Monitoring Lead Screening Within a Milwaukee Family Medicine Residency Clinic

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Methods: Annual BMI screening data and health insurance claims costs were analyzed using a multiple regression model to examine overall weight loss, BMI shift, and health insurance claims costs pre- and post-weight loss program participation.

Results: Over 60 tons of excess weight loss in first 5 years (2013–2017). A multiple regression model shows claims costs go down $20 for every 1 pound decrease in weight. Mean medical claims costs dropped by $3535 for the year after participation in one specific weight loss program when compared to prior-year costs. Pharmacy claims did not show a reduction from pre- to postprogram periods.

Conclusion: This research shows some support for the interventions targeting obesity in a workplace setting and the idea that weight loss results in lower health care costs.

Reimagining Solidarity to Confront Infant Mortality

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Background: In Milwaukee, black babies die nearly three times as often as white babies, and black women experience stillbirth two and a half times more often than white women. There are many contributors to this reality. While parental responsibility is one factor, deeper, more systemic issues related to racial inequality and class privilege are also at play. Even among groups with similar socioeconomic status, racial disparities in infant mortality persist.

Purpose: This project seeks to answer multiple research questions, foremost: How do socioeconomic and racial/ethnic factors relate to infant mortality in the concrete lives of black women in Milwaukee?

Methods: This research draws from ethnographic fieldwork as a type of qualitative method that puts Milwaukee women in conversation with those professionals who work to end racial disparities in infant mortality. Ethnography is a method that seeks to listen to particular persons from within their cultural milieu to better understand their values, beliefs, and practices and learn from them about matters that carry moral meaning. The type of triangulation common to ethnography, in which researchers integrate ethnographic interviews, quantitative studies, and ethical analysis, has been argued to be especially fitting to the goals of medicine. Collaborators for this project included 3 Milwaukee mothers; 5 church support group leaders, 3 of whom are nurses; 5 public health personnel; and 2 physicians.

Results: Analysis of interview recordings and transcripts uncovered 3 themes related to women and infant health: violence and stress; social hierarchy and “feeling less than;” and faith and resiliency. Women’s experiences of violence and stress provide particular instances that mirror statistical connections in the literature between stress and premature birth. Stories of feeling “less than” in health care situations point to data concerning racial health disparities in care quality and outcomes. Women practice faith and resiliency amid adversity to help overcome some of these barriers. The insights of these collaborators may prove helpful in redirecting efforts to improve racial disparities in infant mortality.

Conclusion: Those responsible for efforts to reducing racial disparities in infant mortality can learn important lessons from the experiences of black women in Milwaukee. Health care professionals in particular should learn from these experiences to inform how they can revise and implement strategies to reduce infant mortality.

Monitoring Lead Screening Within a Milwaukee Family Medicine Residency Clinic

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Background: Lead screenings, as part of a child’s preventive examinations, are offered by many Women, Infants, and Children (WIC) clinics in the Milwaukee area. Previously, the Family Care Center (FCC) at Aurora Sinai Medical Center (Milwaukee, WI) did not have access to lead screenings performed by WIC clinics and later recorded in the Wisconsin Blood Lead Registry (WBLR). Therefore, unnecessary duplicate screenings may have occurred on children seen at FCC for their preventive exams.

Purpose: To determine if children were undergoing unnecessary duplicate lead screenings at FCC.

Methods: We conducted a retrospective review of lead screenings performed at well-child exams in children 1–5 years of age at FCC from March 2017 to August 2017. We reviewed FCC patients in the WBLR, gathering additional lead screening information, noting that lead levels were often reported to nearest whole number. Screenings performed less than 6 months apart in children age 12–24 months and less than 12 months apart in children age 2–5 years were considered duplicate lead screens. Basic descriptive statistics were calculated. Categorical data were analyzed using chi-squared tests and continuous variables with 2-sample t-tests or nonparametric alternative tests. Stepwise regression and binary logistic regression was used for multivariable analysis as appropriate.

Results: After excluding 10 children with elevated blood lead levels and required repeat testing, 161 were included in our analysis. Children of mean age 1.8 years were more likely to be female (54.0%) and African American (70.2%). Of children with at least 1 ordered lead test, 39% were not completed; mean first lead level result was 2.4. Only 20 (12.4%) had replicate lead screenings ordered, of which 12 (60.0%) were ordered inappropriately (ie, ordered as a duplicate), with 9 (75.0%) being ordered by FCC. Interestingly, on univariable analysis, higher lead levels were significantly associated with male gender (3.2 vs 1.8; \( P=0.022 \)) and Asian race (4.6 vs 2.1 for all other races; \( P=0.046 \)). On multivariable analysis, when including age, only Asian race remained significantly associated with higher lead levels (\( P=0.002 \)).

Conclusion: Inappropriate lead tests were more commonly ordered at FCC. With access to the WBLR, we can determine if patients have had lead levels drawn at outside facilities and eliminate unnecessary duplicate tests. To further aid in decreasing the number of inappropriately ordered tests, we developed a workflow for clinic medical assistants to check blood lead screening and will conduct a 6-month postintervention analysis.

Utilization of Acupuncture Services in the Emergency Department Setting: A Quality Improvement Study

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Purpose: To determine if children were undergoing unnecessary duplicate lead screenings at FCC.

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