

black patients had a 1% increased odds of mortality (OR 1.01; $p < 0.01$). **DISCUSSION/SIGNIFICANCE OF FINDINGS:** Black patients have increased odds of dying from septic shock compared to white patients after controlling for age, selected comorbid conditions, and markers of illness severity. Future work is needed to move beyond demonstrating septic shock disparities and towards understanding the underlying factors.

83551

Current implementation of expedited partner therapy for the treatment of *N. Gonorrhoeae* and *C. Trachomatis* infection: Integrating mixed methods with cost-effectiveness analysis

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ABSTRACT IMPACT: This work will estimate current EPT implementation in Minnesota and provide cost-effectiveness analyses of different implementation scenarios to inform STI treatment policy. **OBJECTIVES/GOALS:** This research aims to 1) assess current implementation of Expedited Partner Therapy (EPT) as treatment for *C. Trachomatis* (chlamydia) and *N. Gonorrhoeae* (gonorrhea) among healthcare providers in Minnesota and to 2) simulate the current burden of chlamydia and gonorrhea infections to test the cost-effectiveness of increasing EPT implementation. **METHODS/STUDY POPULATION:** We will conduct key informant interviews (KII) and an online survey of health providers across the continuum of care for chlamydia and gonorrhea treatment. Based on experience in prior studies, the KII sample size is expected to be about 15 informants. KIIs will be carried out among providers who submitted EPT protocols to the Minnesota Department of Health to understand how EPT is currently being implemented. KII results will inform the online survey of health providers, which will estimate how many providers across the state provide EPT. We will distribute the survey through Minnesota health provider networks to achieve a sample of at least 500 health providers. The KII and survey results will inform model structure and parameter values for a compartmental cost-effectiveness model of EPT. **RESULTS/ANTICIPATED RESULTS:** Initial results from KII pilots suggest that EPT is primarily provided through a paper script for the sexual partner of a patient who tests positive for CT or NG by the treating provider. Less commonly, a patient's partner who is already a patient in the health system may receive notification and treatment through the provider. While EPT is legal in Minnesota, concerns about medical liability for adverse reactions and difficulty obtaining paper scripts in electronic workflows are barriers to implementation. The statewide survey will include questions to estimate the likelihood of EPT provision among providers when these concerns are addressed. These figures will be integrated into the cost-effectiveness model to simulate outcomes and costs across different EPT implementation scenarios. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** The statewide survey will define cost-effectiveness model parameters, including the proportion of providers in the state who currently provide EPT or would be willing to provide EPT under different scenarios. Study findings will be shared with health provider networks and health departments to inform STI treatment procedures and state EPT policies.

Clinical Trial

27646

Spinal Control Impairments During Two Clinical Tests of Lower Limb Movement in People with and without Low Back Pain

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ABSTRACT IMPACT: Our work may be able to impact the examination and clinical decision making of a clinician to identify and target movement impairments to treat people with low back pain. **OBJECTIVES/GOALS:** Test if the magnitude of spinal control impairments is different in two clinical tests of lower limb movement in people with and without low back pain (LBP). The impairment is defined as the time difference between the start of limb to lumbopelvic motion. Also, test if the magnitude of impairments across tests is associated with LBP intensity and function. **METHODS/STUDY POPULATION:** 18 controls and 21 people with LBP (51.6% F, 34.5 ± 11.5 yrs) participated in a cross-sectional, laboratory-based study. Subjects completed the modified Oswestry Disability Questionnaire (LBP-related functional limitation measure; 0-100%) and the Numeric Pain Rating Scale (LBP intensity; average pain prior 7 days; 0-10) self-report surveys and clinical tests of hip medial and lateral rotation performed in prone. A three-dimensional motion capture system was used to capture angular lumbopelvic and hip motion across time. A 2x2 mixed model ANOVA will be used to examine the effects of group, hip rotation test, and group x hip rotation test. Separate bivariate correlations will be used to quantify the association of magnitude of the impairment to (1) average LBP intensity and (2) LBP-related functional limitation. **RESULTS/ANTICIPATED RESULTS:** We hypothesize that, compared to healthy controls, people with LBP will display a greater magnitude of impairment across the hip medial and lateral rotation tests. In addition, we hypothesize that the magnitude of the difference in impairment between people with LBP vs controls will be larger during the hip lateral rotation test compared to the hip medial rotation test. Finally, we hypothesize that in people with LBP the magnitude of the impairments across tests will be associated with LBP intensity and LBP-related functional limitation. **DISCUSSION/SIGNIFICANCE OF FINDINGS:** If our hypotheses are supported, the hip rotation tests would further be recognized as a key part of a clinician's examination and an important target for treatment of LBP.

35991

Towards a Novel Robotic Control Scheme to Improve Lower Extremity Movement Post-Stroke

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ABSTRACT IMPACT: Effective robotic pedaling therapy would allow stroke survivors a precision, customized, and adaptable therapy to help recover lower extremity function. **OBJECTIVES/GOALS:** It has been observed that people post-stroke can pedal each limb individually but not simultaneously when the bicycle is split-crank. This implies that lower extremity movement difficulties are affected more by interlimb rather than unilateral coordination deficits. This work seeks to further develop a robotic split-crank