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## **Title**

*A standardized patient intervention to improve clinician communication during acute back pain visits: a randomized trial*

## **Priority 1 (Research Category)**

Clinical trial

## **Presenters**

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## **Abstract**

Context: Acute back pain is a common reason for primary care visits and often results in low-value spinal imaging. Objective: To determine the effect of a standardized patient-based intervention on primary care clinician communication during visits with patients with acute low back pain. Study Design: Randomized clinical trial (NCT 04255199). Setting: 10 primary care clinics in Sacramento, CA. Population Studied: Primary care clinicians were randomized 1:1 to intervention or control groups (n=22 intervention and 28 control). Intervention: Intervention clinicians received 3 simulated office visits over with standardized patient instructors (SPIs) portraying patients with acute back pain. During visits, SPIs delivered feedback guided by a theory-informed intervention model, titled Watchful Waiting to Avoid Inappropriate Testing (WAIT). Control clinicians received no intervention. The three steps of WAIT are: 1) set the stage for deferred imaging by building trust, 2) convey empathy, and 3) communicate optimism while advocating a plan without imaging. Outcome measures: We report here on secondary outcomes of targeted communication behaviors during an audio-recorded standardized patient evaluation visit conducted at 9-12 months, which were independently coded using the Four Habits coding scheme: 1) Invest in the Beginning (of the Visit), 2) Elicit the Patient's Perspective, 3) Convey Empathy, and 4) Invest in the End. Results: During evaluation visits, intervention and control clinicians had similar mean ratings on Invest in the Beginning (7.1 vs. 6.7,  $p=0.37$ ), Elicit the Patient's Perspective (10.2 vs. 9.3,  $p=0.26$ ), and Invest in the End (22.1 vs. 22.1,  $p=0.98$ ). Intervention and control clinicians did not differ significantly on the expression of optimism or recommending a watchful waiting approach without imaging. Intervention clinicians, however, had significantly higher mean ratings on the Convey Empathy scale (10.5 vs. 6.7,  $p<.001$ ) with a Cohen's D of 0.95 (95% CI: 0.44-1.46). Intervention clinicians were rated significantly higher ( $p<.01$ ) on each of the scale components: eliciting emotion, validating emotion, and identification of patients' feelings. Conclusions: A simulated office visit intervention substantially enhanced clinician empathic communication with patients with acute back pain. However, it did not improve other targeted communication behaviors including making recommendations for conservative approaches without imaging.