

# Research Week 2020

# The Association of Communication Quality Regarding Incidental Nodules on Psychosocial Outcomes

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## Keywords

health communication, pulmonary nodules, psychosocial harms, lung cancer worry, communication quality

### Abstract

#### Purpose

Millions of patients are diagnosed annually with a pulmonary nodule and related follow up can cause psychosocial harms such as lung cancer worry, depression, and anxiety. High quality patient-centered communication of nodule results could help reduce those psychosocial harms over time.

#### Methods

We conducted a prospective, repeated-measures, cohort study of participants with newly reported, incidentally detected pulmonary nodules. The primary exposure was quality of communication regarding nodules that was measured using the Consultation Care Measure (CCM), which is based on the patient-centered communication model. We assessed the primary outcomes of lung cancer worry, depression, and anxiety with the Lerman Breast Cancer Worry Scale (CWS), the Center for Epidemiologic Studies Depression Scale (CES-D), and the Hospital Anxiety and Depression Scale (HADS), respectively. We performed multivariable-adjusted linear regression models between study visits of each participant to compare the association of high-quality communication with those outcomes.

#### Results

We included 121 participants with an average of 3 (SD 1.24) assessments. Participants with excellent communication had a 0.36 (n=206, 95% CI: 0.04, 0.67, p=0.03) unit increase in their worry score at the next visit, compared to participants with less than excellent communication. We observed no difference (n=210, b=0.90, p=0.40) in depression score change or in the anxiety score change (n=211, b=0.15, p=0.81) between participants who reported excellent communication compared to participants who reported less than excellent communication at the following visit.

#### Conclusions

We found that high quality communication is not associated with reduced psychosocial harms and there was even a small increase in lung cancer worry. We suspect that clinicians may tailor their communication based on their patient's risk of lung cancer. Higher quality communication strategies may appropriately influence patients' worry but does not influence other, possibly more severe harms such as depression and anxiety.