(100 μg/ml) or TNFα (10 ng/ml) -induced IL-6, IL-8 and RANTES. 16HBE14o⁻ cells were treated with BIRB-796 (1–1000 nM) alone and in combination with dexamethasone (0.1 nM) for 30 min and glucocorticoid receptor (GR) nuclear translocation determined by immunofluorescence. The effects of TNFα stimulation on the phosphorylation of p38 and GR (serine 226) in 16HBE14o⁻ cells were determined by Western blot analysis.

Results Maximum inhibition of dexamethasone and BIRB-796 in combination was significantly greater than either drug alone for LPS and TNFα induced IL-6 and IL-8 and for Poly I:C induced RANTES ($p < 0.05$ all comparisons). BIRB-796 (1000 nM) alone had no effect on GR translocation. BIRB-796 (1000 nM) used in combination with dexamethasone (0.1 nM) significantly increased nuclear GR (76.6% nuclear staining) compared to dexamethasone (0.1 nM) alone (4% nuclear staining). TNFα stimulation increased both p38 and GR serine 226 phosphorylation by 15 min. Pre-incubation with BIRB-796 abolished p38 phosphorylation and reduced GR serine 226 phosphorylation.

Conclusion P38 MAPK inhibition enhances the effect of corticosteroids on inflammatory cytokines in human epithelial cells. This enhancement is due to inhibition of p38 dependent phosphorylation of GR serine 226 which leads to increased nuclear localisation of GR.

Keeping your distance: telemonitoring and telehealth

P27 THE USE OF TELEMONITORING TO ASSIST IN THE EARLY SUPPORTED DISCHARGE FOR PATIENTS ADMITTED WITH AN EXACERBATION OF COPD

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Introduction In 2011 the Whole Systems Demonstrator programme findings showed that, if used correctly, Telehealth can deliver 14% reduction in bed days and an 8% reduction in tariff costs in patients with chronic conditions. However little data is available on using Telehealth to assist in the acute setting of early supported discharge of COPD patients as most previous studies focused on its use to assist the long term case management of these patients.

Methods After training of staff within the COPD early support discharge (ESD) team in Salford (CAST), 17 HomePods were made available for this 12 months pilot starting in 2013. Patients were selected based on their ability to use the technology and on availability of HomePods. Pods were left with patients for 30 days and provided remote real-time monitoring of patients before they were re-deployed again to another patients. During the deployment period, patients were supported by a combination of telephone calls and home visits.

Objectives

- Measure the impact of Telehealth on 30 day readmission rates in this cohort
- Test the impact of new technology on caseload/ work load of CAST
- Test the acceptability of Telehealth on this cohort and on CAST
- Asses impact on ability to selfcare
- Measure patients' satisfaction

Outcomes – 73/285 (25%) patients received this intervention with the CAST team

– 30 day re-admission rates within the intervention group was 3% compared to 8% in the other ESD patients, and 18% within the Respiratory directorate

– Those in the telehealth group accounted for 5% of all home visits and 25% of all phone calls made by CAST

– The capacity of CAST was increased from 15 Cases to 18 cases at any one time (20%)

– Patients' survey showed excellent impact on

- Patients' satisfaction
- Confidence in self care
- Patients acceptability and likeability to Telehealth
- Good suggestions were made by patients for improvement

Conclusions The use of Telehealth in the context of ESD for COPD patients admitted with an exacerbation appears to have favourable effect on relevant outcomes without impact on workload and therefore might me a useful tool to consider.

P28 THE USE OF SMARTPHONE APPLICATION (COPD ASSIST) TO SUPPORT THE IMPLEMENTATION OF LOCAL PRIMARY CARE GUIDELINES ON THE MANAGEMENT OF PATIENTS WITH COPD

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Introduction Smartphone applications (apps) have become increasingly popular and offer us up-to-date access to information "on the go". Many national and international societies, medical journals and healthcare organisations develop their own apps; However using apps on a local level to promote implementation of local COPD guidelines and education has not been previously evaluated.

Methods Funding was provided by Salford's CCG innovation fund. A Smartphone app developing firm was commissioned and a development plan was agreed as follows:

1. Close liaison with the lead respiratory physician throughout the project.
2. A primary care focus group helped develop a Beta version for testing prior to launch.
3. App launched as "COPD Assist"
4. Promotion to primary care clinicians via newsletter articles, press releases, seminars, and the intranet
5. Regular data collection on app downloads to measure usability
6. Users' feedback and suggestions via app reviews
7. App downloads initially restricted to Salford clinicians

Objectives

1. Provide primary care clinicians with access to local guidelines and relevant contact details for COPD services anytime, anywhere.
2. Provide the most up-to-date guidelines
3. Offer clinicians access to educational material including videos (inhaler technique, spirometry, and pulmonary rehabilitation) and the opportunity to share this information with patients.
4. Provide up to date pricing of various inhaled therapies