often chronic or long-term conditions. Centers for Disease Control and Prevention. (2018). Retrieved from https://www.cdc.gov/arthritis/data_statistics/comorbidities.htm

Rural area food desserts		Health care cost increases
No primary health home or primary care provider		Overall health status declines
Geographical location rates vary due to social determinants of health		Comorbidities

Capstone Project Description and Justification

The capstone project "Identifying key Social Determinants of Health (SDOH) in Monterey County" will serve as health education intervention by researching health indicators and highlighting SDOH in the development of a health brief that is easily understandable and will be easily accessible on the MCHD website. The goal of the project is to decrease the rates of obesity and diabetes in MC by recognizing the effects of SDOH factors that contribute to the disproportionate rate within cities in MC as a health disparity. The short-term objective through the implementation of the health brief is to increase knowledge on health disparity data in MC that will also be easily understandable and accessible for government agencies, nonprofit organizations and the community in order to reach equitable health. The benefits that will result from this project is the community to have a simpler way to access data relevant to their county and explained in a format that can easily be interpreted. It will also help for the members of the community to understand the needs of varying geographical areas of focus and where health disparities lie in their communities, along with the social determinants of health that play a role in the health needs in their community. It will be a service for research purposes to prioritize community needs and address health disparities and how health officials and organizations can work to identify and address the health needs of the county to strive for equitable health outcomes within the community.

Project Implementation Plan **(1-2 pages)**

The strategy used to implement the project was a health education intervention through the development of an Obesity and Diabetes Health Brief. The purpose will be to provide accessible information and in an understandable format to the public about the status of MC health status and social determinants of health that may affect health outcomes. The preparatory activities to develop the health

brief included conducting research on health indicators that were related to the causes and consequences of obesity and diabetes. The second activity was data pulling for the health indicators of obesity and diabetes from secondary sources and making data visualizations. This allowed for the complex data on the health brief to be easily understandable and accessible.

The participants in this project were the intern, mentor, the Management Analyst III, and the Program Manager. This team oversaw and answered any questions that arose from the expected roles and responsibilities while developing the health brief. Along with reviewing the health brief drafts and providing feedback and approval. This included participating in the survey to determine the results of achieving the success of the expected outcome. Specifically, my responsibilities were to research the health indicators and select them for the health brief, along with conducting the data retrieval from secondary sources that provided the necessary data pertaining to the health brief. With the data collected, data visualization were created with graphs and charts to display the health information in a visually effective manner. Another task was organizing graphs and charts so the health brief could flow nicely with connecting the information to SDOH. Another activity was describing the data from the data visualizations in order for the intended audience to easily understand the health data without having difficulty doing so individually as it was being read.

Some additional resources that were helpful throughout the project process included agency personnel time by contributing time to review the health brief and providing feedback to changes. In addition to, providing insight on how to select indicators that would be helpful when providing input on which indicators would be beneficial to the primary goal of the brief. These resources supplied the project process surrounding the selection of the indicators and health brief edits during meetings and feedback sessions.

The challenges that arose during the project was not having enough time to complete as much research regarding the health indicators and data analysis. This was addressed by doing a large portion of the research during the fall semester. The biggest challenge was the unexpected circumstance of COVID-19, that required the remaining of the internship hours contributing to the project to be completed at home

due to restrictions. This required adjustments to the projects dates and deadlines regarding the completion of the health brief and completion of the survey by the agency in order to account for lost time as a result of the restrictions put in place.

Scope of Work and Timeline (1 page)

This project will be carried by researching and finalizing the health indicator to be further researched for a health brief. The health brief will be developed with health data charts and graphs along with narratives that describe the chronic conditions of obesity and diabetes in MC and specified cities within to show the disproportionate that occur due to SDOH. The Obesity and Diabetes Health Brief is expected to increase access to county-wide health data while increasing knowledge on SDOH and health inequities in the community.

Table 1. Draft Scope of Work Template

Title: Identifying Key Social Determinants of Health in Monterey County

Project description: This project will develop a health brief that will be easy to access health related data information for government agencies and nonprofit organizations in Monterey County. As well as, the general public to better understand county-wide data pertaining to health indicators and social determinants of health that affect community health outcomes. This will allow community organizations and providers to monitor health trends and disparities, prioritize health issues and resources and align services with long-term outcomes.

Goal: Decrease the rate of obesity and diabetes in Monterey County by recognizing the effects of social, economic and environmental factors that contribute to this health disparity.

Primary objective of the project: Increase data sharing and knowledge about health disparities in Monterey County by developing a health brief with easily accessible information for the community to increase knowledge of health concerns to prioritize the needs of the Monterey County community to aim towards equitable health.

Activities		Deliverables	Timeline/deadlines
1	Discuss capstone project ideas with mentor	Final capstone project idea approved	10/30/2019
2	Research topics for Social Determinants of Health (SDOH) and finalize project topic	Submit draft topic to mentor for review/approval	10/25/2019
3	Research indicator information, data pull, data management for health brief	Submit draft report of indicators to mentor for approval	01/27/2020
4	Complete write-up for indicators selected for SDOH brief	Submit draft indicator descriptions for brief	02/28/2020
5	Develop Obesity and Diabetes Health Brief	Submit health brief to mentor for approval	04/17/2020
6	Develop survey using Qualtrics for Obesity and Diabetes health Brief assessment	Submit survey to Mentor/Agency Program Manager	04/17/2020

7	Interview Mentor/Agency management on Obesity and Diabetes Health Brief success	Final assessment of project success of expected outcomes	05/05/2020
8	Prepare capstone presentation in PPT	Present at Dress Rehearsal for grading	05/01/2020
9	Complete reporting requirements	Final agency and capstone reports	05/11/2020
10	Final preparation for Capstone Festival	Final presentation at Capstone Festival!!	05/08/2020

Project Assessment Plan (

As result of the capstone project, the expected outcome is to increase access to county-wide health data. In order to assess the effectiveness of the project, the assessment plan aided in determining if the success of the expected outcome. In the assessment plan the outcome that was measured was Agency/Mentor satisfaction with the (sample) Health Brief on Obesity and Diabetes. The assessment method for the outcome measured was completed through a survey completed by my Mentor and the PEP Program Manager through the survey platform, Qualtrics[6]. The survey developed contained 10 questions concerning satisfaction, accessibility and comprehension.

Project Findings and Results of Assessment

Upon completion of the Obesity and Diabetes Health Brief, a ten-question survey was implemented among staff in the Planning, Evaluation, and Policy Unit with the use of Qualtrics (survey platform). Due to COVID-19, only two staff were available to complete the survey. The summary findings of the survey conducted were as follows:

- 100% of respondents agreed and strongly agreed that the 2020 Obesity and Diabetes Health Brief was easily understandable.
- 100% of respondents strongly agreed that the 2020 Obesity and Diabetes Health Brief was effective in displaying Monterey County data.
- 50% of respondents somewhat agreed and 50% strongly agreed that the 2020 Obesity and Diabetes Health Brief effectively displayed the needs of the community.

[6] Qualtrics is a management platform used to create surveys and generate reports on feedback. Retrieved from https://www.qualtrics.com/uk/what-is-qualtrics/

- 100% of respondents strongly agreed to use this 2020 Obesity and Diabetes Health Brief for future reference.
- 100% of respondents strongly agreed the 2020 Obesity and Diabetes Health Brief would be easily accessible if located on the MCHD data and reports website.
- 100% of respondents were moderately satisfied and extremely satisfied with the overall Obesity and Diabetes Health Brief.

Some additional comments on the health brief included: *"Had there been more time, I would have liked to see more of the community needs explained. For example, what the numbers indicate and how they are related to social and health inequities, in more detail. I would have also liked to have a list of what is currently being done in Monterey County, but due to COVID-19, we were unable to complete this portion for the purpose of the Capstone Project but will be adding these to the final document"(Survey comment, 2020).*

"It's very possible that we include other city level data in the future, especially when working with the Conduent Platform. This brief provides a nice overview of the rates of diabetes and obesity in Monterey County and will be used as template for future health briefs" (Survey comment, 2020).

These findings demonstrate that the development of the Obesity and Diabetes Health Brief project was successful in achieving the expected outcome of increasing access to county-wide health data as an educational health intervention. The format of the health brief was easily understandable and displayed the data in a manner that was easily interpreted. It also explained the needs of the community in a format that was easy to understand. The format of this brief will allow for future use as a template to create other health briefs based on different health indicators. This will help to display data about health disparities and the extent of which social determinants of health play and integral role in health outcomes of a community.

A success of the projects design was creating a health brief format that can be utilized in the future for population health data that will be accessible to the community. One of the strengths in the project was

being able to communicate about the health brief revisions and feedback. This contributed to the overall successful format and display to interpret the data and the effects of social determinants of health in a way that flowed nicely in the health brief.

A challenge for obtaining project findings was due to COVID-19. The Monterey County Health Officer's Shelter in Place Order resulted in staff having to work remotely and assigned to COVID-19 related tasks, which limited the number of survey respondents. Staff were unfortunately unable to participate in the survey as originally planned due to increased responsibilities across the department, especially managers. However, the project's expected outcome was able to be completed by the PEP mentor and Program Manager, with valuable feedback and overall satisfaction with the health brief.

Recommendations

A recommendation for the agency would be to continue creating health briefs on other population health indicators. Luck, J., Chang, C., Brown, E. R., & Lumpkin, J. (2006) asserted "Many types of data that would be highly useful for producing local health information are unavailable for the vast majority of communities" (p. 984). There are other health indicators that can be researched and developed into a health brief for the community to have access to. Some of these indicators include health behaviors, health insurance coverage, the prevalence of other chronic diseases and morbidity rates (Luck, J., Chang, C., Brown, E. R., & Lumpkin, J., 2006). Another important recommendation would be to make health data easily accessible to members and agencies through a centralized website to address social determinant of health connections and needs of the community. Keller, S., Nusser, S., Shipp, S., & Woteki, E. C. (2018) added, "Communities, especially small and rural ones, need to take advantage of new techniques for collecting and analyzing data to better serve their residents" (para. 1). Providing a centralized website or tool to disseminate health information is an important investment, not only for the community but for agencies and organizations as well. Government agencies, in this case the local agency, can utilize health data to develop and revise policies. Data sharing can be used to help implement and prioritize the needed resources to different departments and programs based on geographical locations. Nonprofit organizations could benefit by using the health data information to design programs

to meet the needs of targeted populations in the community (Luck, J., Chang, C., Brown, E. R., & Lumpkin, J., 2006). Providing local health data that is easily accessible and understandable can allow for further health improvements to address social issues and improve the health of the community.

The inability to target populations and efficiently basing services on the needs of the community contributes to the broader goal. It can be attributed to the broader goal a lack in displaying the health inequities being experienced based on social, economic and environmental factors contributes to the high rates of obesity and diabetes in Monterey County. The National Committee on Vital and Health Statistics (NCVHS) conducted a workshop that focused in four areas how to enhance public-private collaboration to increase availability of subcounty data, how to improve health and human service data generation to provide sub-county data, how to aligning federal small area data generation initiatives, and lastly reinforcing multi-sectoral approaches to measuring community health and well-being. NCVHS (2017) stated "The Measurement Framework provides a structure for thinking about how to measure community health and well-being across numerous determinants. As such, it can facilitate community-level data-collection, measurement, and decision-making and provide a means to use multiple domains to design community interventions and track their impacts (p. 9). In doing so, county level data can help communities prioritize needs and has been proven to help communities' guide policy and locate appropriate and necessary resources. The county level health data in the health brief can contribute to positive action through government action and community engagement in the overall goal of decreasing chronic disease rates of obesity and diabetes. There is evidence that elaborates on the important role that community level data has in creating measurable improvements in population health (U.S Department of Health and Human Services, 2017). Displaying the data that interprets the effects of social determinants of health on health disparities will allow agencies, organizations and the community to understand the needs of their geographical areas of focus and where health disparities lie in their communities, along with the social determinants of health that play a role in the health needs in their community. To prioritize community needs and address health disparities of the county to strive for equitable health outcomes and improve community health.

Conclusions and Personal Reflection

The most important insight that I have gained from my capstone year-long research process is knowledge of how to evaluate and expected outcome. That area was a professional skill that I had to develop in order to carry out my assessment properly. Another insight is that planning and implanting a project are sections that require a bulk of the projects time in order to carry out a successful project. The major learning outcomes that were addressed the most were MLO2 Equity and Social Justice, MLO7 Research Methods and Information Literacy and MLO5 Professional Communication due to the tasks of my project and the preparatory activities of researching social determinants of health and developing a health brief in an understandable manner.

The challenges during this project that I will remember most are the challenges that stemmed from COVID-19, there were a lot of adjustments that had to be made in a short amount of time, independently. I would say that from this challenge, I learned to be adaptable in challenging circumstances to achieve my project. I had to learn to trust my judgement on edits that needed to be made to the health brief without mentor consultation. I also had to grow professionally by learning how to complete tasks independently without out direction, since I was at home completing my project rather than at my cubicle at the health department with tasks set up for me.

Some advice for future CHHS student interns would be to keep in mind that there will be continuous changes throughout the process of the project at every stage from planning to assessment. Another piece of advice would be to go into their internship with an open mind. I feel that I learned so much just by being open the learning experience that was open to me. The only expectation that I had entering my internship was willingness to learn any area, and I feel that I gained a good amount of professional skill and knowledge in comparison to when I first entered. Also, my last advice would be not to be afraid or timid about tasking question. I know at times is can be hard to ask questions but as interns we are there to learn the most that we can, so asking questions are our job as a part of our learning process.

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APPENDIX

Qualtrics Survey

1. What is your job classification?
2. What department are you in?

Please respond how much you agree or disagree with the following comments.

3. The 2020 Obesity and Diabetes Health Brief is easily understandable.
4. The 2020 Obesity and Diabetes Health Brief is effective in displaying Monterey County data.
5. The 2020 Obesity and Diabetes Health Brief effectively displays the needs of the community.
6. I would use this 2020 Obesity and Diabetes Health Brief for future reference.
7. The 2020 Obesity and Diabetes Health Brief would be easily accessible if located on the MCHD data and reports website.

Please indicate your satisfaction level with the following comment.

8. Overall, I was satisfied with the Obesity and Diabetes Health Brief.

Please respond to the following questions.

9. What additional information should be included in the 2020 Obesity and Diabetes Health Brief?
10. Please provide any other comments or feedback related to the 2020 Obesity and Diabetes Health Brief?