Quantitative Analysis of Free Radiology Services

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Introduction. Healthcare disparity is a widespread problem in the U.S. that plagues nearly every field of medicine. Though disparities in access to radiological services negatively impact many populations, there is inadequate literature addressing the potential cost savings in free clinics, and there is a need to quantify the amount saved using radiological services in these clinics. The aim of this project is to determine the amount patients saved using a single institution's free clinic compared to the cost-based service at the same institution as well as private practice.

Methods. The number of patients that used image services, conventional radiography and ultrasonography, from 2018-2021 at the Jaydoc free radiology clinic were recorded, along with the price and type of service. The expenses for the cost-based services were obtained using the host institution's and private practice's price transparency documents. These reports included the out-of-pocket costs for each imaging service, which was then matched to the respective free service provided at the clinic.

Results. The costs for the imaging services totaled \$74,177 and \$41,014 for the host institution and private practice, respectively, compared to the same services provided by the free clinic. This equated to roughly \$241 and \$148 saved per patient using the free clinic, respectively, but can expect to save anywhere from \$90-\$350 based on the service provided.

Conclusions. Patients utilizing radiological services at the Jaydoc free radiology clinic can expect to save \$90-\$350, based on the service provided. Most patients saved under \$300, which is lower than expected but still meaningful in this low socioeconomic status (SES) patient population.

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