

**Submission Id: 3842**

**Title**

*"Sludge Audit" to identify barriers to colorectal cancer screening*

**Priority 1 (Research Category)**

Healthcare Services, Delivery, and Financing

**Presenters**

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**Abstract**

Context: Colorectal cancer (CRC) is a leading cause of cancer in the US but is preventable by screening. Screening rates remain low despite addressing established barriers. "Sludge," as popularized by Cass Sunstein, JD, describes "excessive or unjustified frictions, such as paperwork burdens, that cost time or money...that may be frustrating, stigmatizing, or humiliating; and that might end up depriving people of access to important goods, opportunities, and services." Studies of CRC screening mention administrative barriers, but it is unclear how often such sludge impedes CRC screening. Objective: Identify, describe, and quantify sludge in the delivery of CRC screening. Study Design: Observational, mixed methods. Analysis: Descriptive analysis of administrative and claims datasets, content analysis of qualitative interviews. Setting: Regional health system in Southeastern US. Population Studied: 1) Claims and administrative data from 2021 about CRC screening. 2) Clinicians and administrators in the CRC screening process. Instruments: "Sludge Audit" to document the extent of sludge from datasets and interviews. Outcome Measures: Descriptive measures of screening rates in eligible populations, low value screening rate, rates of certain "sludge" categories (time, communication, paperwork, technology, processes), and qualitative themes derived from interview data. Results: The screening rate in 2021 was 60.4%, but 52% of positive stool-based tests were not followed by colonoscopy. 32% of the screenings were considered low value (outside age range, duplicate tests, or non-indicated repeat testing). Administrative data revealed: a wait time of 221 days on average from referral to test, 787 patients with more than 3 missed calls to schedule appointment, 3900 prior authorizations needed to perform screening, 14 to 30 electronic health record "clicks" required to order screening, 1950 duplicate referrals, and a 27% no-show rate for colonoscopies. Qualitative analysis revealed: problems with communication with patients, excessive wait times, difficulty accessing screening results once performed, and inconsistent insurance and pre-procedural requirements. Conclusions: Multiple areas of sludge in the CRC screening process appear to significantly impede screening rates. Further investigation is planned to elicit more systematic information from stakeholders, including patients, and to evaluate the impact on vulnerable populations.