

Spotlight

Why is diversity in sample recruitment needed?

Editor's Note: Sample diversity is critical to the development of quality market research insight that helps to improve strategies around shape patient care. Despite increasing awareness, achieving sample diversity continues to be a key challenge for pharmaceutical market researchers. In this engaging white paper, author Nicole Mair, prepares business insights professionals and brand managers with knowledge of the different ways diversity touches healthcare and why it is important to gather diverse perspectives in research. The paper concludes with a list of tactics that researchers can apply to coach organizations on the importance of inclusivity to patient outcomes, to improve sample diversity in market research, and to deliver stronger business recommendations as a result.

When illustrator Chidiebere Ibe's "black fetus" image went viral in late 2021, it sparked a discussion about the need for diversity in medical textbooks. In fact, several studies have been conducted, particularly focused on dermatology, about the lack of diversity in healthcare.



Aside from the obvious issues of practicality, real danger accompanies a lack of diversity. One example is the significantly higher misdiagnosis rate of melanoma in darker skin. M Lyman, et al (2017)¹ found Black patients were more likely to be misdiagnosed compared to White patients. Physicians were sent 20 images of common skin conditions and asked to identify 20 potential diagnoses. Within those 20 pictures, two depicted melanomas on White skin and two depicted melanomas on Black skin. Of the two Black skin melanoma pictures, 62% (177/287) and 31% (90/287) were incorrectly identified compared to 13% and 7% of the White skin melanoma pictures.

One cause of this disparity might be a key skill taught in dermatology: visually recognizing patterns (e.g., color variations) of different skin conditions, notes an Advisory Board website article. When White skin is considered the 'norm' differences in non-White skin will be missed.

Despite obvious gaps in diverse treatment, there has been progress with a more recent push within the last decade. Indeed reported an increase in job postings for chief diversity officers (CDO) with half of all S&P 500 companies employing a CDO. Companies started to connect diversity with success and have reacted accordingly, but why is diversity in market research recruitment needed?

Our clients' customers are diverse

Our clients serve a broad range of patients – a group that is becoming more diverse by the decade. Although White / Caucasian, remains the largest race or ethnicity group, this trend is changing according to the latest census. Since 2010, people who report being multicultural increased by 276% and the Hispanic or Latino population (which includes people of any race) grew 23%. It is our duty to ensure strategic insights rely on the latest information.



Diseases impact certain groups differently

The COVID-19 pandemic gave a glaring look at the disproportionate impact of disease on people of color. Reyes 2020² found that approximately 97.9 out of every 100,000 African Americans died from COVID-19 compared to 64.7 per 100,000 Latinos, 46.6 per 100,000 Whites and 40.4 per 100,000 Asians. The emergence of 'COVID toes' and rashes, a newer, less common symptom of COVID highlighted an additional concern.



The violaceous color of purpura is obvious on this patient's light skin



In a patient with dark skin, purpura appears dark brown rather than violaceous

COVID toes can develop on both toes and (less often) fingers. The condition manifests as swelling and discoloration of one or several toes or fingers. Patients may also develop rashes including blisters, painful raised bumps, and or areas of rough skin among other symptoms.³⁴ Like most dermatological conditions symptoms and manifestations can differ depending on skin tone. On light skin it is described as flat and not itchy while on dark skin it is raised and itchy with the same pattern. Coloring also differs – on dark skin, the rash is brown or purple but may be red or purple on light skin.

Despite these differences and research showing the disproportionate impact of COVID-19 on African Americans, images of darker skinned patients are less likely to be included in medical studies. A Global and Mail article,⁵ highlighted a literature review in the British Journal of Dermatology. Out of 36 studies showing COVID-19 manifestations on skin, there were none depicting patients with dark skin (Lester et al. 2020). Although COVID toes are not the most common symptom, this exclusion may have widespread impacts on diagnosis.



Some studies (Frumholtz et al 2021)⁶ suggest that COVID toes and rashes may be a side effect of a strong immune response which can damage cells and tissues. This has led research to consider a link between COVID toes and mild / asymptomatic disease. For asymptomatic patients, recognizing these patterns could lead to earlier testing, diagnosis and reduced spread.⁷

Besides COVID-19, it is well known that certain diseases and conditions have a higher prevalence in certain races. James Davies, et al (2017)⁸ looked at the prevalence of single and multiple leading causes of death. This review of the National Health Interview Survey showed that Hispanics and non-Hispanic Blacks had the greatest prevalence of diabetes while

non-Hispanic Whites had the greatest prevalence of cancer and chronic lung disease. This is why it is important to monitor our samples to ensure accurate representation and account for differential incidence by ethnicity.

Diverse doctors are needed and have unique perspectives

Multiple studies show that patients who are the same race as their doctor report higher satisfaction rates, implying that patients prefer their doctors to be the same race (Takeshita J, et al 2020) (Hopkins 2002).^{9 10}

Besides preference, patients seeing doctors of their same race may receive more effective care. A Harvard Business Review article (2018) highlighted a National Bureau of Economic Research (NBER) study (Alsan, Garrick, Graziani 2018) which showed that Black men seeing Black doctors were more likely to agree to more invasive, preventive services compared to those that saw non-Black doctors. Moreover, patients seeing Black doctors were more likely to talk about other health or personal issues, besides prevention, compared to those that saw non-Black doctors.



We carried out our own small-scale study with a subset of Adelphi Research employees based in our global US office found similar results. Two online surveys were sent to Adelphi employees to gauge whether they preferred to have a doctor of the same race and / or gender (N=37) and to understand if their PCP and OB/GYN (if applicable) were the same race as them (N=31). The majority, approximately 84% (31/37) had no racial preference while 54% (20/37) reported a gender preference. However, when asked, 71% (22/31) reported having a primary care physician that was the same race and 70% (19/27) had an OB/GYN of the same race. The demographics for the second survey were 81% White, 6% Asian, 6% Hispanic and 6% black.

Based on the data, minority doctors seeing race concordant patients may have unique perspectives when it comes to their patients. This provides more reason for diversity in market research recruitment. The question then becomes, where are these doctors? Xierali, I.M & Nivet, M.A. (2018)¹¹ studied the distribution of primary care physicians by race and found that minority physicians were more likely to practice primary care in medically underserved areas and may need different thresholds for qualification. This creates a need for specialized recruitment and pharmaceutical research to better serve these populations.

So, what can be done to capture these unique perspectives?

- Reach out to advocacy groups to capture respondents not typically represented by private groups
- Ensure screening criteria are flexible to capture respondents with lower patient volume but diverse patient populations
- Review screener questions to ensure they do not unfairly skew towards one group or another
- Include ethnicity and gender in screeners to monitor along with soft quotas for both to ensure racially different groups are represented in research
- Partner with diverse recruiting firms having proven experience recruiting diverse populations for both patients and physicians
- Employ diverse moderators to make respondents comfortable and therefore more likely to give robust responses in focus groups, IDIs, etc.
- Conduct interviews in languages (other than English) that participants are comfortable speaking in



Adelphi Research is committed to diversity, equity and inclusion. Our project management team is constantly evaluating new resources such as specialized recruiters to include diverse populations. We have a DEI taskforce that partners with our project management teams to identify and implement these actions.

We continually work with our clients to recruit more diverse populations with the understanding that this may require more flexibility regarding recruitment time, a commitment to multiple recruitment methods and sources to recruit diverse populations. In addition, we recommend adapting qualification criteria to ensure diverse respondents have the opportunity to participate after considering their demographic and environmental realities.

At Adelphi Research, we value diverse perspectives and recognize the wealth of knowledge that it brings to both our teams and clients. We are excited to discuss this important topic and help ensure more diversity in recruitment on all market research studies. We look forward to connecting with you!



References

- ¹ Lyman, M., Mills, J. O., & Shipman, A. R. (2017). A dermatological questionnaire for general practitioners in England with a focus on melanoma; misdiagnosis in black patients compared to white patients. *Journal of the European Academy of Dermatology and Venereology* : JEADV, 31(4), 625–628. <https://doi.org/10.1111/jdv.13949>
- ² Vasquez Reyes M. (2020). The Disproportional Impact of COVID-19 on African Americans. *Health and human rights*, 22(2), 299–307.
- ³ Caryn Rabin, Roni. "Covid Toes' May Be Caused by a Powerful Immune Response, a New Study Finds." *The New York Times*, 13 Oct. 2021, www.nytimes.com/2021/10/06/health/covid-toes-cause.html.
- ⁴ Seucharan, C. (2020, July 11). Dark skinned patients left out of COVID-19 studies, as minorities some of the hardest hit by the virus. *The Globe and Mail*. Retrieved September 28, 2022, from <https://www.theglobeandmail.com/canada/article-dark-skinned-patients-left-out-of-covid-19-studies-as-minorities-some/>
- ⁵ Frumholtz, L., Bouaziz, M. Battistella, J. Hadjadj, R. Chocron, D. Bengoufa, H. Le Buanec et al. "Type I interferon response and vascular alteration in chilblain-like lesions during the COVID-19 outbreak." *British Journal of Dermatology* 185, no. 6 (2021): 1176-1185.
- ⁶ Caryn Rabin, Roni. "Covid Toes' May Be Caused by a Powerful Immune Response, a New Study Finds." *The New York Times*, 13 Oct. 2021, www.nytimes.com/2021/10/06/health/covid-toes-cause.html.
- ⁷ Davis J, Penha J, Mbowe O, Taira DA. Prevalence of Single and Multiple Leading Causes of Death by Race/Ethnicity Among People Aged 60 to 70 Years. *Prev Chronic Dis* 2017;14:160241. DOI: <http://dx.doi.org/10.5888/pcd14.160241>external icon
- ⁸ Hopkins Tanne J. (2002). Patients are more satisfied with care from doctors of same race. *BMJ: British Medical Journal*, 325(7372), 1057.
- ⁹ Takeshita J, Wang S, Loren AW, et al. Association of Racial/ Ethnic and Gender Concordance Between Patients and Physicians With Patient Experience Ratings. *JAMA Netw Open*. 2020;3(11):e2024583. doi:10.1001/jamanetworkopen.2020.24583
- ¹⁰ Xierali IM, Nivet MA. The Racial and Ethnic Composition and Distribution of Primary Care Physicians. *J Health Care Poor Underserved*. 2018;29(1):556-570. doi: 10.1353/hpu.2018.0036. PMID: 29503317; PMCID: PMC5871929.

To learn more please contact
illuminate@adelphigroup.com