

Abstract

Research Project: A study of feasibility of investing and access to spirometry service in community hospitals

Background: Spirometry is a gold standard for diagnosing chronic obstructive pulmonary disease (COPD). In Thailand, access to the service may be limited particularly in community hospitals. This can cause misdiagnosis, and lead to inappropriate or unnecessary treatment.

Objectives: This study aimed to assess feasibility of investing and access to spirometry service in community hospitals in Thailand.

Methods: This study examined spirometry service based on four elements including availability, accessibility, appropriateness, and affordability. Data were collected from: (1) questionnaires related to the availability of spirometer, trained personnel and spirometry service, were sent to 896 hospitals; (2) NHSO reimbursement database in 2015 was used to analyze spirometry service utilization of COPD patients; (3) questionnaires on cost information were sent to community hospitals to collect data for an analysis of unit cost and budget impact of spirometry service investment; (4) focus group discussions and in-depth interviews of personnel in COPD clinic and policy makers were conducted to capture additional information of those four elements.

Results: There were 374 hospitals responded to the questionnaires. Only 41% of community hospitals owned spirometers. Many community hospitals did not own spirometers due to a lack of budget and trained personnel, and a small number of COPD patients. Moreover, poor-quality spirometers, lack of accessories and unskilled personnel were common problems among hospitals providing the service. Factors affecting accessibility to spirometry service were a limitation of patient's ability to perform the test and physicians' attitude toward the use of spirometry. Spirometry service currently does not reach a breakeven point. Five-year budget impact of investing spirometry service was 518-1,761 million Baht for all community hospitals, and 109-370 million Baht for M2 and F1 community hospitals.

Conclusions: Spirometry service should be invested in community hospitals depending on their needs and capabilities. Referral system should be provided for hospitals not having the service. Standard specifications of spirometer and trained personnel are needed in order to enhance access to quality service.

For more information: <http://www.hitap.net/documents/173095>