Cystic Fibrosis
our focus

Pharmacy Standards of Care
Pharmacy Standards in Cystic Fibrosis Care 2011

Background
This document has been produced by the Cystic Fibrosis Pharmacists Steering group, building on original work done by the Cystic Fibrosis Pharmacists’ group in 2002. It is intended as a guide for all those involved in the pharmaceutical care of CF patients and others involved in the care of Cystic Fibrosis patients.

1.0 Introduction
The principle objective of the Pharmacy Service is to provide patient focused pharmaceutical care, defined as the responsible provision of medication to achieve definite outcomes that improve patients’ quality of life. It is the process through which the Pharmacist co-operates with a patient and other healthcare professionals in designing, implementing and monitoring a therapeutic plan to produce these specific health outcomes.

The appointment of dedicated Cystic Fibrosis (CF) Clinical Pharmacists has reduced medication errors, increased the availability of prescriptions and strengthened the Primary-Secondary Care relationship with shared care prescribing protocols [1].

2.1 Pharmaceutical Services
All patients with CF should have access to their local Community Pharmacist but due to their range and complex pharmaceutical needs, a Specialist CF Clinical Pharmacist should support each individual patient.

2.2 Support Services
Effective provision of a Clinical Pharmacy Service relies on the knowledge and skills of a Clinical Pharmacist and quality of various support services.

- Clinical Pharmacy Technician – to support inpatient one stop dispensing schemes, including use of patients own medicines and self medication
- Outpatient / discharge Dispensing Service
- Aseptic Dispensing Service – preparation of intravenous antibiotic desensitisation regimes, total parental nutrition
- Access to a Medicines Information Service with experience in the problems of CF and paediatrics (if applicable)
- Access to an on-call service for the supply of urgent medication, information and advice for inpatient care
- Procurement and Distribution – provision of an efficient medicine supply service for inpatients and dispensing services

3. CF Specialist Pharmacist:
A CF Specialist Clinical Pharmacist with training and experience in CF care in a staffing ratio as detailed in the current CF Trust Standards of Care is required undertake the routine pharmaceutical care practice as detailed.

Patients should
- Have access to a CF Specialist Pharmacist at each outpatient appointment
- Be reviewed daily by a CF Specialist Pharmacist whilst an in-patient, during normal working hours with access to on call as detailed above
- Be reviewed by a CF Specialist Pharmacist at annual review and relevant information disseminated to the MDT, General Practitioner and Community Pharmacist where appropriate

CF Specialist Pharmacists should
- Attend inpatient CF ward rounds
- Attend CF multidisciplinary team meetings
- Support Community and Primary Care Trust Pharmacists and Pharmacists, nursing and medical staff in shared care centres
- Liaise with paediatric / adult centres during transition of care
- Be a member of Cystic Fibrosis Pharmacists Group
- Maintain CPD through appropriate study and attendance at relevant study days, national and international conferences

Pharmaceutical Care Practice for CF Clinical Pharmacists

Managing Formularies, Clinical Guidelines and Treatment Protocols

- Assist in the completion of formulary applications to ensure medicines are introduced into clinical practice via joint hospital and primary care formulary process, including development of shared care protocols
- Assist in the completion of Individual Funding Requests or Exceptional case requests for the supply of individual medications for individual patients where no such mechanism exists to currently fund that treatment
- Liaise with health commissioners to resolve inequality of access to medicines
- Assist in the development and support of homecare services such as home intravenous antibiotics providing medicines information and advice
- Ensure effective communication with other members of the CF Multidisciplinary Team
- Provide horizon scanning and critical evaluation of recent studies on new and existing therapies
- Participate in continual professional development and attend CF conferences/study days
- Support the care of an individual patient
- Contribute to education and training of other healthcare professionals, including primary care
- Advise on the Legal and ethical responsibilities of using medicines, including unlicensed / off-label medicines
- Administration of medicines – intravenous antibiotics, appropriate formulations
- Sourcing medicines – unlicensed medicines
- Resolving medication supply problems due to manufacturing problems and liaison with primary care
- Collaborate with CF Research and Development

**Medication History Taking**
- Including alternative and over-the-counter medicines
- Ensure accurate history is recorded, including previous allergic reactions, and information transferred to the patients General Practitioner and Community Pharmacist

**Prescription Monitoring and Medication Review Service**
- Ensure medication and formulations are appropriate
- Utilise supplementary/independent pharmacist prescribing
- Detect potential medication errors
- Ensure Prescriptions are complete, unambiguous and legal
- Check for drug interactions

**Identifying Patient and Medication Risk Factors**
- Ensure patient characteristics, including age, expectation of care, pregnancy or breast feeding, organ dysfunction are taken into account
- Response to previous and current medication
- Use of non-drug and complementary therapies

**Preventing, Detecting and Reporting Adverse Drug Events**
- Document and report all reactions to newer medicines and serious reactions to established medicines to CHM via yellow card system
- Toxicity – allergies / hypersensitivity, contraindications, monitoring for adverse drug reactions
- Appropriate use, storage and disposal of medicines to minimise adverse events

**Individualising Drug and Dosage Requirements**
- Maximise therapeutic potential and minimise adverse effects of medicines
- Therapeutic drug monitoring of specific medicines (aminoglycosides, anti rejection drugs) depending on an individual's pharmacokinetic variables
- Monitor and review outcome of an individual's need for medication
- Optimise use of medicines taking account of and respecting the patients' wishes and lifestyle

**Educating and Counselling Patients and Carers**
- Provide appropriate education and counselling to allow for the safe and effective use of their medicines
- Provide patient information leaflets
- Improve compliance with medicines by providing appropriate education about their medicines.
- Agree an informed plan with a patient / carer to achieve concordance

**Evaluating Medicines Use**
- Financial reporting to Multidisciplinary Team and Primary Care on CF medication usage
- Audit treatment guidelines and new therapies
- Audit Homecare Services

**References**
5. UKCPA Statement on Pharmaceutical Care. March 1996
   http://www.ukcpa.net/ukcpa-statement
6. Equity and Excellence : Liberating the NHS. Department of Health July 2010
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The Cystic Fibrosis Trust is the only UK-wide charity dedicated to fighting for a life unlimited by cystic fibrosis (CF) for everyone affected by the condition. Our mission is to create a world where everyone living with CF will be able to look forward to a long, healthy life.

At the Trust we are:

- Investing in cutting-edge research
- Driving up standards of clinical care
- Providing support and advice to people with CF and their families
- Campaigning hard for the issues that really matter

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