



## 2019 Student Case Study Competition Salt Lake City, Utah Scenario

### **The Health Issue:**

In the United States, there were an estimated 266,120 new cases of breast cancer and 40,920 deaths from breast cancer among women in 2018.<sup>1</sup> While non-modifiable risk factors for breast cancer include age, a family history of breast cancer, and having the BRCA1 or BRCA 2 genes, modifiable risk factors include obesity, having a sedentary lifestyle, and taking hormones with estrogen and progesterone.<sup>2</sup> Early detection of breast cancer is critical, as the five-year survival rate for women with early stages of breast cancer (Stage 0 or Stage 1) is close to 100 percent, whereas the five-year survival rate for a woman diagnosed with a more advanced stage of cancer (Stage 4) is roughly 22 percent.<sup>3</sup> Consequently, annual mammograms are recommended for women ages 45 to 54 who have an average risk of breast cancer.<sup>4</sup>

However, while breast cancer screening increases the five-year survival rate, many American women (44%) still do not get regular mammograms.<sup>5</sup> Women reported being younger than 60 years of age, health insurance<sup>6,7</sup> an annual family income of less than \$40,000, and a perception of pain as barriers to having mammography.<sup>6</sup> Working a higher number of hours per week may also decrease the likelihood of having mammograms.<sup>8</sup> Distance to the nearest mammogram facility may also serve as a barrier to screening, as women who had a longer distance to travel to the nearest facility were significantly more likely to miss having mammograms.<sup>9</sup> Controlling for age, race, and literacy, rural women were significantly less likely than urban women to avoid having a mammogram because of a fear of abnormal results; however, they were significantly more likely than urban women to agree that the perceived level of discomfort from a mammography as a barrier to having a mammography.<sup>10</sup> In several studies, Black women were more likely than White women to have had recent mammograms.<sup>7,11</sup>

### **Epidemiological Data:**

Although breast cancer is a public health concern for women of all races, a disparity exists for American Indians and Alaskan Natives. Compared to white, non-Hispanic women, the breast cancer incidence rate is seven percent higher and the breast cancer death rate is 10 percent higher among American Indian women (American Indian Cancer Foundation). Additionally, American Indian women are more than twice as likely to have cancer in the breast than in any other site.<sup>12</sup> However, despite the need for early detection of breast cancer with mammography, factors such as negative experiences with a health care provider or clinic, lack of knowledge, and mistrust of the system by American Indian women in general have made rural American Indian women less likely than urban American Indian women or non-Hispanic white women to have a mammography.<sup>13</sup>

### **The Territory**

The state of Utah is home to approximately 3.2 million residents, and covers roughly 85,000 square miles of territory. Utah is the home to 60,000 American Indian/Native Alaskan residents, 54 percent of which live on or near one of the reservations in the state. There are 5 tribal cultures and 8 tribal governments in the state. The Uintah and Ouray Indian Reservation covers nearly 10 percent of the total land in Utah; almost 7,000 square miles over 7 counties. The reservation is historically home to the Ute Indians, and currently has more than 20,000 residents (almost one-third of Utah's AI/NA population).

## The Agency and Local Initiative

The American Indian/Native Alaskan Initiatives is located in the Division of Family Health and Preparedness, in the Indian Health Division of the Utah Department of Health (UDOH). The Initiatives has several objectives, one of which is specifically to “assure the availability of UDOH programs for Indian citizens on or off reservations.” In the state of Utah, American Indian and Alaskan Native females ages 40 and older were less likely (59.4%) to have had mammography than any other race within the two-year interval between 2014 and 2016.<sup>14</sup>

## The Goal

Your team of health education specialists has been employed by the Utah Department of Health, Office of Health Disparities, to plan, implement, and evaluate a program designed to increase mammography rates among women in the American Indian community on the Uintah and Ouray Indian Reservation. To do this, your team is charged with the design of a culturally sensitive approach, taking into consideration the specific social, cultural, and economic challenges experienced by this segment of the population. Your team must also demonstrate the application of a health behavior model or theory to the development, implementation, and evaluation of your proposed program (refer to judging criteria).

## References

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