

NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

**Submission Id:** 6786

**Title**

*An Evaluation of Patient Outcomes Associated with Sludge (Administrative Burdens) in Cancer Screening*

**Priority 1 (Research Category)**

Screening, prevention, and health promotion

**Presenters**

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**Abstract**

CONTEXT: 'Sludge' refers to administrative burdens that prevent people from getting what they want or need. Impacts of healthcare sludge on patients have not been well-described.

OBJECTIVE: to quantify sludge in the colorectal cancer (CRC) screening process and evaluate the impacts of sludge on delayed or forgone screenings, screening experience, and health system distrust.

STUDY DESIGN AND ANALYSIS: This sequential/convergent mixed methods study included a patient survey and patient interviews. We used chi-square or t-tests for univariable comparisons and logistic or linear regressions to evaluate the association between cumulative sludge score and outcomes measures. Interview transcripts were inductively and deductively analyzed to identify overarching themes. Results were integrated for interpretation.

SETTING OR DATASET: Southeastern United States.

POPULATION STUDIED: patients (45-75 years of age) at average risk for CRC and had either completed or been referred for CRC screening (colonoscopy or stool-based test) at one of several health systems, centers, or practices within the previous 12 months.

**INSTRUMENT:** survey - sludge (original questions), delayed or foregone screenings (informed by prior work), screening experience (Net Promotor Score) and health system distrust (Health System Distrust Scale); interviews – semi-structured interview guide design by the research team.

**RESULTS:** 255 survey participants and 22 interview participants completed the study. Perceptions of sludge in the screening process varied, with long waiting times and burdensome communication being the most common sources reported (58% and 35% of participants, respectively). Participants with Medicaid reported disproportionately greater sludge compared with those insured by other payers [79 (36, 169)] vs. [60 (23, 126)] ( $p=.048$ ). Interview participants perceived inequities in the screening process based on insurer or “knowing the right people”. Sludge was associated with delayed or foregone screenings [OR (95% CI) = 1.42 (1.28, 1.57),  $p<.001$ ], poor screening experience [OR (95% CI) = 1.15 (1.04, 1.28),  $p<.01$ ], and health system distrust ( $\beta=.47$ ,  $p<.001$ ). Qualitative findings illustrated the heavy emotional impact of sludge: “it just isn’t worth it”.

**CONCLUSIONS:** Efforts to reduce sludge in the CRC screening process may improve timely screening completion, enhance patient experience, and restore trust in the health system.

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