Open Access Research Journal of
Life Sciences
Journals home page: https://oarjpublication/journals/oarjls/
ISSN: 2783-025X (Online)

(REVIEW ARTICLE)

Implementing the Bismarck model for dental care in San Diego County

Foujan Jabbarzadehkhoei [1,*], Jacqueline Hernandez [1] and Paniz Sabeghi [2]

[1] *California State University, San Marocs, California, USA.*
[2] *University of Southern California, Los Angeles, California, USA.*

Open Access Research Journal of Life Sciences, 2023, 06(01), 098–102

Publication history: Received on 20 July 2023; revised on 02 September 2023; accepted on 05 September 2023

Article DOI: https://doi.org/10.53022/oarjls.2023.6.1.0058

Abstract

The Bismarck model is a great model that has been used in other countries as a reference. It provides coverage for all, and it is a more-simple model than the American healthcare system. Coverage is required regardless of someone's income, and it has a higher life expectancy because of the early preventative care provided. The Bismarck model was implemented in 1875 and has worked for Germany and Japan. San Diego County would benefit from this Bismarck model because it has proven to have positive outcomes for its citizens. The objective of this paper is to implement the Bismarck model in San Diego County.

Keywords: Universal access; Bismarck model; Otto von Bismarck; Life expectancy; San Diego County; American Indians; Dental care; ACA insurance; Health Professional Shortage Areas (HPSAs)

1 Introduction

The Bismarck model was created near the end of the 19th century by Otto von Bismarck (PPHR, 2017). This model is found in Germany, France, Netherlands, Australia, Japan, Switzerland, and some parts of Latin America (PNHP, 2010). In this model, insurance is obtained through the employer, and premiums are split between the employer and the employee. In addition, if the employee lost their job, the insurance wouldn't be stopped. The government also requires every citizen to be covered with health insurance (English et al., 2021). Regardless of the number of insurers, the government controls the prices while insurers do not make a profit (English et al.,2021). Moreover, providers have the freedom to provide the care they think is best (PNHP, 2010). In this model, individuals contribute to the sickness funds as a payroll deduction through their employers (English et al., 2021). The Bismarck model adopter has more privatized hospitals than U.S. and health providers are generally private institutions, though the Social Health Insurance funds are considered public. (English et al., 2021).

2 San Diego Population & Demographics

According to recent data, the population of San Diego County is 3,339,298 which has increased since 1940 (Worldpopulationreview, 2022). The population mostly consists of white race (66.6%) while American Indians and Alaska natives make up the lowest portion of the population (0.73%). Based on the education category, 15.3% of the population have graduate degrees and 24% have bachelor's degrees (Worldpopulationreview, 2022). In regard to income, the average earnings for a family were $45,888 and the unemployment rate was 6.2% in 2022 (Worldpopulationreview, 2022). The median age of the population in San Diego County is 36, which means the population mostly consists of young adults. The percentage of uninsured people in San Diego County in 2008 was 21%, which has decreased in 2014 (Open Data Network, 2019). The reason for decreasing uninsured people in San Diego County from 2014 was mandating the ACA insurance for all people in the US. Within the San Diego County programs like the ACA have coverage for dental and prenatal care. These two topics are very important to a person's well-being and research below will elaborate on how the demographics of these look currently in San Diego County.

* Corresponding author: Foujan Jabbarzadehkhoei

Copyright © 2023 Author(s) retain the copyright of this article. This article is published under the terms of the Creative Commons Attribution Liscense 4.0.

3 Demographics of Dental Care

According to the dental demographic information, there are approximately 83 dentists for every 100,000 people in San Diego County (Finlayson & Zapata, 2019). San Diego County has 19 Dental HPSAs (Health Professional Shortage Areas), 12 of which are designated as Federally Qualified Health Centers, 5 are Native American/Tribal Facility 3Population, and 2 are designated for Low Income Populations (Finlayson & Zapata, 2019). There was a California Health Interview Survey in 2017, among adults in San Diego County and it showed 71% had dental insurance and 29% did not have dental insurance (Finlayson & Zapata, 2019). Based on 2017 data from California Health Interview Survey, among children in San Diego County, 96% had dental insurance and 4% did not have dental insurance. From 2017-2018, 7% of parents reported being unable to find a dental office that accepts the child's dental insurance and 5% reported being unable to afford their child's oral health assessment, 49% declined their child receiving a dental check-up (Finlayson & Zapata, 2019). The California Department of Health Care Services (DHCS) hosts a Medi-Cal Dental Portal where California residents can search for Medi-Cal Dental Program Providers but so many people could not afford the costs of Denti- Cal. Therefore, they were not qualified for the coverage (Finlayson & Zapata, 2019). Also, many providers did not accept Denti- Cal for a variety of procedures, which can cause detrimental effects on the oral health of the population (Finlayson & Zapata, 2019). Based on the data from 2018 and 2020, 14.7% of children and 2.3% of adults had never been to a dental visit (O'Malley., et al. 2022). In 2017-2018, OHIO's local efforts to increase access to dental services. Moreover, in 2017, The Health Center Partners had fifteen-member health centers throughout California who provided comprehensive oral health services and 39 dental sites throughout San Diego County (Finlayson & Zapata, 2019). San Diego County male and female residents ages 65-74 are the largest demographic group with Medicare coverage in California. Medi-Cal Dental utilization from June 2017 to May 2018 reported 25% of adults ages 65-74 and 22% of adults ages 75+ had an annual dental visit, and 16% and 15% receive dental treatment, respectively (Finlayson & Zapata, 2019). The John Geis DDS Dental Clinic at the Veteran Village of San Diego is a free dental clinic that opened in November 2015 to provide dental care services to San Diego veterans. The Dental Clinic is run as a partnership between the San Diego Dental Health Foundation, VVSD, and the University of California San Diego's student-run Free Dental Clinic. There are also low-income clinics in San Diego County include American Indian Health Center, Anderson Center for Dental Care, California Kids, Children's Dental Health Association of San Diego, Lemon Grove, Neighborhood Healthcare, and Vista Community clinic (UCSD Pre- Dental Society, 2022)

4 Discussion

Continuing to improve the health of people is important to keep a healthy society because their health is connected to every aspect of their lives (Thompson et. al., 2007). San Diego County currently provides health insurance to residents that qualify for Medi-Cal. Medi-Cal is California's Medicaid health care program, for children and adults with limited income resources (San Diego County, 2022). Those who live in San Diego can choose a health plan choice that includes Aetna, BlueShield, Community Health Group, Kaiser Permanente, Molina Healthcare, United Healthcare (San Diego County, 2022). In 2014 when the Affordable Care Act law took full effect it helped transform the American healthcare system. This helped those who were part of the gap of uninsured people to enroll in exchanges. It was an expansion of Medicaid for adults with incomes below 138% of FPL (McMorrow et. al., 2020). ACA has reduced uninsurance rate and has improved affordability for millions of Americans to receive coverage and care (McMorrow et. al., 2020). Healthcare implementations such as the ACA strive to minimize the gap of the uninsured, however, there is still more that can be done. There are countries that have implemented the Bismarck model into their healthcare system and have closed the uninsured gap. They have also made a tremendous impact when it comes to dental and prenatal care.

5 Benefitted Countries Using the Bismarck Model

5.1 Germany

The first country to review is Germany. Germany was known to have a high GDP and decided to bring in the Bismarck model to cut down costs. With the cut of cost, there was still good coverage for everyone and good quality of care. In a study conducted for dental care coverage for older adults, Germany was ranked one of the top countries. In the cross examination, older adults were categorized to have predominantly deep coverage. These services range from simple routine exams to major services like dentures (Allin et al., 2020).

5.2 Japan

The second country shown to have benefited from the Bismarck model is Japan. In the article, "Pregnancy care in Germany, France and Japan '', by Rump and Schoffski, compares the quality of care, efficiency, and outcomes of the three countries. The article mentioned how Japan was ranked first for pregnancy care quality as well as showing a high

variability in outcomes and technical efficiency (Rump & Schoffski, 2018). Within this study, other countries that weren't under universal coverage were included. France and Germany came in second for the best pregnancy quality, although there could be some improvements.

5.3 France

Aside from Germany and Japan, France is another country that has universal coverage. With France having universal coverage, residents in the country are able to consult with their doctor more often (Taguri, 2008). The model also allows them to maintain a low GDP that runs under 10% whereas in the U.S. the GDP is at 17% (Reid, 2009). By France adopting this model they have been able to give certain relief to women and parents that is not seen in the U.S. "A pregnant woman is exempted from any payment in the last five months of her pregnancy and the first four months after delivery" (Reid, 2009). Having implementations like this may not seem like much, but in the end is a huge impact to those people.

5.4 Australia

The last country to have shown benefited from the Bismarck model being implemented in their system is Australia. Like the other countries mentioned to have switched over to Bismarck for a positive outcome, Australia needed to improve their healthcare performance (Dixit, 2018). Besides improving the healthcare performance, Australia wanted to make healthcare affordable for low-income residents and give them freedom to choose their healthcare plan (Glover & Woods, 2020). The country has shown to have given great access to all citizens. Some examples consist of the federal government funds covering maternity care, limited optometry, and children's dental (Glover & Woods, 2020).

6 Proposal, Implementation, and Measuring Impact of The San Diego Act

6.1 Proposal

These countries have shown a positive outcome after implementing the Bismarck model to their healthcare system. Therefore, we propose that the Bismarck model be implemented in San Diego County. This proposal would mean that every resident in San Diego County would be eligible to receive insurance. Insurance coverage would consist of medical, dental, vision, mental health, prenatal and postpartum care. The first step to achieve this is for the county to require employers to offer insurance to employees and pay health-related fees. The second step is for insurance companies to begin functioning as a non-profit rather than a for profit organization. The last step is for medical professionals to have a voice in the care that they are providing to the patient.

Along with these steps to make the healthcare system reflect more of the Bismarck model, we would also want to make some adjustments to programs that help the uninsured. San Diego County has programs such as Medi-Cal and the Affordable Care Act to assist a range of residents, however there is still a gap that needs to be closed from those that are considered to make too much money to qualify for these programs. We also propose that a program be created to help close the gap of the uninsured that do not qualify for the programs, even after the adjustments. The program would be called "The San Diego Act", which would allow those residents to have coverage and allow them to seek the care that they require. To see if the program is working, it would need to run for approximately 5 - 7 years to see the adverse effects.

6.2 Implementation

When trying to implement a new program like "The San Diego Act", one of the things to review is where the funding will come from. For this program, we need funding from the state to cover those that are unemployed as this will help close the gap. The second thing we would look at is having insurance companies work together to lower premium costs. A form of doing this is having a new enforcement of policies, which insurance companies would have to abide by. Changes like these may not be what companies profiting off the healthcare system would like so the support of the state and county is needed. If the program shows to be successful, then the next assistance needed from them would be to implement a new legislation.

6.3 Measuring the Impact

Once the run of the program has ended, it will be time to see if the program has worked. There will be different aspects that will be analyzed to determine if it was successful or failed. First, we would collect data in different years to see if there has been an improvement in closing the gap of the uninsured. Data collection would consist of the start of the trial, midway and at the end of the trial. Aside from collecting the data, analyzing different components such as the county, residents (insured & uninsured), medical professionals, insurance companies, and employers would be conducted to

see if or how they were impacted. Finally, the last component of analyzing the program is reviewing what aspects of it have worked so it may continue and what has not to be modified.

7 Conclusion

Overall, research has shown that the Bismarck model has many benefits to being implemented to the healthcare systems. The focus is universal coverage for everyone. There is no fear of not having insurance due to losing a job, no fear of not being able to pay for care, and no fear of dying at a young age due to lack of accessible care. The Bismarck model has not only shown to help people, but the system itself in bringing cost down to a more manageable level. With positive outcomes like these it would be a smart decision to run the trail and see the impact that it would make on the county and eventually the country.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

[1] Allin, S., Farmer, J., Quiñonez, C., Peckham, A., Marchildon, G., Panteli, D., Henschke, C., Fattore, G., Lamloum, D., Holden, A. C. L., & Rice, T. (2020). Do health systems cover the mouth? Comparing dental care coverage for older adults in eight jurisdictions. HealthPolicy, 124(9), 998–1007. https://doi-org.ezproxy.csusm.edu/10.1016/j.healthpol.2020.06.015

[2] Centers for Disease Control and Prevention. (n.d.). Pregnancy-related deaths. Centers for Disease Control and Prevention. Retrieved October 23, 2022, from https://www.cdc.gov/vitalsigns/maternal-deaths/

[3] Conrad, J. K., Hollenbach, K. A., Fullerton, J. T., & Feigelson, H. S. (1998). Use of prenatal services by Hispanic women in San Diego County. A comparison of urban and rural settings. Journal of nurse-midwifery, 43(2), 90–96. https://doi.org/10.1016/s0091-2182(97)00155-9

[4] El Taguri, A., & Nasef, A. (2008). The French Healthcare System; What can we Learn?. The Libyan journal of medicine, 3(4), 186-191 . https://doi.org/10.4176/081009

[5] English. P., et al. (2021). The Bismarck Healthcare Model Explained. Retrieved 21 October from https://w3ll.com/blog/the-bismarck-healthcare-model-explained/

[6] Finlayson.T. Zapata. R. (2019) Available Local Oral Health Data Summary Report. Retrieved 21 October from: https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/MCFHS/Avail able%20Local%20Oral%20Health%20Data.pd

[7] Glover, L., & Woods, M. (2020). Internal Health Care Systems Profiles. The Commonwealth Fund. Retrieved 21 October 2022 from:https://www.commonwealthfund.org/international-health-policycenter/countries/australia

[8] HHSA.(2022). Medi-Cal Managed Health Care Options in San Diego County. Retrieved 19 October 2022 from https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/ssp/Healthy%20Sa n%20Diego/HDS%205%2012%2021%2017.pdf.

[9] McMorrow, S., Blumberg, L. J., & Holahan, J. (2020). Ten Years Later: Reflections on Critics' Worst-Case Scenarios for the Affordable Care Act. Journal of Health Politics, Policy & Law, 45(4), 465–483. https://doiorg.ezproxy.csusm.edu/10.1215/03616878-8255421

[10] O'Malley, C. (2022, April 14). Health Care Access and Utilization in San Diego County Health. Retrieved October 19, 2022, from: https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/CHS/Healthy%20San %20Diego%20PPT%20DRAFT%20Final.pdf

[11] Open Data Network. (2019) Health and Health Insurance Data Sets Involving San Diego County, CAAPI. Retrieved 19 October 2022 from: https://www.opendatanetwork.com/entity/0500000US06073/San_Diego_County_C A/health.health_insurance.pctui?year 014&age=18%20to%2064&race=All%20races&sex=Both%20sexes&income=All% 20income%20levels

[12] Reid, T. R. (2009) The Healing of America: A global quest for better, cheaper and fairer health care. Goodreads. Retrieved 19 October 2022, from https://www.goodreads.com/book/show/6402544-the-healing-of-america.

[13] PNHP. (2010). Health Care Systems - Four Basic Models. Retrieved 18 October from https://www.pnhp.org/single_payer_resources/health_care_systems_four_basic_mod els.php

[14] PPHR. (2017). Health Care Reform: Learning from Other Major Health Care Systems. Retrieved 21 October from https://pphr.princeton.edu/2017/12/02/unhealthy-health-care-a-cursory-overview-ofmajor-health-care-systems/

[15] Rump, A., & Schöffski, O. (2018). Pregnancy care in Germany, France and Japan: an international comparison of quality and efficiency using structural equation modeling and data envelopment analysis. Public Health (Elsevier), 160, 129–142. https://doi-org.ezproxy.csusm.edu/10.1016/j.puhe.2018.03.028

[16] Services, D. of H. C. (n.d.). Welcome to the medi-cal access program: En español. Medi-Cal Access Program. Retrieved October 23, 2022, from https://www.dhcs.ca.gov/services/medi-cal/eligibility/MCAP/Pages/MediCalAccessProgram.aspx

[17] Thompson JA, & Lee V. (2007). The effect of health insurance disparities on the health care system. AORN Journal, 86(5), 745–756. https://doi-org.ezproxy.csusm.edu/10.1016/j.aorn.2007.08.020

[18] UCSD Pre- Dental Society. (2022). Retrieved 21 October from https://ucsdpds.org/low-income-clinics-in-san-diego/

[19] U.S. Department of Health and Human Services. (n.d.). Pre-pregnancy care and prenatal Care. Eunice Kennedy Shriver National Institute of Child Health and Human Development. Retrieved October 23, 2022, from https://www.nichd.nih.gov/health/topics/preconceptioncare

[20] Worldpopulationreview. (2022). San Diego County, California Population 2022. Retrieved 21 October from https://worldpopulationreview.com/us-counties/ca/san-diego-countypopulation