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A New Model for Home Care for COPD

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Abstract

A new model for home care of COPD patients is investigated, as a part of a coordinated provision model across levels of care. In the e-Vital project, relevant vital signs for COPD are closely monitored and used for early detection of deterioration in the state of the patient and all prompt treatment. This can also reduce the need for in–person check-ups and re-admission to hospital. Later analysis hopes to determine if the system has significant economic impact, as well as it being more convenient for the patient and health care professionals.

The present trial focuses on the impact of community based nurses visiting each patient in the home as a part of this shared care. The visits are part of the regular follow-up for patients with chronic conditions who belong to any of the home care programs currently available in our institution. In each one of these visits, the nurse performs a number of tasks, in order to assess patient status. Vital signs are collected and may be transmitted to the data monitor centre automatically using 2.5-3G technology. Sensors communicate through a Body Area Network (BAN) with a PDA configured to display the data and transfer it to the server using GPRS. It is possible to train the patients to use the equipment on their own.

Results so far are encouraging. In the previous phase, a similar set-up without monitoring facilities at the patient's home showed improvements in several clinical indicators (ER visits, SGRQ, Quality of life, LOS and costs) for a home hospitalisation program and in a prevention of exacerbation program. The current set-up aims at increasing such benefits and further extending the target population.

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