Conference Abstract

Telepulmonology: effect on quality and efficiency of care

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Abstract

Introduction: Interpreting spirometry results has proven challenging in primary care practice, potentially leading to under- and misdiagnosis of COPD. In telepulmonology a general practitioner (GP) digitally consults a pulmonologist to support the interpretation of spirometry results. This study assessed the effect of telepulmonology on quality and efficiency of care.

Methods: Quality of care was measured by 5 indicators, among others the percentage of TelePulmonology Consultations (TPCs) sent by GPs for advice, percentage of those TPCs resulting in a physical referral, and educational effect of telepulmonology as experienced by GPs. Efficiency was defined as the percentage of prevented unnecessary physical referrals of patients to the pulmonologist.

Results: Between April 2009 and November 2012 1,958 TPCs were sent by 158 GPs to 32 pulmonologists. Sixty-nine percent of the TPCs were sent for advice; based on the advice of the pulmonologist 18% of these TPCs led to a physical referral of patients who would not have been referred without telepulmonology. Thirty-one percent of the TPCs were intended to prevent a physical referral, 68% of these actually prevented a physical referral to a pulmonologist.
**Conclusion:** The results show telepulmonology can contribute to quality of care by supporting GPs and can additionally prevent unnecessary physical referrals.

**Keywords:**

telepulmonology