390* Improving clinic attendance

J.K. Walker[1], F. Edenborough[1], M. Wildman[1], Z. Perveen[1], Y. Locke[1]. [1]*Adult Cystic Fibrosis Centre, Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom*

Aims: Non-attendance at clinics is a common problem among adult Cystic Fibrosis (CF) patients and may result in incomplete monitoring and poor adherence to treatment. The Adult Cystic Fibrosis Centre at Sheffield's Northern General Hospital had 104 clinic appointments which patients failed to attend (DNAs) in the 9 months between January and September 2007. This averaged 11 DNAs per month. We decided to trial telephone reminders in an attempt to reduce the DNA rate.
Methods: A support worker (ZH) was employed to phone patients one or two working days before they were booked for clinic and either remind them directly of their appointments or leave a message. We then counted the number of attendees and DNAs and compared results for the same months the previous year.
Results: In seven weeks of November and December 2006, without telephone reminders, there were 111 clinic appointments booked and 21 DNAs, DNA rate 18.9% (95% CI 12.4–27%). In the corresponding 7 weeks in 2007, after telephone contacting was introduced, there were 199 clinic appointments booked and 15 DNAs, DNA rate 7.5% (95% CI 4.4–11.9%), $\chi^2 = 8.992$, $p = 0.003$.
All those who DNAd despite the telephone call service, were not contactable or had to have a message left on their phone.
Conclusions: Contacting adults with CF the day before their clinic appointment is an effective, low-cost, time-efficient method of improving clinic attendance. Speaking to patients directly is far more effective than leaving a message. An automated text messaging service might be a more economical alternative that requires further assessment.

	Clinic appointments	DNAs	DNA rate
Without telephone reminder	111	21	18.9%
With telephone reminder	199	15	7.5%

391* Concordance and perceived benefits in patients with cystic fibrosis using dossett boxes

M.E. Williams-Gunn[1], J. Keane[1], M. Butler[1], L.M. Kuitert[1]. [1]*Adult Cystic Fibrosis Service, Barts and The London NHS Trust, London, United Kingdom*

Introduction: In chronic illness concordance with treatment is recognised to fall with increasing complexity of medications and frequency of dosing[1]. Self reported concordance with medication, both oral and nebulised, is poor in cystic fibrosis (CF). We introduced medication dossett boxes (similar to those used by the elderly) in an attempt to improve concordance.
Aim: To assess the impact of dossett boxes on self reported concordance in adults with CF.
Method: Patients reporting poor concordance with therapies were offered a dossett box. They were required to fill the box weekly. Patients agreeing to use a dossett box were sent an adapted CF quality of life (QoL) questionnaire at least one month after starting to use the box, to assess the impact of its use.
Results: 16 patients with poor concordance were identified and began using a dossett box. Each was sent the adapted postal questionnaire; 12 (75%) were completed. All 12 patients (100%) reported an increase in their concordance and perceived an improvement in their health status. All strongly agreed with the statement that their dossett box saved them time. Interestingly, although the dossett box was for oral medications only, 7 patients (58%) felt it helped them to remember to take their nebulised drugs. All patients were enthusiastic about the benefit of dossett boxes and were recommending it to other CF patients at our Centre. While the numbers are small, clinical stability, lung function and fat soluble vitamin levels appear to have improved in these patients, although longer follow up is required to confirm these findings.
Conclusion: Dossett boxes can help improve concordance with treatments in CF and potentially improve health status.

Reference(s)

[1] Tashkin DP. Chest 1995;107:176S.

392* An experiential approach to understanding adherence in CF

B. Ashby[1], J. Pagan[1], K. Lamballe[1], D. Beeforth[1], P. Cole[1], S. Earnshaw[1], F. Hampton[1], J. Higgins[1], F. Lindsay[1], S. Robson[1], P. Singleton[1], R. Weatherall[1]. [1]*Teesside CF Service, Middlesbrough, United Kingdom*

Background: The paediatric CF team in Teesside decided to experience first hand a prescribed medical regime.
Aim: To determine how this experience might influence the team's approach to problems with adherence being encountered in clinic.
Method: Ten team members took part over a six-week period. Each had tasks representing physiotherapy, exercise, diet and medical treatment. Adherence was recorded daily, with personal reflections during and after the challenge.
Results: Adherence for all tasks ranged from 45% to 96% with 6 individuals achieving 75% or above. 73% of physiotherapy and exercise tasks, 75% of medical treatments and 90% of dietary tasks were completed. Most participants acknowledged feeling resentful on occasions and some lost their initial motivation. In week 1 93.4% of tasks were completed but in week 6 this fell to 65.5%.
Reflections: Most individuals achieved fair adherence rates but this was an artificial task carried out by people in good health for a limited period. All team members feel they have learned from the ways they coped with their own difficulties in adherence. Ensuing team discussions centred around defining and adjusting our expectations of individuals and their different treatments at various stages in their disease. Particular emphasis has been on those coping with the challenges of adolescence as well as CF. Changes in practice include exploring practical ways of making tasks more palatable through being flexible and discussing options for compromise while recognising the emotions evoked by difficulties in adherence. Alongside this the team appreciates that most patients do well most of the time with the demands of their treatments and that significantly reduced adherence might compromise life expectancy.

393 Adherence to nebulised antibiotics in cystic fibrosis

G. Latchford[1,2], A. Duff[2], J. Quinn[1], S. Conway[2], M. Conner[3]. [1]*Leeds Institute of Health Sciences, University of Leeds, Leeds, United Kingdom;* [2]*Adult CF Unit, Seacroft Hospital, Leeds, United Kingdom;* [3]*Institute of Psychological Sciences, University of Leeds, Leeds, United Kingdom*

Objective: To examine the adherence of patients with Cystic Fibrosis to nebulised antibiotics.
Methods: A longitudinal design with adherence data collected over 12 weeks. 38 patients (mean age 24.6 years, sd 5.3) were recruited from an adult CF clinic. Adherence was electronically monitored using a Prodose Adaptive Aerosol Delivery (AAD) device.
Results: Three indices of adherence were calculated: Mean percentage of times the nebuliser was used as prescribed was 50.0% (sd = 39.7, range 1.1, 155.6); mean percentage of days fully adhered was 31.6% (sd = 29.4, range 0, 97.2); mean percentage of days nebuliser used at least once was 57.1% (sd = 34.2, range 3.3, 100).
Conclusion: Rates of adherence were generally low. Adherence was not associated with any variables apart from age. There were wide variations between individuals, and significant differences in rates of adherence depending on how this was defined. Practice implications: CF teams need to be mindful of the pattern of non-adherence for each individual. In particular, CF teams need to be aware that the advantages of the next generation nebuliser devices do not necessarily translate into optimal patterns of adherence. Attention needs to be given to methods of educating patients about the new devices that lead to improvements in nebuliser technique and adherence behaviour. Interestingly, the chip in the devices offers the prospect of providing patients with detailed personalised feedback on their nebuliser use. As part of a broader psychoeducation strategy within a framework such as motivational interviewing, such feedback could be a significant factor in highlighting a need for change and fine tuning behaviour.