Improving Timeliness of Specialist Referral and Diagnosis for Patients with Suspected Lung Cancer through Standardization

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Background

Delays in lung cancer (LC) diagnosis are associated with worse clinical outcomes. Our rapid assessment LC clinic identified referral delays following thoracic imaging suspicious for LC.

Objectives

Increase the proportion of patients with suspicious CT chest reporting recommending LC clinic referral. Decrease time from suspicious CT chest to LC clinic referral.

Methods

Retrospective baseline chart review (January - April 2018) and prospective monitoring (May 2018 - September 2019). PDSA cycles: 1) Local implementation of standardized CT reporting recommending LC clinic referral (January 2019); 2) Regional implementation of standardized CT reporting recommending LC clinic referral (March 2019). Data include dates of: imaging suspicious for LC, CT chest, specialist referral and assessment, radiologist recommendations and diagnosis. Data are reported as mean days; statistical process control XbarS charts and unpaired t-tests were used to assess for significance.

Results

Following PDSA 1 and PDSA 2, the percentage of LC clinic patients with a CT chest recommending LC clinic referral increased (24.8% to 42.4%, p=0.0002), with increased recommendations from regional hospitals (4.2% to 32%, p=0.0001). When a radiologist recommended LC clinic referral, time to referral and assessment were faster (7.5 vs. 15.1 days, p=0.0001; 21.3 vs. 26.5 days, p=0.0004, respectively).

Discussion

Standardization of radiologist reporting led to significant improvement in timeliness of specialist access.