# Telehealth in Practice

## Tromso, Norway - COPD

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### Ambition

United4Health offered the opportunity to provide better support to patients following discharge from an emergency hospital admission due to an exacerbation of their COPD. In addition, it was anticipated that the new service would reduce future admissions and enable the patient to have greater confidence in following their medication and treatment care plan agreed with their hospital clinicians.

### COPD **ROUTINE** CARE SERVICE MODEL


**Level 1 : Self-management**
Patient and Carer.

**Level 2 : Supported Self-management**
Patient, Carer, GP Practice, Home-visiting nursing service from Municipality as appropriate.

**Level 3 : Specialist Supported Self-management**
Patient, Carer, GP electronic referral and discharge communication to GP and Municipal Assignment office if relevant, Hospital-based respiratory specialist doctors and nurses.

### COPD **TELEHEALTH** ENABLED CARE MODEL


**Level 1 : Self-management**
Patient/carer stepped down from Amber level telehealth and self-management.

**Level 2 : Supported Self-management**
Municipality home-visiting nurse who gives telehealth training only to patient. GP or Municipality nurse has no access to the telehealth web portal.

**Level 3 : Specialist Supported Self-management**
Hospital respiratory specialist team including specialist home-visiting telehealth nurse who delivers care via VC, remote monitoring, alert response, telephone/text messaging.



**COPD Care Management – routine care**
Patients living with COPD are routinely managed by their GP and supported to self-manage (Green/Amber). If a patient has an emergency admission to hospital following an exacerbation of their COPD, they are admitted to the Lung Department (Pink). The patient's GP will provide an electronic referral containing patient-related information as well as whether the patient receives a Municipality home-nursing service. When a patient is discharged, their ongoing care is provided by their GP and Municipality home-nursing service if the patient is eligible (Green/Amber). Electronic discharge communication is sent to both the GP and Municipality, if relevant, providing in particular any revisions to their care plan including medication (Pink).

**U4H Telehealth Enabled COPD Care Management**
The telehealth service has been designed to provide specialist support to patients upon discharge from an emergency hospital admission following an exacerbation of their COPD (Pink). The telehealth service is provided in collaboration with the Municipality home-nursing service if appropriate. With the agreement of the hospital nurse and medical specialists, patients meeting the eligibility criteria are offered the telehealth service whilst an inpatient. The Municipal Assignment Office organises the telehealth and patient training immediately following the patient's discharge. In the hospital, the patient will be given their telehealth solution to take home in preparation for the visit by the COPD home-nursing service. Once the patient has been given telehealth training by the COPD home-nurse/technician, the patient undertakes their physiological measurements, uploads the data to the Telemedical Centre where a nurse reviews the data and initiates a video conference with the patient (Pink). The home-nurse only visits the patient after one initial visit to provide training on the telehealth device if they receive the home-nursing service as part of their care plan. Neither the patient's GP or home-visiting nurse has access to telemonitoring data. After the initial high intensity period, the patient continues to measure their oxygen saturation and pulse and enters the results into their personal journal by answering simple questions for approximately another 14 days with the option of a video conference with the COPD home-nursing service.

When the patient has recovered from their initial exacerbation they will continue self-managing by recording their symptoms on paper and make telephone contact with their COPD home-nurse (Green). If they experience any worsening systems they will be treated according to local standard protocols, eg GP appointments (Amber), emergency room attendance or hospital admission (Pink).