

*Community Pharmacy  
Paediatric Asthma  
Medicines Use Review + Service  
Project Protocol*

Isle of Wight **NHS**  
Primary Care Trust

This project has been supported by a financial grant from Merck Sharp & Dohme Ltd. Merck Sharp and Dohme Ltd have also assisted in the development and printing of supporting materials.

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## Introduction

Medicines Use Review (MUR) is a service which can be offered to their patients by accredited community pharmacists as an Advanced Service within their Contractual Framework.

The aim of the Service is to achieve a concordant approach to medicine taking by:

- establishing the patient's actual use, understanding and experience of taking their medicines;
- identifying, discussing and resolving poor or ineffective use of their medicines;
- identifying side effects and drug interactions that may affect patient compliance;
- improving the clinical effectiveness and cost effectiveness of prescribed medicines and reducing medicine wastage.

Currently, MURs are often a stand-alone service and not always integrated into patient care pathways. In addition, the national specification does not technically allow a concordant consultation with a carer as would be the case with a paediatric asthma service.

By targeting this non-compliant group of patients and by auditing and evaluating the outcomes, community pharmacy can demonstrate the benefits of supporting this patient group and their carers. The outcomes could then be used as credible evidence to persuade the Department of Health to change the service specification to permit carer involvement in MURs for patient groups who are not in a position to grant consent.

The Pharmacy White Paper<sup>1</sup> seeks to optimise the benefits of community pharmacists supporting patients with long-term conditions and screening at risk groups for the benefit of patients and the broader NHS; this project seeks to do so and evaluate the outcomes.

## Benefits

### To patients:

Improving patients' and carers' understanding of their condition and treatment should:

- improve compliance with prescribed medication;
- improve health outcomes;
- improve quality of life;
- increase ownership of condition and treatment; and
- encourage self-care.

### To the NHS:

- 80% of patients with asthma do not comply with some element of their prescribed treatment<sup>2</sup>;
- An estimated 5-20% of prescribed medication is wasted<sup>3</sup> (£10million in Hampshire alone);
- A large proportion of GP practice appointments are taken by patients with long-term conditions; and
- Over half of hospital re-admissions in the elderly are a direct result of poor compliance with prescribed medication<sup>4</sup>.

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<sup>1</sup> Pharmacy White Paper, Department of Health, April 2008

<sup>2</sup> Whitney HAK, Jr. et al. (Editors). Medication compliance: a healthcare problem. Annals of Pharmacotherapy 1993; 27 (9. Suppl).

<sup>3</sup> Pharmacy in the Future - Implementing the NHS Plan. London: Department of Health; 2000

It does not matter how clinically appropriate prescribed treatment is if the patient does not follow the recommended regimen the desired health outcomes will not be achieved. Improving a patient's compliance with their treatment through the effective delivery of MURs involving their carer should improve patients' health outcomes thus reducing workload for GP practices, unnecessary secondary care admissions and ensure more appropriate use of NHS resources.

## Aims and intended service outcomes

### Aim:

To optimise the outcomes of treatment of asthma in paediatric patients through the effective delivery of Medicines Use Reviews involving the patient's carer and demonstrating the benefits through audit and evaluation.

### Intended service outcomes:

- improved concordance and adherence of paediatric patients with asthma
- improved access to support, particularly for those traditionally hard-to-reach patients
- integration of community pharmacy services into patient care pathways
- updated knowledge of the condition and management guidelines for community pharmacy healthcare teams
- some demonstrable benefits of the MUR service
- demonstrate the benefits of involving carers in the MUR service
- create an evidenced case for the Department of Health to change the service specification for MURs to permit the engagement and involvement of carers.

### Measurable outcomes:

#### Quantitative:

- number of patients accessing the MUR service by age group
- number of these patients receiving a GP/nurse review in previous 12 months
- Royal College of Physicians "Key Questions" score pre and post MUR intervention
- Use of reliever medication
- Compliance issues – belief, device, medicine
- Concordance
- Intervention – patient education, carer education, device training, referral

#### Qualitative:

- Patient/carer feedback
- Community Pharmacist feedback
- Healthcare professional (GP/nurse) feedback

## Service outline and scope

### Outline:

This initiative builds the established Medicines Use Review service by providing:

- Training events that cover:
  - updates on the condition, treatment options and local & national management guidelines – provided by local NHS respiratory experts
  - steps to be taken to deliver and expectations of a successful paediatric asthma MUR
  - audit and evaluation process

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<sup>4</sup> Dunbar-Jacob J, Schlenk E (2001): Patient adherence to treatment regimens.

- Resources to support community pharmacists in the delivery of the service:
  - pharmacy team information leaflets and support tools
  - patient information leaflets
  
- Audit and evaluation deliverables:
  - Anonymised audit of consultation outcomes (appendix 1)
  - Service evaluation feedback from patients, pharmacists and other healthcare professionals
  - A full analysis and report will be made available to participating community pharmacy contractors and other interested parties.

**Scope:**

The initiative will be delivered through 10 community pharmacies on the IOW with engagement criteria being based on location, MUR accreditation status and recent history of successful delivery of MURs. This process will be managed by the PCT.

The target for asthma patient consultations over the period is a minimum of 20 per participating pharmacy. It is desirable to target a balance of age groups, i.e. 10 patients between 0-5 years and 10 between 5-12 years.

It is important to record that there is no desire to limit a pharmacy's MUR activity to paediatric patients with asthma as this may be detrimental to the broader patient population.

**Timelines:**

Launch event to be held on September 3<sup>rd</sup> 2008; the project will run for a period of nine months before evaluation.

## Service Protocol

The provision of this service is commissioned as a time limited enhanced service targeted at paediatric patients with Asthma which can be identified opportunistically at the point of dispensing their prescription, by actively searching the pharmacy patient database or by referral from a GP practice (N.B. this does not imply or include direction of patients to a particular pharmacy).

The critical steps in the process are:

1. Following the initial training, familiarise the whole pharmacy team with the documentation and support tools.
  
2. Make an appointment to meet the local GPs, practice managers and asthma nurses to brief them on the initiative. Printed briefing materials explaining the aims of the pilot and designed to be given to the practices are included in the resources together with a more general leaflet on MURs (N.B. these must not be a substitute for a face-to-face briefing). The objective of this meeting is to engage with the GP practice team, get them to understand the aim of the initiative, integrate with their existing care pathway, support their hard-to-reach patients who do not attend their clinics and/or may be non-compliant with their therapy, and agree protocols for referral and administration.
  
3. Identify and actively recruit patients who may be good candidates for an asthma MUR.

4. Complete a normal MUR concordance consultation involving the patient's carer. Ask patient the 3 RCP questions (Appendix 1); record outcomes on Audit Form (Appendix 2).
5. Identify and address any concordance and compliance issues with referral to GP and/or asthma nurse where appropriate and as agreed in the initial briefing.
6. Complete the MUR forms and send the white copy of the action plan to the patient's GP.
7. Give the patient/carer a copy of the MUR form together with any patient and carer information leaflets required to support concordance and compliance.
8. Make follow-up appointment within 3-6 months to assess change in condition management.
9. Complete follow-up audit and record outcomes on audit form.
10. Provide patient/carer a copy of the **Patient Feedback Form** (Appendix 3) which is anonymous and should be sent back to the LPC at the FREEPOST address for collation and analysis.
11. Copies of the Audit Form should be routinely posted or faxed back to input into a database, analysis and report generation. They should be posted to Patrick Leppard at Hampshire & IOW LPC or faxed to 08716 613991
12. At the end of the project, give the GPs and asthma nurses a copy of the **Healthcare Professional Feedback Form** (Appendix 4) which they can fax back to the LPC for evaluation. Complete a **Pharmacist Feedback Form** (Appendix 5) and fax back.

## Service finance

All costs related to the provision of training, pharmacy fees, resources and the evaluation of the initiative will be funded by the PCT with support from a financial grant from MSD. MSD have also assisted in the development and printing of educational materials being used in the project.

Pharmacies will be paid £27 for the first intervention and £8 for the follow-up audit. This will be claimed from the PCT using a modified version of the standard claim sheet.

## Contacts

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Service Development Lead, Hampshire & IOW Pharmaceutical Committee 01256 704455

# Appendices

1. RCP Key Questions
2. Audit form
3. Patient feedback form
4. Healthcare Professional feedback form
5. Pharmacist feedback form
6. Paed MUR pilot briefing document

## Appendix 1

### Royal College of Physicians 3 Key Questions

1. In the last month/week have you had difficulty sleeping due to your asthma (including cough symptoms)?
2. Have you had your usual asthma symptoms (e.g. cough, wheeze, chest tightness, shortness of breath) during the day?
3. Has your asthma interfered with your usual daily activities (e.g. school, sport, play activity)?

One "yes" indicates medium morbidity and two or three "yes" answers indicate high morbidity.

# Appendix 2

## PAEDIATRIC ASTHMA MEDICINES USE REVIEW SERVICE AUDIT

Pharmacy Name: \_\_\_\_\_

Pharmacy Code: \_\_\_\_\_

PATIENT	PAC No.	DOB	Age	Date of Review	Review 1 or 2?	Last review with GP/Nurse		Patient RCP Score	Use of Inhaler (Blue) Inhaler in last month			Compliance Issues (complete any that apply)			Patient Concordant?		Intervention (complete all that apply)				
						<12 months	>12 months		Average number of puffs / day	More, Less or Same as usual	Highest use / day within last month	Belief	Device	Medicine	Yes	No	Patient Education	Carer Education	Device Training	HCP Referral	
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09-09 MGS/77007-08

See instructions overleaf

**Notes:**

- To complete box either insert figure or simply tick the box
- Date of review and is this the initial review (1) or follow-up (2)
- Compliance issue:  
  - Belief: Is the patient non-compliant due to their beliefs/mis-beliefs about their treatment?  
 Patients may make a risk/benefit analysis in which beliefs about the need to take their medicines are balanced against the potential/perceived benefits/adverse effects
  - Formulation: Does the patient have difficulty with practical issues about the medicine - difficulty in swallowing, taste etc
  - Side effects: Dry throat, headache etc
- Concordance: Does the patient understand their condition and treatment and are they in agreement with the diagnosis and treatment regime.
- Pharmacist Intervention:  
  - Patient/carer Education: Providing information or education to the patient/carer on the appropriate use of the medicines
  - Device Training: Inhaler technique check and issues addressed
  - Referral: Patient referral for action by another healthcare professional - GP, asthma nurse



# Appendix 4

## HEALTHCARE PROFESSIONAL FEEDBACK FORM PAEDIATRIC ASTHMA MEDICINES USE REVIEW

# Fax

To:	Hampshire & IOW LPC	From:	
Fax:	08716 613991	Pages:	1
Phone:	01256 704455	Date:	

Please rate your level of agreement with each of the following statements by ticking one box for each statement, add any additional comments and fax back to the LPC on 08716 613991.

Statement	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
I am aware of this initiative and what it set out to achieve from discussion with local community pharmacist(s)					
Criteria and protocol for referral of patients were clearly agreed with the community pharmacist(s)					
Community pharmacists have an important role to play in the management of paediatric patients with asthma					
Asthma MURs are of benefit to my paediatric patients					
The inclusion of the patient's carer in the consultation is of benefit to the health outcomes of the patient					
This service supports the achievement of my GOF targets					
This programme should reduce my long-term workload					
I would support similar initiatives in the future on the following clinical areas:					
Further comments:					

**Thank you for taking the time to provide this feedback.**

LPC Office · Old Bank House · 59 High Street · Odiham RG29 1LF  
Tel 01256 704455 · Fax 08716 613991 · office@hampshirelpc.org.uk · www.hampshirelpc.org.uk

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# Appendix 5

Pharmacy: \_\_\_\_\_

Date:        /        /

## Paediatric Asthma Medicines Use Review Project

### PHARMACIST FEEDBACK FORM

- Thank you for participating in this evaluation.
- In order to help us to evaluate the benefits of the service, please would you complete the following questions.
- Questions may be completed by marking 'X' in the most appropriate box(es).
- We would also welcome any additional comments you may have.

**Q1. Please indicate who recruited patients for this Asthma MUR Service.**

1. Pharmacist	4. Medicines Counter Assistant
2. Technician	5. GP
3. Dispensing Assistant	6. Asthma Nurse

**Q2. Please rate your level of agreement with each of the following statements by marking 'X' in ONE box for EACH statement.**

Statement	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Community pharmacists have an important role to play in the management of paediatric patients with asthma.					
Including the patient's carer in the consultation was of benefit to all parties					
The training provided enabled me to implement this service confidently.					
I received sufficient information in order to be able to implement the service.					
I received sufficient support in order to enable me to implement the service.					
I found the Pharmacist Meetings of benefit in implementing the service					
I found the progress updates of benefit.					
Participation in the service has developed my professional working relationship with other healthcare professionals.					
I would welcome the opportunity to work closer with other healthcare professionals in similar services.					

**Additional comments**

**Thank you for taking the time to complete this form**  
**Please fax the completed form to Hampshire & IOW LPC on 08716 613991**

Hampshire & IOW LPC, Paed Asthma MUR Project, June 2007

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## Appendix 6

# Paediatric Asthma Medicines Use Review Project

The purpose of this letter is to support the briefing of GP practices by participating community pharmacies in a Paediatric Asthma MUR project which has been developed with input from the PCT and partnership support from Merck, Sharp and Dohme. This letter is supported by a leaflet explaining the broader benefits of MURs. We would be grateful if all GPs and staff in the practice have an opportunity to read both.

### Aim:

To optimise the outcomes of treatment of asthma in paediatric patients through the effective delivery of Medicines Use Reviews involving the patient's carer and demonstrating the benefits through audit and evaluation.

### Intended outcomes:

- improved concordance and adherence of paediatric patients with asthma
- improved access to support, particularly for those traditionally hard-to-reach patients
- integration of community pharmacy services into patient care pathways
- updated knowledge of the condition and management guidelines for community pharmacy healthcare teams
- some demonstrable benefits of the MUR service
- demonstrate the benefits of involving carers in the MUR service
- create an evidenced case for the Department of Health to change the service specification for MURs to permit the engagement and involvement of carers.

### Outline:

This initiative builds the established Medicines Use Review service by providing:

- Training events to cover:
  - updates on the condition, treatment options and local & national management guidelines provided by local NHS respiratory expert
  - audit and evaluation process
- Service overview:
  - Appropriate patients identified by pharmacy and/or referred by GP practice
  - Normal MUR concordance consultation involving the patient's carer. Patient asked the 3 RCP questions; outcomes recorded
  - Any concordance and compliance issues identified and addressed with referral to GP and/or asthma nurse where appropriate and as agreed
  - MUR forms completed and the white copy of the action plan sent to the patient's GP where appropriate
  - Patient/carer given a copy of the MUR form together with any patient and carer information leaflets required to support concordance and compliance
  - Follow-up audit completed within 3-6 months to assess change in condition management with outcomes recorded
- Evaluation of anonymised consultation outcomes and service evaluation feedback questionnaires from patients, pharmacists and other healthcare professionals.

### Scope:

The target for paediatric asthma patient consultations over the period is 20 per participating pharmacy. There is no desire to limit a pharmacy's MUR activity to patients with asthma as this may be detrimental to the broader patient population.

### Timelines:

This time-limited initiative which will run through until the end of June 2009 followed by the evaluation phase. A full analysis and report will be made available to all interested parties.

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