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'Remote Monitoring of Chronic Obstructive Pulmonary Disease (COPD). '

This work was part of a larger programme called Defence Technologies for Health- using funding from -HM Treasury Capital Modernisation Fund, which addressed many of the policy issues highlighted under the current NHS plan and Department of Health Modernisation Agenda.

There is a substantial need to address service delivery of managed care to patients suffering, with forms of COPD. The disease is recognised as a major cause of death in the UK. Indeed, COPD is forecast to become the fifth most frequent cause of death by 2020. The chronic condition creates a significant burden on primary and secondary care services, and is a major contributor to winter pressures imposed on current NHS services.

A feasibility project was undertaken to trial three separate, but integrated, methods of home monitoring. **This involved recruitment of fifty COPD patients from the West Surrey Health Authority area.** Each patient had a history of acute exacerbations that often led to hospital admittance.

There is a body of evidence to show that a community-based response to COPD reduces the admission rate from exacerbations of COPD and reduces the length of stay of those who are admitted. This "Acute Respiratory Assessment Service" (ARAS) is based in the A&E department of acute hospitals and is designed to respond to COPD patients once they have become acutely sick.

The COPD project in West Surrey tested the premise that by monitoring patients between acute exacerbations you could identify patients who were becoming ill earlier in the disease process, and therefore take pre-emptive action to avoid an acute exacerbation occurring. The project had the following key elements:

- All patients received intensive continuous remote physiological monitoring for twenty-four hours on two or three occasions during the trial
- All patients received daily "point in time" vital signs monitoring and a phone call from a specialist call centre based nurse
- In a unique arrangement the paramedic involved in the proof of concept study was effective as a decision maker on the need to transfer the patient to hospital versus mobilisation of a community based resource.

Potential Benefits

Routine home monitoring allows for earlier clinical interventions. This provides an immediate improvement in patient care, which potentially leads to the following benefits:

- Reductions in acute exacerbation.
- Reductions in lost working days.
- Reductions in hospital admissions, and earlier discharges.
- Evidence based treatment protocols.

The clinical outcomes from this initial study will be discussed.

No profile received