Home Oxygen for Patients with Cystic Fibrosis:
Patients with Cystic Fibrosis who are suspected of hypoxaemia i.e. oxygen saturation measured by pulse oximetry ≤92% will need referral for a Long Term Oxygen Therapy (LTOT) assessment. Please refer to local policy for the assessment guidelines for supplemental oxygen.

LTOT refers to the provision of oxygen therapy for continuous use at home for patients with chronic hypoxaemia in order to maintain oxygen saturation at or above 92%. It may be required for 15 – 24 hours a day. Oxygen may only be required overnight. Assessment for this involves overnight oximetry and early morning blood gases to ensure safe PaCO2 levels. The principle aims of LTOT are to prevent harm from chronic hypoxaemia and for symptomatic relief in palliative care. It is important to be clear about the aims for the individual as this will effect decisions about target oxygenation levels. LTOT assessments must be performed at a time when a patient is stable i.e. not during an acute exacerbation of their Cystic Fibrosis. The patients oxygen requirements should be reassessed at regular intervals (see local policy). At reassessment oxygen can be continued, adjusted or discontinued. The introduction of the integrated oxygen service has allowed provision of all modalities of home oxygen including LTOT, ambulatory and short- burst therapy by one contractor. There is surprisingly little evidence for the benefit of LTOT in CF, there is no perceived effect on mortality rate, hospitalisation or disease progression. Benefits in physical function and mortality rates have been documented in patients with chronic obstructive pulmonary disease and may be applicable to patients with CF.

References:
1, BTS Clinical Guidelines for Oxygen Assessment 2005  
2, DOH Guidelines for Domiciliary and Ambulatory Oxygen 2005  

Acknowledgements: The Peninsula CF team acknowledges the use of guidelines produced by The CF Trust, Manchester, Papworth, Leeds and Brompton CF teams during development of these local Peninsula protocols and guidelines.