RHEUMATOLOGY NURSES SOCIETY™

BREAKING DOWN HEALTHCARE DISPARITIES:

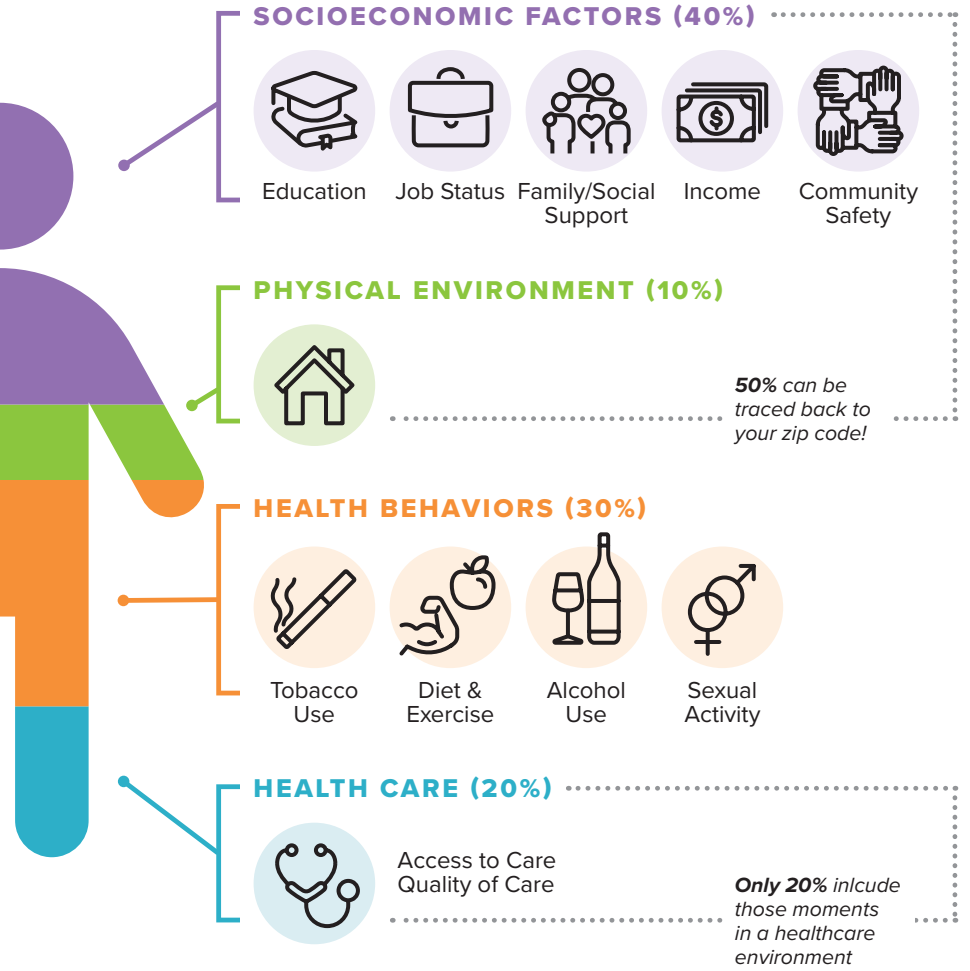
Conversations We Should be Having With Our Patients

Introduction

In order to monitor and develop comprehensive patient care plans, social determinants of health must be considered when addressing patient needs. Without understanding the clinical and non-clinical history of the patient, providers will not be able to treat the patient as a whole person. Some patients' ability to adhere and maintain health recommendations are limited to the environment around them. Research states that 20% of a person's health correlates to the clinical care they receive, 30% to their personal health behaviors, and the remaining 40% to their socioeconomic factors.[1]

The purpose of this discussion guide is to inform providers on how to collect information about the patient's social determinants of health, and why it is crucial for impactful care delivery. By documenting information about a patient's socioeconomic factors, providers will not only connect with their patients on a deeper level but also provide improved patient-centered care as they develop care plans that take into consideration their patient's social health.

Figure 1
Recreated from: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)[2]



Assessing socioeconomic characteristics like income, access to adequate housing, access to transportation, and education level provide context for why certain people are able to live healthier and even longer lives than others.

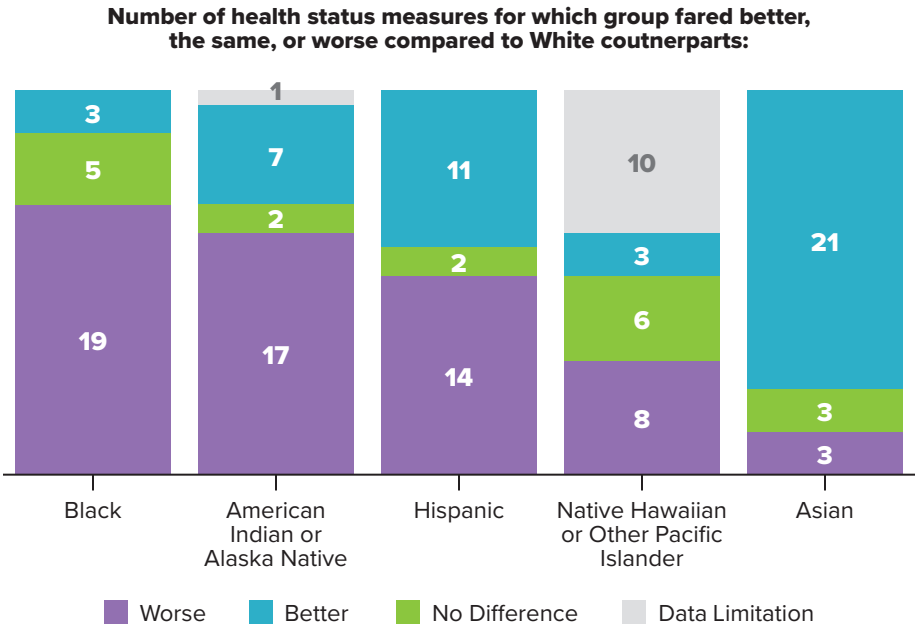
What are Social Determinants of Health?

Social Determinants of Health (SDOH) are the factors in which people live, work, and play.[3] These factors are integral in understanding and predicting health outcomes in the communities we serve. Assessing socioeconomic characteristics like income, access to adequate housing, access to transportation, and education level provide context for why certain people are able to live healthier and even longer lives than others. One of the primary reasons SDOH varies across various patient backgrounds is due to the impact of health disparities on vulnerable populations.

The Impact of Health Disparities

According to the Centers for Disease Control and Prevention, health disparities are the differences in disease burden and instances of injury and violence that ultimately affect socially disenfranchised groups rendering them unable to attain their desired level of a healthy life.[3] Factors that can be used to analyze the impact of health disparities are age, economic status, gender, sexual orientation,

Figure 2
People of Color Fare Worse than their White Counterparts Across Many Measures of Health Status[4]



physical and mental ability, immigration status, and primary language.[4] Health disparities have the power to change a person's overall life trajectory starting from birth with the ability for their life to improve or diminish throughout adulthood to elderly years.[4] Health disparities that providers and healthcare teams need to be aware of are access to health insurance (how little or how much coverage) and access to quality healthcare.[4] Due to inequity in health care coverage and access to quality care, certain disadvantaged groups suffer from greater adverse health outcomes.

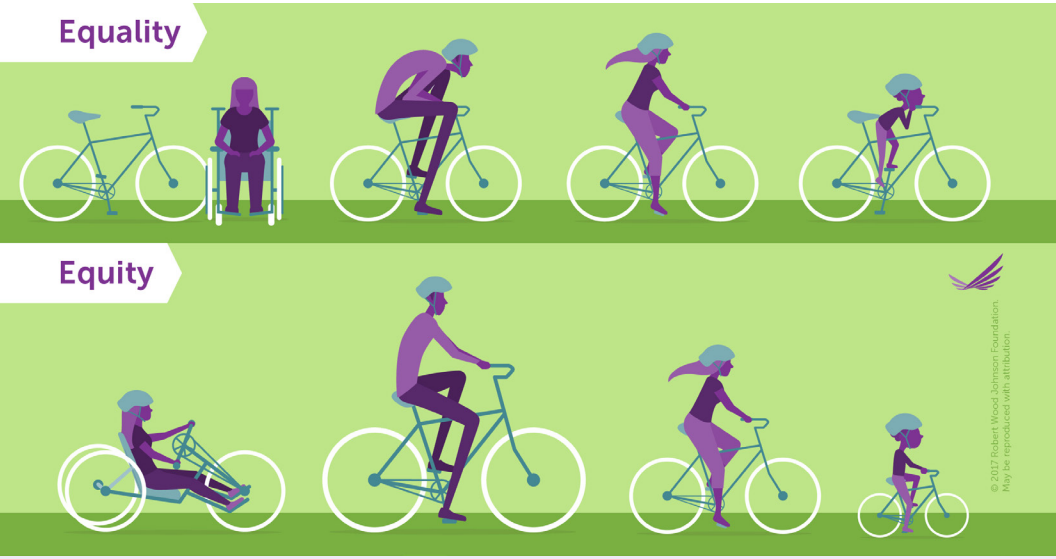
Researchers from the Kaiser Family Foundation found that racial and ethnic minorities tend to have worse overall health outcomes than their white counterparts (Figure 2).[4] These results are largely linked to findings that people of color tend to have little or no healthcare coverage because of socioeconomic factors like income level and/or immigration status and have historically received poor quality care in the United States health system.[4] COVID-19 brought a greater emphasis on the need to address health disparities within vulnerable populations. By adapting our approaches to healthcare delivery, we can begin providing higher quality patient-centered care.

NOTE: Measures are for 2018 or the most recent year for which data are available. "Better" or "Worse" indicates a statistically significant difference from Whites at the p<0.05 level. No difference indicates no statistically significant difference. "Data limitation" indicates data are no separate data for a racial/ethinic group, insufficient data for a reliable estimate, or comparisons not possible due to overlapping samples. Persons of Hispanic origin may be of any race but are categorized as Hispanic for this analysis; other groups are non-Hispanic.

Equity vs. Equality

As providers and health systems strive to tackle health disparities and change the course of health outcomes for their various patient populations, it is important to understand that the care plan development should be done through a health equity lens. Health equity is seen as the chance for all people to achieve and live their healthiest life despite the social and economic circumstances a person may have been born into by reducing and eliminating any barriers or burdens.[3] It is important to note why health equity is a more refined approach to addressing health disparities in comparison to health equality.

Figure 3
Visualizing Health Equity: One Size Does Not Fit All
© Robert Wood Johnson Foundation[5]



As depicted in Figure 3, the same bike was given to four different people, yet it does not accommodate each individual's needs to successfully ride the bike.[5] When analyzing the equity portion of the image, each person was given a bike that was appropriate for their physical makeup. As we look at equity from a health promotion perspective, the lens of equity decreases the effects of historical mistreatment of certain groups by understanding that not everyone has access to the same resources and has the same needs.[6] Implementing health equity into a patient's care plan will ensure that health systems and providers are meeting patients where they are and developing regimens that patients can maintain.

Health Disparities in Rheumatology

In order to understand the importance of social determinants of health in practice, it is imperative to highlight the disparities in Rheumatological health amongst marginalized populations. Research has shown that health disparities significantly impact the health outcomes of those in various racial/ethnic minority groups. Researchers have found that nonwhite patients are more likely to be diagnosed with rheumatoid diseases and have a greater burden of disease than white patients.[7] Patients of color, majority Black, Hispanic, and American Native, and those of lower socioeconomic status tend to have poor outcomes when living with rheumatological diseases.[7]

By acknowledging the social determinants of health that impact marginalized groups, nurses and physicians can also improve the trust between patients that have been historically abused by the healthcare system.

The Nurse and Provider Role in Addressing Health Disparities

As we look at the patient care team, nurses are the first set of providers to interact with patients when they come to the doctor. This provides a special opportunity for the nurse to document information regarding health disparities and SDOHs in the electronic medical record. Nurses are taught to consider a patient's individual and social factors as a part of the standard curriculum which demonstrates how nurses are inherently equipped to incorporate SDOHs into the patient care plan.[9]

Researchers state that 60% of patients noted that their care team did not address or inquire about their social determinants of health during their visit.[9] Additional research has found that patients are 2.5 times more likely to respond to recommendations on how to reduce the impact that health disparities have on their social determinants of health if they come from a doctor or a nurse.[9] By acknowledging the social determinants of health that impact marginalized groups, nurses and physicians can also improve the trust between patients that have been historically abused by the healthcare system.

Nurses and physicians play an integral role in reducing the residual effects of inequity by assessing each patient from a non-clinical perspective. For example, implementing a social determinant of health assessment will construct a detailed picture as to why a patient may have medical adherence issues or a long list of chronic diseases. By collecting data on the SDOHs of each patient, social service programs can be provided to patients in need, thus establishing a care plan that links clinical and non-clinical recommendations to promote better health outcomes.

GUIDED QUESTIONS FOR ADDRESSING SOCIAL DETERMINANTS OF HEALTH

Transportation Assessment

One component to analyzing a patient's social determinants of health is to consider their access to reliable transportation. Lack of access to reliable transportation can cause patients to fall behind on their appointments causing health issues to worsen.[10]

Approximately 3.6 million Americans report transportation as one of the primary barriers to attending their doctor's appointments.[11] Missing doctor's appointments oftentimes can cause long term financial consequences to the patient and to the health system providing the care. If a patient's health declines, they will be unable to provide for themselves financially and missed appointments cause access issues within the health system when appointments are unable to be filled.[12]

Document your patient's transportation needs using the questions below.

> *Understanding a patient's primary mode of transportation when attending doctor's appointments can help clinics and providers anticipate if their patients will have issues arriving on time or may miss their appointment entirely. Collecting data on patient's transportation trends can lead to advance planning and partnership with community organizations to provide transportation to members that have been identified as lacking access.*

1. **What is your primary mode of transportation to and from the doctor?**
    a. Bus
    b. Personal vehicle
    c. Uber, Lyft, or other car service
    d. Family member/caretaker

2. **If you take the bus, how far away is your nearest bus stop?**

3. **Does public transportation only run during certain hours of the day or days of the week in your community?**
    a. Yes
    b. No

> *In a 2022 study, no-show rates in the United States range from 5-55%.[13] This study found that reliable transportation was a barrier to attending primary care appointments and even noted that some patients cannot afford the public transportation fees.[13] As we strive to find a deeper understanding of our patient's lifestyle, these questions reduce the need to categorize a patient as difficult or non-compliant if we are taking into account their dependency on someone else to support them in their healthcare journey.*

4. **Have you or a family member ever missed a doctor's appointment due to unreliable transportation?**
    a. Yes
    b. No
5. **Do you struggle paying for gas for medical appointments?**
    a. Yes
    b. No

> *Patients without secure support structures in their personal life are more likely to have challenges with adhering to medical care.[13] It is important for providers to assess the patient's no show rate from a non-judgmental perspective as there are conditions outside of the patient's control that inhibit them from attending their scheduled appointments or arriving late.*

6. **Do you worry about missing a doctor's appointment due to unreliable transportation?**
    a. Yes
    b. No

> *Pharmacy access and utilization of medication in lower income communities has been found to be another source of adverse health outcomes for our most vulnerable populations. Patients who lack health insurance often travel miles from home in order to obtain their medication at a cost that they can afford.*[14]

7. **Do you find it difficult to make it to the pharmacy to pick up your prescriptions?**
    a. Yes
    b. No
8. **Are you familiar with mail order pharmacy services?**
    a. Yes
    b. No

Housing Assessment

Another key component to understanding the link between a patient's social determinants of health and health disparities is through their current housing environment. If patients do not have safe and adequate housing, injuries and exacerbation of other chronic conditions are more likely to occur. Neighborhood conditions should also be considered in the health outcomes of the patient. The patient's zip code is an indicator of what resources patients may or may not have access to.[15] In an ideal built environment, all patients would have access to grocery stores, affordable housing, and well-kept parks to facilitate a healthy lifestyle. Accounting for a patient's living conditions can be done using the questions below.

> *Affordable living is defined as paying 30% or less of income on rent or mortgage.[15] Lower income patients may struggle to find affordable housing, and typically, the locations in which vulnerable patients find affordable housing have subpar living conditions. The COVID-19 pandemic pushed many families into financial strain where 8 million Americans fell behind in rent.[16] Housing instability is found to lead to chronic morbidity in both the physical and mental health of a patient.[16]*

1. **During the last year, have you ever been concerned about maintaining housing for yourself or your family?**
    a. Yes
    b. No
2. **Are you familiar with community resources that assist with the cost of housing?**
    a. Yes
    b. No

3. **Do you have clean running water in your place of residence?**
    a. Yes
    b. No
4. **Have you ever been exposed to lead in your place of residence?**
    a. Yes
    b. No

> *Patients living in apartments or houses where the number of people in the house exceed the recommended amount based on the square footage or rooms available can create adverse health outcomes.[18] The World Health Organization also classifies household crowding by the difference in gender and age of the members living in the residential space.[18] Overcrowding within the home or residential space leads to the spread of diseases that can burden all members of a household.[18] For those living in close quarters, quarantining during the COVID-19 pandemic was limited causing an increase in disease contraction within dwellings of many Americans.[16]*

5. **How many people live in your place of residence?**
    a. 1-2
    b. 3-4
    c. 5 or more persons

> *Lower income neighborhoods tend to be impacted by food deserts which render patients unable to make the necessary changes to their diet that a nurse or physician may recommend. Lower income neighborhoods are heavily populated with fast-food restaurants, convenient stores, and liquor stores with many residents having to drive miles from home to reach a grocery store.[19]*

6. **Do you travel more than 5 miles to access your local grocery store?**
    a. Yes
    b. No
7. **How often do you eat fast food (ex: McDonalds, Wendy's, other drive through restaurants)?**
    a. Rarely
    b. Sometimes
    c. Often
    d. Very Often

> *If the neighborhood in which a patient lives does not have a park or other forms of recreational centers, it will be difficult for a patient to incorporate exercise into their behavioral changes. Studies have shown that poorer communities tend to have underdeveloped recreational spaces or no parks for people to engage in any forms of physical activity or wellness.[20] Safe places for populations to be active within their community are directly correlated to improved health outcomes.[17]*

8. **Do you have access to a safe public park or recreation facility in your neighborhood?**
    a. Yes
    b. No
9. **Do you have internet access or access to a cell phone?**
    a. Internet Access Only
    b. Cell Phone Only
    c. Access to the Internet and a cell phone
10. **Do you feel that there are enough resources in your community to assist in the area of housing, employment, transportation, food, and education?**
    a. Yes
    b. No

Income

Lower income patients are less likely to schedule medical appointments due to cost of the appointment or lab fees.[21] Affordability of healthcare and lack of health insurance are common issues with this target population.[21] Vulnerable patients typically make less than 30,000 a year and find themselves unable to attend or schedule medical appointments due job inflexibility or lack of insurance.[21] Overall, lower income patients do not have the finances to maintain their health, purchase healthy foods, pay their bills, or travel to their medical appointments and will have to prioritize needs depending on their current circumstances. Below are questions to assess the financial state of patients we serve.

1. **How many hours do you work a week?**
   a. 20-40
   b. 40-50
   c. 50-60
   d. More than 60 hours
2. **Do you feel like you have an assortment of clothing or adequate or appropriate clothing to dress for your job?**
   a. Yes
   b. No
3. **Do you engage in physical labor as part of your daily work?**
   a. Yes
   b. No
4. **Have you ever been unable to pay your heat, electricity, or water bill?**
   a. Yes
   b. No

5. **Do you have a washer and dryer?**
    a. Yes
    b. No
6. **If you have children, do you struggle to afford child care for your family?**
    a. Yes
    b. No
    c. Does not apply

> *Incorporating nutritious foods into a patient's diet is not easy if the patient cannot afford to eat healthy foods. In 2017, Supplemental Nutrition Assistance Program allowed for 42 million Americans the ability to have access to healthy foods.[22] By documenting the use of SNAP for our more vulnerable patients, the care team can provide more information to the patient on how to best use this resource to improve their household diets. Promoting food security is not only beneficial for the patient, but also for the health system. Those who are food insecure spend 45% more on healthcare than those who are able to consume nutritious foods.[22]*

7. **Are you currently enrolled in food assistance programs to support yourself and/or your family?**
    a. Yes
    b. No
8. **Over the last year, have you ever been concerned that you would not be able to purchase food for yourself and/or your family?**
    a. Yes
    b. No

Education

Assessing the education level of our patients is a key indicator for understanding other social determinants of health like income and housing. Research has found that adults with lower levels of education usually present with poor health conditions.[23] Patients with lower levels of education have a lower life expectancy rate than their higher education counterparts.[24] Those with higher levels of education are more likely to attain higher paying jobs which will provide resources needed to live a higher quality life.[23] It is important to document information regarding education, learning style, and literacy to ensure that the patient understands and can apply the nurse and physician recommendations.

1. **How do you best learn?**
    a. Seeing
    b. Reading
    c. Hearing
    d. One or more
    e. All of the above
2. **What is the highest level of education you have attained?**
    a. High School or less
    b. Associates Degree or Trade School
    c. Undergraduate Degree
    d. Graduate Degree or higher
3. **Do you want to further your educational training?**
    a. Yes
    b. No
4. **Are you familiar with resources to further your educational training?**
    a. Yes
    b. No

Documenting the patient's preferred language allows for clinics to prepare for the patient's needs prior to their appointment. If the patient's preferred language is not English, the clinic ensures that the proper interpreter services are available either with an in-person translator or virtual interpretation tools. Patients who experienced language barriers with their provider rated their experience unsatisfactory.[25] Decreasing language barriers creates a more fruitful medical experience for both the patient and care team.[25]

5. **What is the primary language spoken in your home?**

6. **Have you ever been unable to follow or understand the instructions given to you from your doctor or nurse?**
    a. Yes
    b. No

Stress and Anxiety

Our most vulnerable patients are plagued by negative social determinants of health that cause higher levels of stress and anxiety, which only further decrease the health outcomes of these patients. Patients in lower income communities express more stress and anxiety in their daily lives because of exposure to traumatic events that their more affluent counterparts do not experience.[26] Whether the patient is aware of their chronic stress or not, unresolved stress and anxiety can limit one's ability to meet their health goals and cause the patient to resort to unhealthy habits to regulate their chronic stress and anxiety.

1. **How would you describe your stress level?**
    a. Rarely experiencing stress and anxiety
    b. Sometimes experiencing stress and anxiety
    c. Often experiencing stress and anxiety
    d. Very often experiencing stress and anxiety
2. **How often do you interact with positive/supportive people?**
    a. Rarely
    b. Sometimes
    c. Often
    d. Very often
3. **Do you feel like you need more emotional support?**
    a. Yes
    b. No
4. **Are you familiar with local resources for support groups, counseling, and mental health services?**
    a. Yes
    b. No

References

1. Skillen, W. H. E. A. E. (2021, July 29). *Public transportation in the US: A driver of health and equity: Health affairs brief.* Health Affairs. Retrieved September 19, 2022, from https://www.healthaffairs.org/do/10.1377/hpb20210630.810356/
2. Scott, J. (2019, November 4). *Programs focused on the social determinants of health: Balancing costs and outcomes*. Applied Policy. Retrieved October 17, 2022, from https://www.appliedpolicy.com/programs-focused-on-the-social-determinants-of-health-balancing-cost-and-outcomes/
3. Centers for Disease Control and Prevention. (2019, December 19). *Frequently asked questions*. Centers for Disease Control and Prevention. Retrieved September 19, 2022, from https://www.cdc.gov/nchhstp/socialdeterminants/faq.html#what-is-health-equity
4. Ndugga, N. (2021, May 12). *Disparities in health and health care: 5 key questions and answers*. Kaiser Family Foundation. Retrieved September 19, 2022, from https://www.kff.org/racial-equity-and-health-policy/issue-brief/disparities-in-health-and-health-care-5-key-question-and-answers/
5. Robert Wood Johnson Foundation. (2017). *Health Equity Infographic*. Visualizing Health Equity: One Size Does Not Fit All Infographics. Retrieved November 30, 2022, from https://www.rwjf.org/en/library/infographics/visualizing-health-equity.html#/download
6. The Annie E. Casey Foundation. (2020, August 25). *Equity vs. equality and other racial justice definitions*. The Annie E. Casey Foundation. Retrieved September 19, 2022, from https://www.aecf.org/blog/racial-justice-definitions?gclid=CjwKCAjw4JWZBhApEiwAtJUN0LOqcf3cdHjdkMNmX5uftQdNuZQVcY1xSUiE9PDjysNaKLoXShG0choCjHYQAvD_BwE
7. Taylor, T., Yazdany, J., & Gianfrancesco, M. A. (2021). The racial/ethnic and sociocultural aspects of the pandemic in rheumatology. *Best Practice & Research Clinical Rheumatology, 35*(1), 101665. https://doi.org/10.1016/j.berh.2021.101665
8. *Nurses poised to address social determinants of health - perspectives.* Oracle Cerner. (2017). Retrieved September 19, 2022, from https://www.cerner.com/perspectives/nurses-address-social-determinants-of-health
9. Heath, S. (2018, December 19). *Few docs discuss Social Determinants of Health with patients*. PatientEngagementHIT. Retrieved September 19, 2022, from https://patientengagementhit.com/news/few-docs-discuss-social-determinants-of-health-with-patients
10. Weber, S. (2020). *Overcoming patient transportation barriers to care*. Physicians Practice. Retrieved September 19, 2022, from https://www.physicianspractice.com/view/overcoming-patient-transportation-barriers-care

11. Providertech. (2022, June 27). *Top 3 reasons underserved patients miss appointments-and how to ensure they don't*. Providertech. Retrieved October 17, 2022, from https://www.providertech.com/top-3-reasons-underserved-patients-miss-appointments-and-how-to-ensure-they-dont/

12. Lambalot, H, Jimenez, K., & Roseman, D. (2019). *Confronting transportation barriers - America's essential hospitals*. Retrieved September 20, 2022, from https://essentialhospitals.org/wp-content/uploads/2019/03/Confronting-Transporation-Barriers-1.pdf

13. Chapman, K. A., Machado, S. S., van der Merwe, K., Bryson, A., & Smith, D. (2022). Exploring primary care non-attendance: A study of low-income patients. *Journal of Primary Care & Community Health, 13*, 215013192210823. https://doi.org/10.1177/21501319221082352

14. Qato, D. M., Wilder, J., Zenk, S., Davis, A., Makelarski, J., & Lindau, S. T. (2017). Pharmacy accessibility and cost-related underuse of prescription medications in low-income black and Hispanic Urban Communities. *Journal of the American Pharmacists Association, 57*(2). https://doi.org/10.1016/j.japh.2016.12.065

15. Braveman, P. (2021, June 1). *Housing and health*. How Does Housing Affect Health? Retrieved September 19, 2022, from https://www.rwjf.org/en/library/research/2011/05/housing-and-health.html#:~:text=Healthy%20homes%20promote%20good%20physical,harmful%20effects%20on%20childhood%20development.

16. Consumer Financial Protection Bureau. (2021, March). *Housing insecurity and the COVID-19 pandemic*. Retrieved October 18, 2022, from https://www.consumerfinance.gov/documents/9512/cfpb_Housing_insecurity_and_the_COVID-19_pandemic.pdf

17. Chokshi, D. K. D. A. (2018, October 4). *Health, income, & poverty: Where we are & what could help: Health Affairs Brief*. Health, Income, & Poverty: Where We Are & What Could Help | Health Affairs. Retrieved September 19, 2022, from https://www.healthaffairs.org/do/10.1377/hpb20180817.901935/

18. WHO Housing and Health Guidelines. Geneva: World Health Organization; 2018. 3, Household crowding. Available from: https://www-ncbi-nlm-nih-gov.proxy.lib.umich.edu/books/NBK535289/

19. Yater, A. (2021, May 4). *Correlation between food deserts and fast-food restaurants*. ArcGIS StoryMaps. Retrieved October 17, 2022, from https://storymaps.arcgis.com/stories/c85cf89d1516498d9645c325b3f5d814

20. Gordon, D. (2017, March 22). *Access to parks, open spaces in your community can be a health factor*. UCLA. Retrieved October 17, 2022, from https://newsroom.ucla.edu/stories/public-health-experts-find-poor-neighborhoods-lack-access-to-parks-open-space

21. Lewis, C., Zephyrin, L., Abrams, M., & Seervai, S. (2019, May 15). *Listening to low-income patients and their physicians: Solutions for improving access and quality in primary care*. Commonwealth Fund. Retrieved October 17, 2022, from https://www.commonwealthfund.org/blog/2019/listening-low-income-patients-and-their-physicians--improving-access-and-quality

22. Carlson, S. & Keith - Jennings, B. (2018, January 17). *SNAP is linked with improved nutritional outcomes and lower health care costs*. Center on Budget and Policy Priorities. Retrieved October 17, 2022, from https://www.cbpp.org/research/food-assistance/snap-is-linked-with-improved-nutritional-outcomes-and-lower-health-care

23. Dotson, E., Freeman, K., Michel, E., & Young, M. (2022). Physicians, prescribe education to address Population Health Equity. *Preventive Medicine Reports, 29*, 101950. https://doi.org/10.1016/j.pmedr.2022.101950

24. Zajacova, A., & Lawrence, E. M. (2018). The relationship between education and health: Reducing disparities through a contextual approach. *Annual Review of Public Health, 39*(1), 273–289. https://doi.org/10.1146/annurev-publhealth-031816-044628

25. Al Shamsi, H., Almutairi, A. G., Al Mashrafi, S., & Al Kalbani, T. (2020). Implications of language barriers for Healthcare: A systematic review. *Oman Medical Journal, 35*(2). https://doi.org/10.5001/omj.2020.40

26. Silwa, J. (2018, January 18). *Higher stress among minority and low-income populations can lead to health disparities, says report*. American Psychological Association. Retrieved October 17, 2022, from https://www.apa.org/news/press/releases/2018/01/stress-minority-income

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