

**Appendix 1**

**ETHICS APPROVAL FROM UNIVERSITY OF SYDNEY FOR  
ASTHMA OUTREACH HEALTH PROMOTION**



The University of Sydney  
Room K4.01 Main Quad A14  
Sydney 2006

Tel: (02) 9351.4474 Fax: (02) 9351.4612 E-mail: [human.ethics@reschois.usyd.edu.au](mailto:human.ethics@reschois.usyd.edu.au) [www.usyd.edu.au/ethics/human](http://www.usyd.edu.au/ethics/human)

Ms B Saini  
Faculty of Pharmacy, A15

10 September 2002

Dear Ms Saini,

Thank you for your ethics application, which was considered at the last meeting of the University of Sydney Human Ethics Committee.

*Title: Managing asthma in rural communities*

*Ref No: 2948 Protocol No: 02/06/44*

I am pleased to inform you that the Human Ethics Committee approved your protocol on the above study. Please note that subject to annual monitoring returns, the approved protocol is valid for five years.

In order to comply with the *National Statement on Ethical Conduct in Research Involving Humans*, and in line with the Human Ethics Committee requirements the Chief Investigator's responsibility is to ensure that:

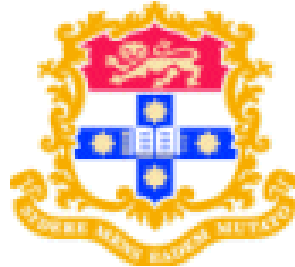
- (1) The individual researcher's protocol complies with the final and Committee approved protocol.
- (2) Modifications to the protocol cannot proceed until such approval is obtained in writing.
- (3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
- (4) All research subjects are provided with a Subject Information Sheet and Consent Form.
- (5) The Subject Information Sheet and Consent Form be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers.
- (6) The following statement appears on the bottom of the Subject Information Sheet:  
*Any person with concerns or complaints about the conduct of a research study can contact the Manager of Ethics and Biosafety Administration, University of Sydney, on (02) 9351 4811.*
- (7) The standard University policy concerning storage of data and tapes should be followed. While temporary storage of data or tapes at the researcher's home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of five years.
- (8) A progress report is provided by the end of each year. Failure to do so will lead to withdrawal of the approval of the research protocol and re-application to the Committee must occur before recommencing.
- (9) A report and a copy of the published material is provided at the end of the project.

Yours sincerely,

*Associate Professor Stewart Kellie*  
Chairman, Human Ethics Committee

**Appendix 2**

**PHARMACIST INFORMATION SHEET AND CONSENT FORM**



Faculty of Pharmacy, University of Sydney  
Tel : 02 93512333, Fax 1800 636 052

**Re: asthma management in rural Australia**

Asthma is a national health problem in the Australian community. Pharmacists are one of the health care professionals who can take a proactive step in helping to improve asthma care in the community. This project will explore this possibility by empowering pharmacists through adequate training and resources to conduct specialised asthma education and management services.

The Triple A (Adolescent Asthma Action program) is a validated peer led asthma education program that uses the “ripple effect” for information dissemination about asthma and has shown to be effective. Within the triple A, a group of people, who serve as “champions” or are trained about asthma and methods to disseminate asthma awareness. These “champions” then undertake the task of training/educating another group of people, and this step is then repeated within the community. You will be trained to train year 11 and 12 students, who will then further deliver this program to other students. You will also be trained and provided with resources to conduct community information sessions on asthma and deliver specialised services for people with asthma in the pharmacy.

**Participation in the project is entirely voluntary and you can withdraw at any time. Participation in the project will expand the reach of asthma education and care to a target group (adolescents) in a rural community. In particular, you as the pharmacist will have an opportunity to connect with groups in the community who underestimate the seriousness of asthma and are unlikely to visit the pharmacy on a regular basis and seek advice and information about their asthma.**

*Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney on 02 93514811.*



**PHARMACIST’S CONSENT FORM**

I, ..... hereby voluntarily consent to participate in the study entitled “**Asthma management in rural Australia.**”

This project is being conducted by a team of researchers – Ms Bandana Saini, Dr Sinthia Bosnic-Anticevich, Dr Sue Taylor, Dr Ines Krass and Prof Carol Armour all from the Faculty of Pharmacy, University of Sydney, and Ms Ann Dalton and Dr Smita Shah from the Pharmacy Guild of Australia and the Department of Public Health and Community Medicine, Westmead respectively.

I understand that participation at this stage of the project involves taking part in training in asthma management and the Triple A program for adolescents, delivering the Triple A program in schools in the community of Orange and setting up a specialised asthma service for patients who request it. I understand that this role will require collaboration with other health professionals in the area. I understand that any data collected for the purposes of this study will remain strictly confidential and will not be used to identify any pharmacy, pharmacist or pharmacy staff. I have been informed that the information obtained from this research may be used in future research or published.

I am aware of the purpose of this project and what my involvement entails. My participation is entirely voluntary. I have been informed of my right to question any part of the procedure or withdraw from the project at any time (by calling the contact listed below).

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

Address \_\_\_\_\_

Phone \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney

Faculty of Pharmacy, University of Sydney Contact: Ms Bandana Saini,  
Tel : 02 93512333, Fax 1800 636 052, email:bandana@pharm.usyd.edu.au

<p><b>Appendix 3</b></p> <p><b>LETTERS TO HIGH SCHOOLS</b></p>
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To

Dated:

The Principal  
 XYZ High School  
 ORANGE 2800.

**Re: Asthma Innovative Management Project (AIM)**

Sir,

We, the AIM project team, from the Faculty of Pharmacy; University of Sydney would like to invite your participation in our project. The AIM project is a Commonwealth funded project, looking to improve the management of asthma in special areas and sections of society. As you may be aware, asthma poses a significant burden on the community, in direct and indirect ways. Unfortunately, the management of asthma in rural and remote areas and in adolescents is sub optimal. The AIM project attempts to address both these issues by using a peer led education program to increase awareness of asthma in adolescents and other young people.

The objectives of this project are:

- 1. To implement a peer led asthma education program targeted at adolescents in a rural community**
- 2. To increase awareness of issues associated with asthma in a rural community**
- 3. To enable the community pharmacist to take an active role in the provision of education and advice on asthma issues in rural communities**
- 4. To build collaboration between the community pharmacists and other health care professionals in rural areas**
- 5. To offer people with asthma a personalised, evidence based asthma intervention program**

We will be using the AIM project grant to train community pharmacists in Orange about specialised asthma care provision, adult asthma education provision and to be Triple A peer leaders. This process will facilitate the Triple A program implementation in your schools, through a specially trained health care professional. Pharmacists will

later be offering community education on asthma and specialised asthma care services.

The Triple A program fits into the Asthma Friendly Schools project as one of the high school curriculum programs to choose from. Having an asthma program as part of the school curriculum is one of the criteria required to become an ‘asthma friendly’ school. To register with the Asthma Friendly Schools project a criteria checklist and a registration form must be completed to receive the Guidelines. These contain asthma first aid posters, first aid kit order forms and an order form for the Triple A program. Asthma NSW will be in contact with you to arrange the registration of your school in the project.

This is a unique opportunity for your school to become an ‘asthma friendly school’, and hence to foster the creation of a community that is aware of best asthma management practices. We will shortly be conducting a meeting of a local working party, which will consist of: person/s with asthma, a school teacher, a representative of the P and C, a local GP, a local pharmacist, a member of the local council, and the editor of the local newspaper.

We would sincerely like to invite your school to participate in this project. With your permission, one of the AIM team members can visit your school to help the person in charge of completing the registration form and provide further information about the project. If you wish to be involved in this innovative program, please complete the green form, sent to you by Asthma NSW, and please return the consent sheet to us in the reply paid envelope. Please do not hesitate to call us if you have any queries, contact details are listed in the information sheet attached. We are looking forward to working with you.

Sincerely,

Bandana Saini  
Chief Investigator, AIM Project  
Building A 15, Faculty of Pharmacy,  
University of Sydney.  
Sydney, NSW 2006

Rebecca Stephenson,  
Program Coordinator  
The Asthma Foundation of NSW,  
Suite 2, 100 Pacific Highway,  
St Leonards NSW 2065

To  
Teacher  
XYZ High School  
ORANGE. 2800

Dated:

**Re... Asthma Innovative Management Project (AIM)**

Dear ,

This letter is to follow up on the Asthma Innovative Management Project that we discussed with you earlier. This project, funded by the Commonwealth Department of Health and Aged Care, aims to facilitate optimal asthma management practices in adolescents living in rural areas. Asthma NSW supports this project and have incorporated the project within the Asthma Friendly Schools Policy.

We are glad to inform you that there has been an enthusiastic response from the Community of Orange for this project. We have attached a list of the schools which have agreed to participate in this project, and which are undertaking the process of registering as Asthma Friendly Schools.

As you may remember, registering in the Asthma Friendly Schools Project requires filling in the forms in your “Asthma Friendly Schools Guidelines” folder and sending it to Asthma NSW, for their records, and conducting an in-house asthma education session. In your case, this will be the Triple A program, which, as discussed, is a peer led asthma education program which has been shown to be quite effective in enhancing better asthma management behaviours in adolescents, besides being a fun learning activity.

For the Triple A program, a Triple A educator will train year 11 students, and we are lucky to have a team of enthusiastic pharmacists who have volunteered to do this. We are attaching a list of these pharmacists. We are not sure which pharmacist will be allocated to your school at this stage.

Following the training of the Year 11 students (6 hours), another session will need to be organised for the year 11 students to train the younger students before an open session is conducted. We had hoped to start this process in November (Term 4). However, most schools indicated that this might not be an optimal time because of the transition phase between year 11 and 12. Since February is the next available

month after the break, we would like you to nominate a date between the 11<sup>th</sup> (a week after term begins) and 21<sup>st</sup> of February for the training of Year 11 students. We need to fix these dates so that pharmacists can book a time and make arrangements to come out to the schools. We are restricted to these dates, as there is a community awareness phase for adults that needs to occur, after the Triple A has been conducted. As the report to the government is due at the end of March, it only leaves February for us to organise the Triple A program.

We hope you can help us and take this opportunity to improve asthma management in your community. We will call you to discuss this asthma education program further. Please do not hesitate to contact us, if you have any concerns or need any clarification about either the Asthma Friendly Schools Criteria or the Triple A program.

Yours truly

Vicky Kritikos

On behalf of the AIM Project Team

Faculty of Pharmacy

University of Sydney NSW. 2006

#### **List of Pharmacists**

<b>Pharmacy</b>	<b>Contact</b>	<b>Address</b>	<b>Telephone</b>
1. Johns Chemworld	John Howie	176 Summer Street	02 6362 1564
2. Peter Smith Chemart	Kate Grey	180 Summer Street	02 6362 4029
3. City Centre Pharmacy	David Charles	Shop 2-3 Orange City Centre	02 6362 8444
4. Baldwins Pharmacy	Kay Davison	215 Summer Street	02 6362 1188
5. John Cahill Pharmacy	Ken Ooi / John Cahill	101 Glenroi Ave	02 6362 7008
6. Hogans Pharmacy	Frances Kinghorne	123 Sale Street	02 6362 3680
7. Hogans Pharmacy	Frances Hulme	123 Sale Street	02 6362 3680

***Appendix 4***

**TRIPLE A EDUCATORS TRAINING WORKSHOP**

**Dr Smita Shah, Director  
Primary Health care Education and Research Unit  
Department of Public Health and Community Medicine  
University of Sydney, Westmead**

Session

1. Build on knowledge
2. Empowerment
3. Communication and leadership

Learning Outcomes

- Describe issues faced by students with asthma
- Provide the relevant information about asthma using empowerment education strategies
- Explain how Triple A Program is part of the asthma Friendly Schools Program
- Become familiar with the resources in the Triple A Educator's kit

**Appendix 5**  
**ASTHMA KNOWLEDGE QUESTIONNAIRE**

Name: \_\_\_\_\_ SID: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_  
Trainer: \_\_\_\_\_

1. What are the three main symptoms of asthma?  
• \_\_\_\_\_  
• \_\_\_\_\_  
• \_\_\_\_\_
2. More than 1 in 10 children will have asthma at some time during their childhood.  
True  False
3. Children with asthma have abnormally sensitive air passages in their lungs.  
True  False
4. If one child in a family has asthma then all his/her brothers and sisters are almost certain to have asthma as well.  
True  False
5. Most children with asthma have an increase in mucus when they drink cow's milk.  
True  False
6. Write down all the things you know that cause asthma (sometimes called trigger factors): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. During an attack of asthma the wheeze may be due to muscles tightening in the wall of the air passages in the lungs.  
True  False
8. During an attack of asthma, the wheeze may be due to swelling in the lining of the air passage in the lungs.  
True  False
9. Asthma damages the heart.  
True  False
10. Write down two asthma treatments (medicines) which are taken every day on a regular basis to prevent attacks of asthma from occurring.  
• \_\_\_\_\_  
• \_\_\_\_\_

11. What are three asthma treatments (medicines) which are useful during an attack of asthma?

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

12. Antibiotics are an important part of treatment for most children with asthma.

True  False

13. Most children with asthma should not eat dairy products.

True  False

14. Allergy injections cure asthma.

True  False

15. If a person dies from an asthma attack, this usually means that the final attack must have begun so quickly that there was no time to start any treatment.

True  False

16. People with asthma usually have ‘nervous problems’.

True  False

17. Asthma is infectious (i.e. you can catch it from another person).

True  False

18. Inhaled medications for asthma (e.g. Ventolin puffers, rotacaps) have fewer side effects than tablets.

True  False

19. Short courses of oral steroids (such as prednisolone) usually cause significant side effects.

True  False

20. Some asthma treatments (such as Ventolin) damage the heart.

True  False

21. A 5 year old boy has an attack of asthma and takes two puffs of Ventolin from a puffer (metered dose inhaler). After 5 minutes he is no better. Give some reasons why this might have happened. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

22. During an attack of asthma, which you are managing at home, your child is requiring the nebulizer (mask) every 2 hours. He/she is gaining benefit but is breathless after 2 hours. Provided that he/she doesn't get any worse, it is fine to continue with 2 hourly treatment.

True  False

23. Write down ways of helping to prevent attacks of asthma during exercise. \_\_\_\_\_

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24. Children with asthma become addicted to their asthma drugs.

True  False

25. Swimming is the only suitable exercise for asthmatics.

True  False

26. Parental smoking may make the child's asthma worse.

True  False

27. With appropriate treatment most children with asthma should lead a normal life with no restrictions on activity.

True  False

28. The best way to measure the severity of a child's asthma is for the doctor to listen to his chest.

True  False

29. Asthma is usually more of a problem at night than during the day.

True  False

30. Most children with asthma will have stunted growth.

True  False

31. Children with frequent asthma should have preventive drugs.

True  False

Please circle at what stage you are completing this questionnaire:

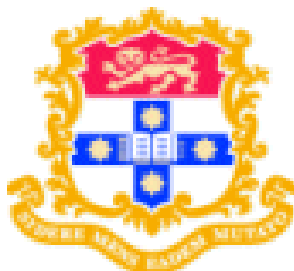
Prior to Triple A workshop

After completion of Triple A workshop

**Appendix 6**

**STUDENT INFORMATION SHEET- YEARS 11 AND 12**

**STUDENT INFORMATION AND CONSENT FORM**



Faculty of Pharmacy, University of Sydney  
Tel: 02 93512333, Fax 1800 636 052

**Re: asthma management in rural Australia**

Asthma is a national health problem in the Australian community. Pharmacists are one of professionals who can take a step in helping to improve asthma care in the community. This project will explore this possibility by training pharmacists to conduct specialised asthma services.

The Triple A program for adolescents is a peer led program that has been shown to improve asthma awareness and asthma knowledge among adolescents in the community. Pharmacists will be trained to deliver the Triple A program to year 11 and 12 students of local schools. The trained year 11 and 12 students will then further train year 9 and 10 students in the school, who will then create fun ways of delivering the asthma message to the rest of the school.

Data about asthma awareness and knowledge amongst students will be collected before and after the Triple A training program. If you agree to participate in the study, local pharmacists will work with the schools in the area and deliver the Triple A program to you. Once trained, you will have the opportunity to further train year 9 and 10 students about asthma.

**Participation in this project is entirely voluntary, you can choose to withdraw at any time, a decision not to participate, or to withdraw from the study will not affect your relationship with the school or your academic progress.**

*Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney on 02 93514811.*



**STUDENT CONSENT FORM- YEARS 11 and 12**

I, ....., hereby consent to participate in the study entitled “**Asthma management in rural Australia.**” This project is being conducted by a team of researchers – Ms Bandana Saini, Dr Sinthia Bosnic-Anticevich, Dr Sue Taylor, Dr Ines Krass and Prof Carol Armour all from the Faculty of Pharmacy, University of Sydney, and Ms Ann Dalton and Dr Smita Shah from the Pharmacy Guild of Australia and the Department of Public Health and Community Medicine, Westmead respectively.

I understand that participation in the project involves my being trained at school by community pharmacist/s in the area, about asthma, and then using this training to train other students about asthma within the school. I understand that any data collected for the purposes of this study will remain strictly confidential and will not be used to identify any student or school. I have been informed that information obtained from this research may be used in future research or published.

I am aware of the purpose of this project, what involvement entails and that participation is voluntary. I have been informed of my right to question any part of the procedure or withdraw my child from the project at any time (by calling the contact listed below). I am aware that withdrawing from the study or non-participation will not affect my relationship with the school or my academic progress.

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

School: \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney on (02) 9351 - 4811.  
Faculty of Pharmacy, University of Sydney Contact: Ms Bandana Saini, Tel : 02 93512333, Fax 1800 636 052, email:bandana@pharm.usyd.edu.au

**Appendix 7**

**ASTHMA PEER LEADERS' EVALUATION QUESTIONNAIRE**

Date of Birth \_\_\_\_\_ Sex \_\_\_\_\_ Training date \_\_\_\_\_

*Please take some time to complete the following questionnaire.  
Your feedback is very important to us.*

**1. What are the 3 most important points you gained from the workshop?**

**2. What did you like in particular?**

**3. What other information would you have liked?**

*Thank you for your comments and participation*

**Primary Health Care Education and Research Unit, Western Sydney Health**

**Appendix 8**

**TRIPLE A EDUCATORS' EVALUATION QUESTIONNAIRE**

*Your opinion about the Program is valuable to us. Please take a couple of minutes to complete this questionnaire regarding the Asthma Peer Leader Workshop you conducted.*

**1. What did you gain from participating in the training of school students?**

**2. Was workshop conducted as planned? If not, what changes occurred?**

**3. What aspects of the workshop worked well and why?**

**4. What difficulties if any, did you face when teaching the students? (Your suggestions on how these could be overcome would be welcome)**

*Please turn to second page*

**5. On a scale of 1 to 5, how successful do you feel your workshop went?**

Session 1: Asthma Knowledge

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

Session 2: Empowerment of Adolescents

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

Session 3; Teaching, communication and group work

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

**6. On a scale of 1 to 5, how well did you think the Asthma Peer Leaders responded to the training sessions? Circle one number**

1	2	3	4	5
---	---	---	---	---

Not at All      Slightly      Moderately      Very successful      Extremely Well

**7. Was the training you received adequate, if not what other support is required?**

**8. Any other Comments**

*THANK YOU*

**Appendix 9**  
**TEACHERS' FEEDBACK QUESTIONNAIRE**

*Your opinion about the Triple A Program is valuable to us. We thank you for completing this questionnaire.*

**1. Did you have an opportunity to be in the classroom during the program?  
If so:**

(a) How effective were the lessons given by the Asthma Peer leaders?

(b) What difficulties, if any, did the Asthma Peer leaders experience in conducting their lessons?

(c) What benefits did the Asthma Peer leaders gain from their experience?

(d) What did other students gain from the program?

**2. What issues or problems had to be faced in running the program at your school? How did you deal with them?**

**3. On a scale of 1 to 5, how useful was the program in your school?**

1	2	3	4	5
---	---	---	---	---

Not Useful                  Slightly                  Moderately                  Very successful                  Extremely Useful

**4. Would you like to see the program repeated in future years? YES NO**

**5. Comments**

**Appendix 10**  
**LOCAL NEWSPAPER ARTICLES ABOUT TRIPLE A**



**TRAIN THE TRAINER:** Dr Smita Shah (front left) hosted the Adolescent Asthma Action Program yesterday. The session was attended by pharmacists (front) Frances Hulme, David Charles, (back) pharmacy graduate Kirsty Tobin, pharmacists Frances King-horne, Grace Cheong, Sue Taylor, John Cahill, Kate Gray and John Ferguson. Photo: STEVE GOSCH.

0209sgasthma

## Spreading message on asthma aid

By Georgie McCulloch

THE high incidence of asthma related admissions to Orange Base Hospital has prompted health professionals to train pharmacists in the Adolescent Asthma Action (Triple A) program.

Triple A aims to educate young adults in the community about asthma.

Seven pharmacists attended an all day session on

Triple A at Orange Ex-Services Club yesterday run by the program's developer Dr Smita Shah, of Westmead Hospital.

Asthma is the most common chronic illness of childhood, affecting up to one in four children and adolescents.

It is the leading cause of hospital admissions and school absences due to chronic illness in childhood.

The Triple A program is

Australia's first peer-led approach to asthma health promotion in high schools, where senior students are active participants in learning and teaching.

According to University of Sydney faculty of pharmacy project officer Vicky Kritikos, Orange Base Hospital admissions for asthma for people aged between 18 and 24 are higher than the State average.

"Asthma practises in the

Mid Western Area are sub-optimal so what we are trying to do is get the pharmacists out into the community to promote asthma awareness and give education and advise on asthma issues," Mrs Kritikos said.

"Asthma management practises have been shown to be poorer in remote areas compared to metropolitan areas," she said.

□ Continued Page 2

NEWS

# Students become 'champions' of asthma cause

By Sam Bartlett

CANOBOLAS High School year 11 students were last week taught how to become "champions" of the cause against asthma.

A group of students volunteered to attend the Asthma Innovation Management (AIM) program, being trialled

in Orange by the University of Sydney, where they were trained by pharmacists in asthma management.

Professor Carol Armour said Orange was a great place to test the program and the aim was to encourage students to pass on the message.

"For the first time pharmacists are com-



**CHAMPIONS OF THE CAUSE (above):** Canobolas High students Michael Slattery (front) and John Hickling will become champions for the cause against asthma with the help of Orange pharmacist John Ferguson. Photo: STEVE GOSCH.

"One in seven adolescents suffer from asthma and many know someone who does so it makes them more aware of it and what to do in an asthma attack," she said. "It also gives them leadership training which I'm hoping they can take out into the community and be good ambassadors."

Pharmacists John Ferguson, Kirsty Tobin, Francis Kinghorn and Francis Haline attended.

Kinross Wolatui students will also learn the program.

Canobolas High welfare co-ordinator Anne Marceau said the program would not only teach students what to do in the event of an asthma attack but also give them leadership skills.

## **Appendix 11**

### **PHARMACISTS' SECOND TRAINING WORKSHOP**

#### OBJECTIVES

- Outline the epidemiology of asthma, asthma management practices in Australia and the role of the pharmacist in asthma care in rural areas.
- Provide pharmacists with knowledge regarding the range of individual beliefs, attitudes and behaviours that can impact on asthma management.
- Develop skills to assess patient attitudes and behaviours.
- Provide pharmacists with knowledge regarding beginning-level communication skills useful for enhancing patient-HCP interaction
- Provide pharmacists with specific skills and strategies for enhancing communication, thus optimising patient adherence and self-management of asthma
- Demonstrate these skills in role plays

#### LEARNING OUTCOMES

By the end of the workshop, pharmacists should have

- An understanding of the psychosocial and behavioural factors which can influence patients' approaches to the management of their asthma
- Acquired a range of skills and strategies for enhancing communication with patients who have asthma
- Some practical experience in demonstrating and practising these skills and understandings.
- Additional knowledge re: proactive role of pharmacists with respect to asthma management.

**Appendix 12**

**PHARMACISTS' WORKSHOP PROGRAM**  
**Sunday, 13 APRIL 2003**

**MORNING**

Oral Presentation

1. The Management of Asthma
2. Factors influencing asthma management
  - a. Psychosocial factors
  - b. Behavioural factors
  - c. Developmental stage/lifespan factors
  - d. Lifestyle
  - e. Social support
3. Facilitating patient asthma management
4. Communications

**AFTERNOON**

Case Studies and Role Plays

Task:

Identify the factors that may be influencing the patient's responses/behaviours in the case study. Write down your ideas on the overhead transparencies provided. Elect a spokesperson from your group to report back to the workshop.

To help you do this, consider the following:

- What is the nature of the problem? Consider manifestations, responses from family members, intensity of the problem, current other associated problems, related events.
- History of problem development: what was happening at the time? Who was involved? What behavioural reactions occurred? What behaviours/emotions/ thoughts have become problematic?
- Beliefs and perceptions about the problem: at onset and from the perspective of other important people in the patient's life
- Attempted solutions: what steps were taken? By whom? With whom? With what results?

**Appendix 13**  
**FEEDBACK SURVEY**

**FEEDBACK FROM PARTICIPANTS**

We would like some feedback from you regarding the manuals and the training you have received. Training for this part of the project has involved a pre course manual, workshops and lectures on health beliefs and communication. We would like you to review your learning relevant to these outcomes.

1. Please rate the helpfulness of the training you have received so far (please fill in the table).

Very helpful/relevant 3 4 5 6 7 Not at all helpful/ relevant

1                      2                      3                      4                      5                      6                      7

Learning outcome	Pre course manual	Lectures	Workshops
1. Understand the psychosocial and behavioural factors which can influence patients in the management of their asthma			
2. Acquire a range of skills and strategies for enhancing communication with patients who have asthma			
3. Demonstrate practical skills and understanding relevant to communication with patients			
4. Acquire additional knowledge regarding the proactive role of pharmacists with respect to asthma management			

2. What factors enhanced your learning?

3. What were the barriers to your learning?

4. What would help you to improve your  
skills acquisition?  
application in your workplace?  
knowledge acquisition?

5. Was the amount of detail provided appropriate for your learning needs?  
Yes/No

If no please specify in which areas you would have liked more or less detail

6. Were there any other areas you would have liked covered in order to achieve  
the learning objectives?

7. Overall how confident do you now feel about putting the training into practice?  
Please circle the most appropriate for you

Very confident

not at all confident

1

2

3

4

5

6

7

8. Please add any other comments here

THANK YOU

**Appendix 14**  
**EXIT SURVEY FOR THE PUBLIC FORUM**

We would appreciate your comments and feedback on this evening's event.

1. Please circle the number that best describes your opinion on each of the following parts of this evening's program.

1. TALKS

Interesting	7	6	5	4	3	2	1	Uninteresting
Informative	7	6	5	4	3	2	1	Uninformative
Helpful	7	6	5	4	3	2	1	Unhelpful

2. PANEL DISCUSSION

Interesting	7	6	5	4	3	2	1	Uninteresting
Informative	7	6	5	4	3	2	1	Uninformative
Helpful	7	6	5	4	3	2	1	Unhelpful

3. STUDENT PERFORMANCES

Interesting	7	6	5	4	3	2	1	Uninteresting
Informative	7	6	5	4	3	2	1	Uninformative
Helpful	7	6	5	4	3	2	1	Unhelpful
Enjoyable	7	6	5	4	3	2	1	Not enjoyable

2. Overall, what were your impressions of this evening's program?

3. What aspect did you find the most useful and enjoyable?

4. What would you have changed?

5. Did you learn anything new about asthma? If yes please describe

6. A few questions about you.

- Under 25 years
- 25-39 years
- 40-60 years
- over 60 years.

7. What was your reason for coming this evening? Please tick as many boxes as apply.

- You have asthma.
- Your child or partner has asthma.
- To see a child performing this evening.
- You have a general interest
- Other – please describe -----

We may like to interview you again about asthma in the future.  
If you're happy to do so, please leave name and contact no.

NAME-----

CONTACT NUMBER-----

THANK YOU

## **Appendix 15**

### **MEDIA PROMOTION OF THE PUBLIC FORUM**

#### **MEDIA RELEASE**

##### **WHAT**

“Taking Control of Asthma in Orange”

Public education evening: managing asthma in a rural community

Local medical practitioners, pharmacists and people with asthma talking about specific challenges in asthma management in Orange. Plus performances from local high school students trained in the Adolescent Asthma Action Program, spreading the message about asthma.

##### **WHERE AND WHEN**

The Orange Civic Centre, Wednesday, 30 April, 2003, 7.00-9.00 pm.

##### **BACKGROUND**

Asthma is a chronic disease affecting approximately 1 in 5 children, 1 in 7 adolescents and 1 in 10 adults. Its prevalence and severity are increasing worldwide. There are many challenges associated with the optimal management of asthma, as this involves not only the optimal use of medication but several other aspects which require people with asthma and their health care professionals to work together in order to achieve specific goals.

Managing asthma in rural communities has added challenges as data has indicated that in rural communities, asthma management practices are poorer, asthma death rates are twice as high as those in metropolitan areas, personal health risk factors are higher and most importantly, supply rate of primary care practitioners is 13% below that of capital cities.

More specifically, the Mid Western Area Health Services performed a needs analysis in Jun 2000 indicating that there was a need to increase community-based services for asthma in the town of Orange. This concept had previously been highlighted in 1999, when the Ministerial Advisory Committee on Health Services in Smaller Towns, published a Report to the NSW Minister for Health, recommending that rural communities should consider reallocating resources from high cost, under utilised bed-based services to more cost effective and accessible ambulatory and community based services.

The aim of the public education evening is Part 2 of a two phase plan to increase asthma awareness in Orange and to utilise the community pharmacist as an alternative primary health care provider of asthma services, thereby helping identify people with asthma and working with other health care professionals in the area to improve asthma management practices for as many people with asthma as possible.

The pharmacist training you are attending today (Sunday 13<sup>th</sup> April) is once again the second phase of training which the local pharmacists are undertaking in order to equip them for the above-mentioned task. Phase 1 involved the local pharmacists training high school students in a peer led asthma education program (Adolescent Asthma Action Program or Triple A) designed to increase asthma awareness amongst all adolescents. Three local high schools, Canobolas Technology High, Orange High and Kinross Wolaroi School, were involved in the Triple A Program and will be performing at the public education evening.

POSTERS AND FLYERS

## *Taking Control of Asthma*



### *The Forum*

### *Orange Civic Centre*

**Wednesday 30<sup>th</sup> of April  
7:00 PM – 9:00 PM**

For the first time in Australia, local community pharmacists have used a world-renowned program in high schools, to promote better asthma management practices in the community.

Overcome the challenges of asthma management practices specific to rural communities. Have your questions answered by a panel of experts including a local GP, pharmacist, asthma educator, and a guest respiratory physician.

**All members of the community of Orange are invited to attend.**

#### **Asthma Innovative Management:**

**A Commonwealth Department of Health & Ageing initiative in collaboration with the Faculty of Pharmacy, University of Sydney**

# **PROGRAM**

## **Taking Control of Asthma in Orange**

**Wednesday Evening 30<sup>th</sup> April 2003**

**The Forum**

**Orange Civic Centre**

*MC for this evening: Dr Sinthia Bosnic-Anticevich*

**7.00pm**                    **Opening by the Mayor of Orange**

**7.10 – 8.00pm**        **Panel Discussion**

- ❖ **Dr Peter Jones** *Local Respiratory Physician*
- ❖ **Dr Kath Errey** *Local Medical Practitioner*
- ❖ **Professor Carol Armour** *Researcher*
- ❖ **John Ferguson, Kirsty Tobin** *Local Pharmacists*
- ❖ **Ann Roth** *Asthma Educator*
- ❖ **Consumer for Asthma**

**8.00 – 9.00pm**        **Performances from**

- ❖ **Canobolas Rural Technology High School**
- ❖ **Kinross Wolaroi School**
- ❖ **Orange High School**

**9.00pm**                    **Presentation of Certificates to Students**

*by: Frances Kinghorne - Local Pharmacist and  
Vicky Kritikos - AIM Project Officer*

### **Asthma Innovative Management Project Team**

**Professor Carol Armour**

**Dr Sinthia Bosnic-Anticevich**

**Dr Ines Krass**

**Dr Sue Taylor**

**Bandana Saini**

**Dr Smita Shah**

**Vicky Kritikos**

**Ann Dalton**



## The Orange Asthma Innovative Management Project



Faculty of Pharmacy  
University of Sydney

The Commonwealth Department of Health and Ageing  
and  
The Faculty of Pharmacy, University of Sydney

### INVITATIONS

## Public Forum for Health Care Professionals and People with Asthma:

### *Managing Asthma in Rural Communities*

We would like to invite you to attend this forum aimed at addressing the challenges associated with managing asthma in Orange.

The forum will consist of a panel discussion during which the panel members - a respiratory physician, a world-renowned researcher, a local medical practitioner, two pharmacists, an asthma educator, and a consumer will be identifying and discussing asthma issues along with audience participation.

Finally, in the second half of the program, students who have trained as asthma peer leaders will be presenting and receiving their certificates for their contribution to increasing asthma awareness.

**The Forum, The Orange Civic Centre**

**Wednesday 30th April 2003**

**7.00pm - 9.00 pm.**

We would be honoured if you could be part of this important public meeting. Should you have any questions relating to this event please do not hesitate to contact Vicky Kritikos on 02 9351 3647 or email [Vicky@pharm.usyd.edu.au](mailto:Vicky@pharm.usyd.edu.au)

Yours sincerely,

**Vicky Kritikos On behalf of the Asthma Innovative Management,  
Managing asthma in rural communities, Project Team**

LOCAL NEWSPAPER ARTICLES

# Public forum on asthma care

A PUBLIC forum for health care professionals and people with asthma will take place tonight at Orange Civic Theatre from 7 until 9.

The forum, titled *Managing Asthma in Rural Communities*, is aimed at addressing the challenges associated with managing asthma in Orange.

The forum will consist of a panel discussion during which the panel members, a respiratory physician, an asthma educator, and a consumer will be identifying and discussing asthma issues along with audience participation.

In the second half of the program, students who have trained as asthma peer-leaders will present and receive certificates for their contribution to increasing asthma awareness.

For information call Vicky Kritikos on 9351-3647 or email [Vicky@pharm.usyd.edu.au](mailto:Vicky@pharm.usyd.edu.au)

**PHOTO OF STREET BANNERS**



**Appendix 16**  
**DATA COLLECTION FORM FOR ASTHMA-RELATED PHARMACY VISITS**

<b>PATIENT NAME</b>		<b>PHARMACY CODE PHAIM 3</b>			<b>DATE. .... / ..... / 03</b>
Patient	Gender	Age	Circumstances	Information requested about <u>Asthma</u> <small>(Tick as many as apply)</small>	Referral Required
<input type="checkbox"/> New  <input type="checkbox"/> Regular  <input type="checkbox"/> Carer	<input type="checkbox"/> Male  <input type="checkbox"/> Female	<input type="checkbox"/> Under 18  <input type="checkbox"/> 18-35  <input type="checkbox"/> 36-64  <input type="checkbox"/> 65+	<input type="checkbox"/> OTC  <input type="checkbox"/> Prescription  <input type="checkbox"/> Other-Please specify..... ..... ..... ..... .....	<input type="checkbox"/> None  <input type="checkbox"/> Medication  <input type="checkbox"/> Disease  <input type="checkbox"/> Device  <input type="checkbox"/> Other – Please specify..... ... .....	<input type="checkbox"/> No  <input type="checkbox"/> Yes-Please specify ..... ..... ..... ..... ..... .....
<b>How is it that you came to ask for information today?</b>					

*Please write at the back of the form if there were any other points of interest regarding this patient*

**Appendix 17**

**SEMI-STRUCTURED INTERVIEWS WITH PHARMACISTS AT THE END OF  
BASELINE DATA COLLECTION**

**Objectives**

1. To determine the frequency and nature of contact between pharmacists and patients with asthma in terms of the supply of asthma medications.
2. To identify the demographics of asthma patients/carers pharmacists generally deal with in the rural community pharmacy setting.
3. To determine the ethical and professional standards of pharmacists with respect to the supply of asthma medications.
4. To determine the frequency and nature of contact between pharmacists and other health care providers.
5. To determine the degree at which pharmacists are utilised by asthma patients/ the community in general, as a source of information and advice about asthma issues.

**Questions for semi-structured interviews:**

1. Within a week, how many people would you say come into your pharmacy for asthma medications?  
Of those, how many in terms of %, would be prescription medications compared to OTC s?  
Prompts: seasonal variation. Objective 1
2. Prompts: New/Regular, Ages, severity. Objective 2
3. How do you normally approach a patient presenting for asthma medications?  
Prompts: Objective 3  
Ask for asthma card  
Check when last used  
All steps followed  
Written AAP  
Inhaler technique, adherence, spacer, peak flow meter  
Trigger factors.  
For new patients, for old patients, for adolescent/paediatric patients
4. If a problem arises, what do you normally do?  
Prompt: Interactions, inhaler technique Contact doctor, referral, or tell them to go to see the doctor. Objective 4
5. What is your opinion on how well informed these people are about asthma issues? Objective 5  
What do they need to know?  
What about the community in general?  
Prompts: knowledge of disease, understanding of medication

### **Appendix 18**

#### **23-ITEM ASTHMA KNOWLEDGE QUESTIONNAIRE FOR CONSUMERS**

Here are some questions about asthma in general. Circle T if you think the statement is true or F if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

1. You can become addicted to asthma medications if you use them all the time. T F
2. An asthma action plan can prevent hospitalisations due to asthma. T F
3. Patients who take their medications as directed can have a normal life with no restrictions on daily activity. T F
4. You may have fewer asthma attacks if you can identify and avoid things that trigger them. T F
5. Exercise can help keep you fit and well and better able to cope with asthma. T F
6. Asthma medications do not work as well if you use them all the time. T F
7. An asthma action plan is important to keep track of your symptoms, medications, and peak expiratory flow. F T
8. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure. T F
9. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication. T F
10. Exercising until you become breathless can damage the heart and/or lungs T F
11. Side effects are less likely with inhaled medications than with tablets. T F
12. With preventer medications, it does not matter if some doses are missed or if you go on or off. T F
13. Allergy is a common medical cause of asthma in both adults and children. T F
14. People with stable asthma condition only need to be reviewed once a year. T F
15. You should not exercise if exercise brings on even the occasional asthma attack. T F
16. Syrups and tablets work almost as quickly as inhaled medications. T F
17. If you get a cold or flu, you should increase your asthma medications. T F
18. Some medications can trigger asthma attacks. T F
19. Spacers should be washed in warm water with diluted kitchen detergent before initial use and at least every 1-2 weeks thereafter. T F
20. You should use “preventer medication” when you have an asthma attack. T F

21. Going from a cold to a hot environment can trigger asthma, but going from a hot to a cold environment does not trigger asthma. T F
22. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma. T F
23. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. T F

**Appendix 19**  
**41-ITEM ASTHMA KNOWLEDGE QUESTIONNAIRE FOR HEALTH CARE PROFESSIONALS**

Here are some questions about asthma in general. Circle T if you think the statement is true or F if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

1. Asthma results from complex interactions among inflammatory cells, mediators and other tissues in the airway. T      F
2. Asthma can be triggered by aspirin or other non-steroidal anti-inflammatory drugs (NSAIDs) such as Nurofen. T      F
3. After the patient has recovered from a severe asthma attack, he/she should be maintained on the same dose of oral corticosteroid permanently in order to control his/her condition. T      F
4. Adherence to reliever medication is greater than to preventive drugs in most people with asthma. T      F
5. The aim of asthma management is to empower health care professionals to take control of patients' disease. T      F
6. Nebulisers are the most effective method of asthma medication delivery in an asthma exacerbation. T      F
7. Peak Expiratory Flow Measurement should be used for diagnosis and assessment of asthma progress in adults. T      F
8. If someone has an asthma attack, you should perform emergency asthma management first if his or her condition suddenly deteriorates or, if at any time you are concerned – call an ambulance. T      F
9. Asthma episodes are associated with variable airflow obstruction that is often reversible with treatment. T      F
10. Only a small proportion of people with asthma have symptoms triggered by vigorous exercise. T      F
11. All people with asthma should have a long-acting beta<sub>2</sub> agonist for symptom relief. T      F
12. Airway inflammation in asthma can lead to airway wall remodelling. T      F
13. Avoiding exposure to trigger factors is less important than taking medications regularly. T      F
14. Doctors should only discuss an action plan with patients when they have a severe attack. T      F
15. Increased air pollution levels of respiratory particulates, ozone and oxides of nitrogen can precipitate asthma symptoms. T      F

- |                                                                                                                                                                                                                   |   |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 16. Spirometry can be used as a diagnostic testing in all people with asthma.                                                                                                                                     | T | F |
| 17. When you are performing emergency asthma management, you should shake the puffer, attach it to the spacer and give 4 separate puffs of a reliever medication (blue/grey, puffer/inhaler), one puff at a time. | T | F |
| 18. The inflammatory process in asthma does not cause permanent changes in the airways.                                                                                                                           | T | F |
| 19. Symptom controllers do not treat the underlying airway inflammation and should only be used as an adjunct to regular inhaled corticosteroids.                                                                 | T | F |
| 20. Long-acting beta <sub>2</sub> agonists' side-effects are similar in type and frequency to those of short-acting beta <sub>2</sub> agonists.                                                                   | T | F |
| 21. Multiple actuations of aerosol devices before inhaling from a spacer will result in more effective medication delivery.                                                                                       | T | F |
| 22. The most common problem with Dry Powder Inhaler (DPI) use is incorrectly coordinating drug release and inhalation.                                                                                            | T | F |
| 23. Viral respiratory infections are the least frequent precipitants of asthma exacerbations in infancy.                                                                                                          | T | F |
| 24. In children, a chronic or recurring cough in the absence of any wheeze is unlikely to be asthma.                                                                                                              | T | F |
| 25. A Leukotriene receptor antagonist such as Montelukast sodium (Singulair) is useful as preventive treatment in severe asthma.                                                                                  | T | F |
| 26. It is a good idea to give cough syrups during an asthma attack to treat asthma-related cough.                                                                                                                 | T | F |
| 27. The genetic predisposition for the development of IgE-mediated response to common aeroallergens is not a predisposing factor for developing asthma.                                                           | T | F |
| 28. Food preservatives based on sulphites are common triggers for asthma.                                                                                                                                         | T | F |
| 29. An asthma 3+visit plan is a plan in which GPs treat an acute asthma exacerbation over 3 visits.                                                                                                               | T | F |
| 30. Inhaled non-steroidal anti-inflammatories such Sodium Cromoglycate (Intal) are recommended as initial preventative therapy for children with frequent episodic to mild persistent asthma.                     | T | F |
| 31. Adolescents can be helped to increase adherence to treatment plans by reinforcing their self-concept as the owners of their healthcare problem.                                                               | T | F |
| 32. An asthma management plan is essentially the same as an asthma action plan.                                                                                                                                   | T | F |
| 33. Symptoms of asthma always correlate with the degree of airway obstruction.                                                                                                                                    | T | F |
| 34. In some people with asthma, exercise-induced symptoms may be the only manifestations of asthma.                                                                                                               | T | F |
| 35. When oral corticosteroids are initiated in an acute attack, inhaled corticosteroids should be ceased to avoid any complications.                                                                              | T | F |

- |                                                                                                           |   |   |
|-----------------------------------------------------------------------------------------------------------|---|---|
| 36. Dry Powder Inhalers (DPI) require higher inspiratory flow rates than Metered Dose Inhalers (MDI).     | T | F |
| 37. Sub-basement membrane fibrosis in asthma can contribute to persistent abnormalities in lung function. | T | F |
| 38. Gastro-oesophageal reflux of acid can rarely exacerbate asthma.                                       | T | F |
| 39. Only nebulisers can be used in children < 2 years who have asthma.                                    | T | F |
| 40. As with Metered Dose Inhalers (MDI), the mouthpiece of Dry Powder Inhalers (DPI) should be washed.    | T | F |
| 41. Unlike short-acting bronchodilators, Eformoterol (Foradile, Oxis ) effects usually last for 2 days.   | T | F |

**Appendix 20**

**SUBJECT INFORMATION AND CONSENT FOR PILOT STUDY**



Faculty of Pharmacy, University of Sydney  
Tel: 02 9351 2320, Fax: 02 9351 4391

Development of Two New Asthma Knowledge Questionnaires

*Dear Participant,*

This research is being conducted by Hui Shen Chan under the supervision of Dr Sinthia Bosnic-Anticevich and Dr Ines Krass from the Faculty of Pharmacy, University of Sydney. We thank you for your assistance in completing this questionnaire. By completing these questionnaires, you will be helping us to develop two new asthma knowledge questionnaires.

This survey will only take 10 minutes of your time to complete. All responses collected are strictly anonymous and will be kept confidential, subject to legal constraints. No individual person or institution will be identified in the resulting research paper, reports or future publications, as only summary statistical data will be reported.

By completing and returning this questionnaire, consent to participate is implied. Participation in this project is entirely voluntary and you are free to withdraw at anytime.

If you have any questions or concerns about this project, please do not hesitate to contact Dr Sinthia Bosnic-Anticevich at the Faculty of Pharmacy, University of Sydney on (02) 9351 5818. The number of surveys returned would improve the success of my research and therefore your participation is greatly appreciated

Any person with complaints about the conduct of a research study can contact the Manage of Ethics and Biosafety Administration, The University Of Sydney, on (02) 9351 4811

**Appendix 21**

**ETHICS APPROVAL FROM UNIVERSITY OF SYDNEY FOR MAIN STUDY**



**The University of Sydney**

NSW 2006 Australia

**Human Research Ethics Committee**  
<http://www.usyd.edu.au/ethics/human/>

**Chairman:**

Associate Professor Stewart Kellie  
Telephone: (02) 9845 2141  
Facsimile: (02) 9845 2171  
Email: [stewartk@chw.edu.au](mailto:stewartk@chw.edu.au)

**Manager:**

Mrs Gail Briody  
Telephone: (02) 9351 4811  
Facsimile: (02) 9351 6706  
Email: [gbriody@mail.usyd.edu.au](mailto:gbriody@mail.usyd.edu.au)

**Human Secretariat**

Telephone: (02) 9036 9309  
(02) 9036 9308  
(02) 9351 4474  
Facsimile: (02) 9036 9310  
Email: [r.todd@reschols.usyd.edu.au](mailto:r.todd@reschols.usyd.edu.au)  
Rooms L4.13/L4.14, Main Quadrangle – A14

29 April 2004

Dr S Bosnic-Anticevich  
Faculty of Pharmacy  
Building A15  
The University of Sydney

Dear Dr Bosnic-Anticevich

I am pleased to inform you that the Human Research Ethics Committee at its meeting on 19 April approved your protocol on the following study. Please note that subject to annual monitoring returns, the approved protocol is valid for five years.

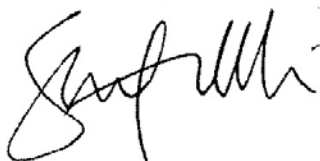
**Title:** *Validation of two asthma knowledge questionnaires: One for consumers and one for health care professionals*  
**Ref No.:** *7360*  
**Approval Period:** *April 2004 – April 2005*  
**Authorised Personnel:** *Dr S Bosnic-Anticevich*  
*Associate Professor I Krass*  
*Mrs V Kritikos*

In order to comply with the *National Statement on Ethical Conduct in Research Involving Humans*, and in line with the Human Research Ethics Committee requirements the Chief Investigator's responsibility is to ensure that:

- (1) The individual researcher's protocol complies with the final and Committee approved protocol.
- (2) Modifications to the protocol cannot proceed until such approval is obtained in writing.
- (3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
- (4) All research subjects are provided with a Participant Information Sheet and Consent Form, unless otherwise agreed by the Committee.

- (5) The Participant Information Sheet and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee.
- (6) The following statement must appear on the bottom of the Participant Information Sheet. *Any person with concerns or complaints about the conduct of a research study can contact the Manager of Ethics Administration, University of Sydney, on (02) 9351 4811.*
- (7) The standard University policy concerning storage of data and tapes should be followed. While temporary storage of data or tapes at the researcher's home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of five years.
- (8) A progress report should be provided by the end of each year. Failure to do so will lead to withdrawal of the approval of the research protocol and re-application to the Committee must occur before recommencing. **Your first report will be due on 30 April 2005.**
- (9) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely



**Associate Professor Stewart Kellie**  
**Chairman, Human Research Ethics Committee**

Encl. Subject Information Sheet  
Questionnaires

<p><b>Appendix 22</b></p> <p><b>THE 14-ITEM CQ</b></p>
--------------------------------------------------------

For each statement about asthma, please circle T if you think the statement is true or F if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

- |                                                                                                                                                                                |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 1. You can become addicted to asthma medications if you use them all the time.                                                                                                 | T | F |
| 2. An asthma action plan can prevent hospitalisations due to asthma.                                                                                                           | T | F |
| 3. You may have fewer asthma attacks if you can identify and avoid things that trigger them.                                                                                   | T | F |
| 4. Exercise can help keep you fit and well and better able to cope with asthma.                                                                                                | T | F |
| 5. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure.                     | T | F |
| 6. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication.                 | T | F |
| 7. Side effects are less likely with inhaled medications than with tablets.                                                                                                    | T | F |
| 8. With preventer medications, it does not matter if some doses are missed or if you go on or off.                                                                             | T | F |
| 9. If you get a cold or flu, you should increase your asthma medications.                                                                                                      | T | F |
| 10. Some medications can trigger asthma attacks.                                                                                                                               | T | F |
| 11. You should use “preventer medication” when you have an asthma attack.                                                                                                      | T | F |
| 12. Going from a cold to a hot environment can trigger asthma, but going from a hot to a cold environment does not trigger asthma.                                             | T | F |
| 13. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma.                                                                   | T | F |
| 14. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. | T | F |

<p><b>Appendix 23</b></p> <p><b>THE 20-ITEM HQ</b></p>
--------------------------------------------------------

For each statement about asthma, please circle T if you think the statement is true or F if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

1. Asthma results from complex interactions among inflammatory cells, mediators and other tissues in the airway. T      F
2. Asthma can be triggered by aspirin or other non-steroidal anti-inflammatory drugs (NSAIDS) such as Nurofen. T      F
3. After the patient has recovered from a severe asthma attack, he/she should be maintained on the same dose of oral corticosteroid permanently in order to control his/her condition. T      F
4. The aim of asthma management is to empower health care professionals to take control of patients' disease. T      F
5. Asthma episodes are associated with variable airflow obstruction that is often reversible with treatment. T      F
6. All people with asthma should have a long-acting beta<sub>2</sub> agonist for symptom relief. T      F
7. When you are performing emergency asthma management, you should shake the puffer, attach it to the spacer and give 4 separate puffs of a reliever medication (blue/grey, puffer/inhaler), one puff at a time. T      F
8. The inflammatory process in asthma does not cause permanent changes in the airways. T      F
9. Multiple actuations of aerosol devices before inhaling from a spacer will result in more effective medication delivery. T      F
10. The most common problem with Dry Powder Inhaler (DPI) use is incorrectly coordinating drug release and inhalation. T      F
11. It is a good idea to give cough syrups during an asthma attack to treat asthma-related cough. T      F
12. The genetic predisposition for the development of IgE-mediated response to common aeroallergens is not a predisposing factor for developing asthma. T      F
13. An asthma 3+visit plan is a plan in which GPs treat an acute asthma exacerbation over 3 visits. T      F
14. Inhaled non-steroidal anti-inflammatories such Sodium Cromoglycate (Intal) are recommended as initial preventative therapy for children with frequent episodic to mild persistent asthma. T      F
15. In some people with asthma, exercise-induced symptoms may be the only manifestations of asthma. T      F

16. When oral corticosteroids are initiated in an acute attack, inhaled corticosteroids should be ceased to avoid any complications. T F
17. Dry Powder Inhalers (DPI) require higher inspiratory flow rates than Metered Dose Inhalers (MDI). T F
18. Gastro-oesophageal reflux of acid can rarely exacerbate asthma. T F
19. Only nebulisers can be used in children < 2 years who have asthma. T F
20. Unlike short-acting bronchodilators, Eformoterol (Foradile, Oxis ) effects usually last for 2 days. T F

<p style="text-align: center;"><b>Appendix 24</b> <b>THE 12-ITEM CQ</b></p>
---------------------------------------------------------------------------------

1. You can become addicted to asthma medications if you use them all the time. (F)
2. An asthma action plan can prevent hospitalisations due to asthma. (T)
3. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure. (T)
4. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication. (F)
5. Side effects are less likely with inhaled medications than with tablets. (T)
6. With preventer medications, it does not matter if some doses are missed or if you go on and off them. (F)
7. If you get a cold or flu, you should increase your asthma medications. (T)
8. Some medications can trigger asthma attacks. (T)
9. You should use “preventer medication” when you have an asthma attack. (F)
10. Going from a cold to hot environment can trigger asthma, but going from a hot to cold environment does not trigger asthma. (F)
11. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma. (T)
12. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. (F)

<p style="text-align: center;"><b>Appendix 25</b> <b>THE 18-ITEM HQ</b></p>
---------------------------------------------------------------------------------

1. Asthma results from complex interactions among inflammatory cells, mediators and other tissues in the airway. (T)
2. Asthma can be triggered by aspirin or other non-steroidal anti-inflammatory drugs (NSAIDS) such as Nurofen. (T)
3. After the patient has recovered from a severe asthma attack, he/she should be maintained on the same dose of oral corticosteroid permanently in order to control his/her condition. (F)
4. The aim of asthma management is to empower health care professionals to take control of patients' disease. (F)
5. Asthma episodes are associated with variable airflow obstruction that is often reversible with treatment. (T)
6. All people with asthma should have a long-acting beta<sub>2</sub> agonist for symptom relief. (F)
7. The inflammatory process in asthma does not cause permanent changes in the airways. (F)
8. Multiple actuations of aerosol devices before inhaling from a spacer will result in more effective medication delivery. (F)
9. The most common problem with Dry Powder Inhaler (DPI) use is incorrectly coordinating drug release and inhalation. (F)
10. It is a good idea to give cough syrups during an asthma attack to treat asthma related cough. (F)
11. The genetic predisposition for the development of an IgE-mediated response to common aeroallergens is not a predisposing factor for developing asthma. (F)
12. An asthma 3+ visit plan is a plan in which GPs treat an acute asthma exacerbation over 3 visits. (F)
13. Inhaled non-steroidal anti-inflammatories such as Sodium Cromoglycate (Intal) are recommended as initial preventative therapy for children with frequent episodic to mild persistent asthma. (T)
14. In some people with asthma, exercise-induced symptoms may be the only manifestation of asthma. (T)
15. When oral corticosteroids are initiated in an acute asthma attack, inhaled corticosteroids should be ceased to avoid any complications. (F)

16. Dry Powder Inhalers (DPI) require higher inspiratory flow rates than Metered Dose Inhalers (MDI). (T)
17. Only nebulisers can be used in children < 2 years who have asthma. (F)
18. Unlike short-acting bronchodilators, Eformoterol (Foradile, Oxis) effects usually last for 2 days. (F)

**Appendix 26**  
**ETHICS APPROVAL FROM UNIVERSITY OF SYDNEY FOR**  
**SMALL-GROUP ASTHMA EDUCATION**



**The University of Sydney**

NSW 2006 Australia

**Human Research Ethics Committee**  
<http://www.usyd.edu.au/ethics/human/>

**Chairman:**  
Associate Professor Stewart Kellie  
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Facsimile: (02) 9845 2171  
Email: [stewartk@chw.edu.au](mailto:stewartk@chw.edu.au)

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Room L4.13, Main Quadrangle – A14

28 July 2004

Dr S Bosnic-Anticevich  
Faculty of Pharmacy – A15  
The University of Sydney

Dear Dr Bosnic-Anticevich

Thank you for your correspondence dated 16 July 2004 addressing comments made to you by the Committee. After considering the additional information, the Executive Committee at its meeting on 26 July 2004 approved your protocol entitled "**Pharmacist-led Group Asthma Education Program – focusing on asthma medication use delivered in the community pharmacy setting**".

Details of the approval are as follows:

<b>Ref No.:</b>	<b>7558</b>
<b>Approval Period:</b>	<b>31 July 2004 to 31 July 2005</b>
<b>Completion Date of Project:</b>	<b>January 2005</b>
<b>No. of Participants:</b>	<b>90</b>
<b>Authorised Personnel:</b>	<b>Dr S Bosnic-Anticevich</b> <b>Professor C Armour</b> <b>Ms V Kritikos</b>

To comply with the *National Statement on Ethical Conduct in Research Involving Humans*, and in line with the Human Research Ethics Committee requirements this approval is for a 12-month period. At the end of the approval period, the HREC will approve extensions for a further 12-month, subject to a satisfactory annual report. The HREC will forward to you an Annual Progress Report form, at the end of each 12-month period. **Your first report will be due on 31 July 2005.**

**Conditions of Approval Applicable to all Projects**

- (1) The individual researcher's protocol complies with the final and the Committee approved protocol.

- (2) Modifications to the protocol cannot proceed until such approval is obtained in writing.
- (3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.
- (4) All research subjects are provided with a Participant Information Sheet and Consent Form, unless otherwise agreed by the Committee.
- (5) The Participant Information Sheet and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee.
- (6) The following statement must appear on the bottom of the Participant Information Sheet. ***Any person with concerns or complaints about the conduct of a research study can contact the Manager for Ethics Administration, University of Sydney, on (02) 9351 4811.***
- (7) The standard University policy concerning storage of data and tapes should be followed. While temporary storage of data or tapes at the researcher's home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of seven years.
- (8) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely



**Associate Professor Stewart Kellie**  
**Chairman, Human Research Ethics Committee**

Encl. Pharmacy Information and Consent Sheet (Intervention Group A)  
Pharmacy Information and Consent Sheet (Intervention Group B)  
Pharmacy Information and Consent Sheet  
Subject/Participant Information and Consent Sheet (Intervention Group A)  
Subject/Participant Information and Consent Sheet (Intervention Group B)  
Subject/Participant Information and Consent Sheet)  
Asthma Questionnaire

cc: [REDACTED], Faculty of Pharmacy, Building A15, The University of Sydney

**Appendix 27**  
**SUBJECT/PARTICIPANT INFORMATION AND CONSENT SHEET**  
**INTERVENTION GROUP A**



Faculty of Pharmacy, University of Sydney  
Tel: (02) 9351 5818, Fax: (02) 9351 4391

Re: "Pharmacist-led group asthma education program".

Asthma is a common condition of the airways in which the person with asthma regularly interacts with a wide range of health care professionals. These include not only their general practitioner or respiratory physician, but also the community pharmacy, through the purchase of their asthma medication.

The aim of this project is to investigate the way in which pharmacists are able to help people with asthma gain the skills, confidence and motivation to control their own asthma and achieve the maximum benefits from the use of their asthma medication.

This project will achieve this aim by assessing the impact of a pharmacist-led group asthma education program delivered to people with asthma. This service will then be compared to the impact of the standard practice of pharmacy on asthma management.

As part of this project, each participating pharmacist has been randomly assigned to one of three groups. As your pharmacist has already been randomised into one group, if you choose to participate in this study, you will be required to meet with your pharmacist 3 times over a 3-month period in your community pharmacy. At Visit one you will be required to participate in a pharmacist-led group asthma education program lasting 2.5 hours one afternoon, delivered by your pharmacist in the community pharmacy setting. Visits 2 and 3 will involve data collection which will last between 10 -15 minutes. As a result, you shall be reimbursed with a \$ 25 gift voucher redeemable in the pharmacy, at the completion of the study to cover the expenses associated with visiting the pharmacy for 3 visits.

By agreeing to participate in this study, you will be providing evidence relating to the role of the community pharmacist in asthma management.

The study is being conducted by Vicky Kritikos and will form the basis for the degree of PhD at The University of Sydney under the supervision of Dr Sinthia Bosnic-Anticevich, Lecturer in Pharmacy Practice and Prof Carol Armour, Professor of Pharmacy.

Participation in this project is entirely voluntary and you can withdraw at any time without any short- or long-term consequences. For further information please contact Dr Sinthia Bosnic-Anticevich at the Faculty of Pharmacy, University of Sydney on (02) 9351 5818 or [sinthia@pharm.usyd.edu.au](mailto:sinthia@pharm.usyd.edu.au).

**Any person with concerns or complaints about the conduct of a research study can contact the Manager for Ethics Administration, University of Sydney on (02) 9351 4811.**

10/01/05 Version 3 (Participant A)  
GAEP program



Faculty of Pharmacy, University of Sydney  
Tel: (02) 9351 5818, Fax: (02) 9351 4391

I, .....  
(print name)

hereby voluntarily consent to participate in the study entitled "Pharmacist-led group asthma education program".

This project is being conducted by the Dr Sinthia Bosnic-Anticevich, Prof Carol Armour and Mrs Vicky Kritikos from the Faculty of Pharmacy, University of Sydney.

I understand that any data collected for the purposes of this study will remain strictly confidential. I have been informed that information obtained from this research may be used in future research or published.

Details of this study have been clearly explained by the pharmacist. I am aware of the purpose of this project and what my involvement entails. I have read the Subject Information attached. My participation is entirely voluntary. I have been informed of my right to question any part of the procedure or withdraw from the project at any time.

Name: .....

Signature: ..... Date:.....

Parent / Guardian Name (if applicable):.....

Signature:..... Date:.....

**Any person with concerns or complaints about the conduct of a research study can contact the Manager for Ethics Administration, University of Sydney on (02) 9351 4811.**

10/01/05 Version 3 (Participant A)  
GAEP program

**Appendix 28**  
**A PHARMACIST-LED GROUP ASTHMA EDUCATION PROGRAM**

**Suggested Guidelines**  
**2 hour in-pharmacy session**

**Program Goal**

To empower people with asthma to use their asthma medication as recommended for controlling their asthma

**Learning objectives**

*By the end of this session the participant will be better able to:*

1. Utilise knowledge about the asthma disease process and common triggers to manage their asthma more effectively
2. Identify the type(s) and purposes of medication they have been prescribed
3. Differentiate between the relievers and preventers in terms of physical effect
4. Identify strategies to overcome problems associated with taking their asthma medications
5. Demonstrate correct inhaler technique
6. Recognise worsening asthma and the role of medication using a written Asthma Action Plan

<b>Resources</b>	<b>Activity and Key Points</b>
<b>Pre-session assessment (15 mins)</b>	
<b>Assessment tools</b> Inhaler Technique Checklist (pre-session) Asthma Knowledge Questionnaire Asthma Severity Tables <b>Nametags + WB pens</b>	<ol style="list-style-type: none"> <li>1. Collect completed questionnaires (MARS/Quality of Life)</li> <li>2. Invite to write name on tag (+ WB pen)</li> <li>3. Invite individuals to complete the Asthma Knowledge Questionnaire</li> <li>4. Check participants have brought their medication</li> <li>5. Assess inhaler technique using checklist</li> <li>6. Complete the Asthma Severity Table</li> </ol>
<b>INTRODUCTION to Group Session (5 mins)</b>	
Welcome Group Introduce yourself (and any assistants) Round the group individuals: introduce self + 'one burning issue' you have about your asthma Topics to be covered: <ol style="list-style-type: none"> <li>1. Asthma disease process and symptoms</li> <li>2. Asthma triggers</li> <li>3. Asthma medications</li> <li>4. Taking asthma medications</li> <li>5. Inhaler technique</li> <li>6. Asthma Action plan and the role of medication</li> </ol>	

<b>1. ASTHMA DISEASE PROCESS and SYMPTOMS (15 mins)</b>	
<p><b>Overhead 1</b> Asthma: How serious is the problem?</p>	<p><b>QUESTION</b> Can you think of any examples of celebrities that have asthma? (For example, Susie Maroney, Mark Taylor, Shane Gould)</p> <p><b>KEY POINTS</b></p> <ul style="list-style-type: none"> <li>• Asthma cannot be cured, but it can be managed so that people with asthma are able to carry out daily activities without asthma symptoms</li> </ul>
<p><b>Overhead 3</b> Where does asthma occur?</p> <p><b>Brochure</b> “All you need to know about asthma”</p>	<p><i>HANDOUT BOOKLET- Turn to 1<sup>st</sup> page</i></p> <ul style="list-style-type: none"> <li>• Location of lungs, etc (use example of tree)</li> <li>• Asthma affects breathing and the lungs</li> </ul>
<p><b>Overhead 4</b> What is Asthma?</p> <p><b>Model</b> Airways</p>	<p>[Key concept: INTRODUCTION]</p> <p><b>(What happens during an asthma attack?)</b></p> <p><i>USE MODEL AIRWAYS TO DEMONSTRATE</i></p> <p><b>KEY POINTS</b></p> <p>Airway narrowing occurs because of two different events:</p> <ol style="list-style-type: none"> <li>1. The muscle around the <b>outside</b> of the airways tightens, and,</li> <li>2. The lining <b>inside</b> the airways becomes red and swollen (inflammation) and extra mucus (sticky fluid) may be produced</li> </ol> <p>So, if we need to treat these then we need two different types of drugs</p> <ol style="list-style-type: none"> <li>1. One to <b>relax</b> the muscle around airways, and,</li> <li>2. One to <b>prevent</b> the inflammation</li> </ol> <p><i>PASS AIRWAYS AROUND GROUP</i></p>

<p><b>Overhead 5</b> Asthma symptoms</p> <p>WB pen</p>	<p><b>KEY POINTS</b></p> <ul style="list-style-type: none"> <li>Asthma symptoms may vary between people –some people may have all or one</li> </ul> <p><b>GROUP ACTIVITY</b> <i>Quick Tally: Which symptoms do you have?</i> (tally on chart)</p>
	<p><b>SUMMARY</b></p> <ul style="list-style-type: none"> <li><b>Asthma is a complex inflammatory disease</b></li> <li><b>Main symptoms are wheeze, cough and SOB</b></li> </ul>
<b>2. TRIGGERS (10 mins)</b>	
<p><b>Overhead 6</b> Triggers</p>	<p><b>DEFINITION:</b> Triggers are substances or conditions which bring on an asthma attack in a person with asthma (a person with twitchy airways)</p> <p><b>GROUP ACTIVITY</b></p> <ol style="list-style-type: none"> <li>Based on the items shown in each section of the diagram: What do each of the main categories of triggers seem to be? (label chart)</li> <li><i>Quick tally: Which are your triggers?</i> (record on chart)</li> <li><i>Brainstorm:</i> Work around each trigger group and brainstorm: <b>What are ways we can avoid each of these trigger groups?</b> (not all are avoidable)</li> </ol> <p><b>KEY POINTS</b></p> <ul style="list-style-type: none"> <li>You can have fewer attacks if you can identify and avoid triggers</li> <li>When you know that you are going to be exposed to something that triggers your asthma you should take your medication <b>before exposure</b>, you should <b>not wait</b> until symptoms develop before taking medication</li> <li>Going from cold to hot or hot to cold triggers asthma (it's the <b>change</b> in the temperature that is the trigger)</li> </ul>
<b>Suggested 15 minute break</b>	
<b>3. ASTHMA MEDICATIONS (10 mins)</b>	
<p><b>Overhead 7</b> Medications</p> <p><b>Medication chart</b></p>	<p>[Key concept: <b>ADVANCED ORGANISER</b> – the chart] <b>(What are the different types of medication?)</b> Locate the 4 types shown on the Medication Chart</p> <p><b>Which types of medications do I take?</b></p>

	<p><b>GROUP ACTIVITY</b> Ask group to take out their medication and using the chart, identify their Medication Type(s)</p>
<b>Model Airways</b>	<p>[Key concept: ELABORATION 1 ] <b>(How do preventers work?)</b> Ask the participants to each hold their <i>preventer</i> in one hand (if they have it with them)</p> <p>KEY POINTS (Use model to explain)</p> <ul style="list-style-type: none"> <li>• Relationship of preventers to pathophysiology of asthma</li> <li>• <b>Preventers <u>prevent the inflammation inside the airways</u></b></li> </ul>
	<p>[Key concept: ELABORATION 2 ] <b>(How do relievers work?)</b> ACTIVITY Ask the participants to each hold their <i>reliever</i> in one hand (if they have it with them)</p> <p>KEY POINTS (Use model to explain)</p> <ul style="list-style-type: none"> <li>• <b>Relievers <u>relax the muscle outside airways and relieve the symptoms of asthma</u></b> (They have no effect on the inflammation inside airways)</li> </ul>
<b>4. TAKING ASTHMA MEDICATIONS (20 mins)</b>	
<b>Overhead 8 Preventers</b>	<p>[Key concept: REINFORCEMENT 1] <b>(What are the key things to remember about taking preventers?)</b></p> <p><b>Recall:</b> What do preventers do? (Reinforce with model)</p> <p>KEY POINTS (Use model to explain)</p> <ul style="list-style-type: none"> <li>• If you are on preventer inhalers, then use everyday, exactly as prescribed and always rinse gargle and spit afterwards, to help reduce SE</li> <li>• With preventer medication it <b>does matter</b> if you miss doses or go on or off them</li> </ul>
<b>Overhead 9 Relievers</b>	<p>[Key concept: REINFORCEMENT 2] <b>(What are the key things to remember about taking relievers?)</b></p> <p><b>Recall:</b> What do relievers do? (Reinforce with model)</p> <p>KEY POINTS</p>

	<ul style="list-style-type: none"> <li>If you use your reliever &gt; 3-4 times a week to relieve symptoms it may be a sign that your asthma is poorly controlled</li> </ul>
<b>Overhead 10</b> Symptom Controllers (long-acting relievers)	<b>KEY POINTS</b> <ul style="list-style-type: none"> <li>Not to be used in an asthma attack because they have a slower onset of action</li> </ul>
<b>Overhead 11</b> Combination therapies	<b>KEY POINTS</b> <ul style="list-style-type: none"> <li>Combine a preventer and a symptom controller in one device –improve adherence</li> <li>Can be used to decrease the amount of ICS required while reducing side effects and still provide control</li> </ul>
	<b>SUMMARY</b> <ul style="list-style-type: none"> <li><b>Side effects are less likely with inhaled medications than tablets</b></li> <li><b>You cannot become addicted to asthma medications</b></li> </ul>
<b>Blank chart</b> Problems  <b>WB pen</b>	<p><b>(What are the likely problems I will face with my medications?)</b></p> <p><b>ACTIVITY</b></p> <ol style="list-style-type: none"> <li><i>Brainstorm:</i> What do you think are the main problems people face in taking their medication as prescribed? (For example, don't understand the requirements or the side effects; costs; or memory)</li> <li><i>List</i> key words on chart</li> <li><i>Brainstorm:</i> What strategies could be used to overcome each of these?</li> </ol> <p>Reassure and encourage to see the pharmacist after the session</p>
<b>5. INHALER TECHNIQUE (20 mins)</b>	
<b>Equipment</b> Placebo inhalers  <b>Brochure</b> "Asthma medications and delivery devices"	<p><b>What are the benefits of correct inhaler technique?</b></p> <p>Optimal benefit from medication:</p> <ul style="list-style-type: none"> <li>Improve relief of symptoms – improve asthma control</li> <li>Decrease side effects</li> <li>Use less medication, reduce costs (need to check technique regularly)</li> </ul> <p><b>(What is the correct inhaler technique?)</b></p> <p><i>DEMONSTRATE TECHNIQUE</i></p> <p><b>GROUP ACTIVITY</b></p> <ol style="list-style-type: none"> <li><i>Divide group</i> in pairs who use the same devices. One member acts an observer while the other person practises using placebos. Reverse the roles.</li> <li><i>Give feedback</i> on technique and assess technique using</li> </ol>

	checklist
<b>6. ASTHMA ACTION PLANS and the role of medications (15 mins)</b>	
<p><b>Overhead 17</b> Asthma action Plans</p> <p><b>Handout</b> Asthma Action Plan</p>	<p><i>Round robin:</i> Who has an Asthma Action Plan?</p> <p>[Key concept: APPLICATION]</p> <p><b>What is an asthma action plan?</b></p> <p><b>Why is it used?</b></p> <ul style="list-style-type: none"> <li>• It enables you to adjust your medication</li> <li>• It helps you monitor and manage your asthma</li> </ul> <p><i>DISTRIBUTE ASTHMA ACTION PLAN TO EACH PARTICIPANT</i></p> <ul style="list-style-type: none"> <li>• Explain the green zone/ yellow zone/ red zone (symptom and PEF based) from page 18 TIB</li> </ul> <p><b>How do you get an Asthma Action Plan?</b> Need to go and see the doctor to:</p> <ul style="list-style-type: none"> <li>• Get a <i>written</i> AAP if you don't have one</li> <li>• <i>Review</i> the AAP every 6 months</li> </ul>
<p><b>Overhead 23</b> Recognising poor asthma control</p> <p><b>Overhead 24</b> Good asthma control</p>	<p><b>What are the <i>early</i> signs of worsening asthma?</b> <i>Quick tally: Do you experience any of these signs of worsening asthma?</i></p> <p>Good control happens with regular visit to the doctor to co-manage your asthma <u>even when you are well</u></p>
	<p>SUMMARISE WITH KEY MESSAGES</p> <ul style="list-style-type: none"> <li>• <b>An Asthma Action Plan can prevent hospitalisations due to asthma</b></li> <li>• People who follow their asthma action plan are likely to have better controlled asthma, fewer asthma attacks and fewer days off work/school because of asthma</li> <li>• <b>Need to visit their doctor regularly for review of their asthma medication, as well as their Asthma Action Plan</b></li> <li>• Come back to the Pharmacy for further information and advice about your asthma</li> </ul>
<b>Session Conclusion (5 mins)</b>	
	<p>Check if 'burning questions' have been answered</p> <p><b>Any remaining questions?</b></p>

Post session activity (10 mins)	
<p><b>Assessment tools</b> Asthma Knowledge Questionnaires (post test)</p> <p><b>Brochure</b> “Asthma – the basic facts”</p>	<ul style="list-style-type: none"> <li>• Participants complete Asthma Knowledge Questionnaires</li> <li>• Participants to take home 3 Asthma Brochures</li> </ul>

**Appendix 29**

**BASELINE QUESTIONNAIRE  
Visit 1**

*Your participation in filling out this questionnaire is voluntary. However the information you give us will help the research team analyse the outcomes of the service. The information will remain confidential and the only person who will have access to it is your pharmacist and the researchers. Before the information is entered in any data analysis program, your personal details like address and name will be removed.*

*Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney on (02) 9351 - 4811*



**PHARMACIST-LED GROUP  
ASTHMA EDUCATION  
PROGRAM**

## PATIENT RECRUITMENT

➔ ***PHARMACIST***, when patient returns signed consent form **keep it in the folder**, then tick relevant eligibility criteria and fill out patient contact details:

➔ ***If any exclusion criteria are ticked DO NOT enrol patient.***

### ELIGIBILITY FOR THE STUDY

#### **Inclusion Criteria** (tick box)

A patient will be included in the study if:

- He/she is  $\geq 16$  years of age
- He/she has a previous diagnosis of asthma and fulfils **at least one** of the following sub-criteria (Modified from the “Revised Jones Morbidity Index” for asthma assessment):
  - Used a reliever medication (e.g. Ventolin, Asmol, EPAQ, Airomir) more than 3 times a week, in the last 4 weeks
  - Woken up on a night or morning with cough/chest tightness on at least one occasion in the last 4 weeks
  - Had to take time off work/study because of asthma, on at least one occasion in the last 4 weeks
  - Experienced symptoms of asthma (cough, breathlessness, wheeze etc), at least once a week, over the last 4 weeks
  - Has not seen a doctor for asthma within the last 6 months
- He/she is on preventer medication
- He/she is able to speak and understand English
- He/she is able to return for all follow-up visits

#### **Exclusion Criteria** (tick box)

A patient will be excluded from the study if:

- He/she does not self-administer their inhaler
- He/she does not speak English well enough to communicate with the pharmacist and to complete the required questionnaires independently
- He/she is currently enrolled in another clinical trial
- He/she is undergoing review with his/her GP as part of the 3+ Visit Plan
- He/she has a diagnosis of chronic obstructive pulmonary disease

<b>ASSESS ASTHMA SEVERITY</b>
-------------------------------

**➔** ***PHARMACIST**, complete the following with your patient to assess asthma severity.*

1. Please circle the most appropriate response that describes the patient's asthma status **in the last one month**.

ASTHMA FEATURE	FREQUENCY		
Wheeze, chest tightness, cough breathlessness	Occasional	Most days	Every day
Night time symptoms	No	Less than once a week	Once a week or more
Asthma symptoms wakening	No	Less than once a week	Once a week or more
Hospital admission or emergency room in the past year	No		Yes
Life threatening Attack (ICU or ventilator) in the last 5 years	No		Yes
Reliever use	Less than twice a week	Most days	More than 3-4 times per day

Modified from National Asthma Council Australia 2002

**Baseline Inhaler Technique**

**Please tick actions completed and add ticks to calculate score when completed.**

<ul style="list-style-type: none"> <li><input type="checkbox"/> Puts thumb into thumb grip groove</li> <li><input type="checkbox"/> Pushes in anticlockwise direction until click is heard OR pushes lever until it clicks</li> <li><input type="checkbox"/> Exhales</li> <li><input type="checkbox"/> Exhales away from device</li> <li><input type="checkbox"/> Places lip over mouthpiece &amp; inhales deeply</li> <li><input type="checkbox"/> Holds breath for 10 seconds</li> <li><input type="checkbox"/> Breathes out</li> <li><input type="checkbox"/> Breathes out away from the Accuhaler</li> <li><input type="checkbox"/> Waits before repeating procedure</li> <li><input type="checkbox"/> Pulls the groove back into place</li> </ul> <p><b>SCORE ...../10</b></p>	<p><b>METERED DOSE INHALER + SPACER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cap</li> <li><input type="checkbox"/> Shakes Inhaler</li> <li><input type="checkbox"/> Puts mouthpiece of Inhaler in correct end of spacer</li> <li><input type="checkbox"/> Breathes out</li> <li><input type="checkbox"/> Places spacer mouthpiece between lips</li> <li><input type="checkbox"/> Presses Inhaler once to actuate</li> <li><input type="checkbox"/> Breathes in</li> <li><input type="checkbox"/> Holds breath for 10 seconds</li> <li><input type="checkbox"/> Breathes out &amp; then in</li> <li><input type="checkbox"/> Holds for further 5 sec</li> <li><input type="checkbox"/> OR breathes in &amp; out 3-4 times</li> </ul> <p><b>SCORE ...../10</b></p>
<p><b>TURBUHALER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cover</li> <li><input type="checkbox"/> Holds Inhaler upright at 90 degrees</li> <li><input type="checkbox"/> Turns bottom until click is heard</li> <li><input type="checkbox"/> Clicks only once</li> <li><input type="checkbox"/> Exhales</li> <li><input type="checkbox"/> Exhales away from device</li> <li><input type="checkbox"/> Puts mouthpiece in mouth</li> <li><input type="checkbox"/> Breathes in forcefully</li> <li><input type="checkbox"/> Removes mouthpiece before exhaling</li> <li><input type="checkbox"/> Holds breath</li> <li><input type="checkbox"/> Exhales away from mouthpiece</li> <li><input type="checkbox"/> Waits 20-30 seconds before clicking for next dose</li> </ul> <p><b>SCORE ...../12</b></p>	<p><b>METERED DOSE INHALER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cap</li> <li><input type="checkbox"/> Shakes Inhaler</li> <li><input type="checkbox"/> Tilts head back OR keeps at level</li> <li><input type="checkbox"/> Exhales (to functional residual capacity)</li> <li><input type="checkbox"/> Inserts mouthpiece &amp; closes lips firmly around rim</li> <li><input type="checkbox"/> OR holds mouthpiece 2-4 cm from mouth</li> <li><input type="checkbox"/> Actuates Inhaler once</li> <li><input type="checkbox"/> Begins to inhale as soon as actuation is done</li> <li><input type="checkbox"/> Continues slow deep inspiration</li> <li><input type="checkbox"/> Holds breath for 5-10 seconds</li> <li><input type="checkbox"/> Exhales</li> <li><input type="checkbox"/> Shakes canister</li> <li><input type="checkbox"/> Waits 20-30 seconds before next actuation</li> <li><input type="checkbox"/> Replaces cap</li> </ul> <p><b>SCORE ...../13</b></p>
<p><b>AUTOHALERS</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cover</li> <li><input type="checkbox"/> Holds Autohaler upright</li> <li><input type="checkbox"/> Pushes lever up</li> <li><input type="checkbox"/> Shakes the Autohaler</li> <li><input type="checkbox"/> Breathes out before inserting mouthpiece</li> <li><input type="checkbox"/> Inserts mouthpiece</li> <li><input type="checkbox"/> Closes lips around mouthpiece</li> <li><input type="checkbox"/> Hands do not block air vents while mouthpiece in</li> <li><input type="checkbox"/> Device held upright while insertion into mouth</li> <li><input type="checkbox"/> Breathes in</li> <li><input type="checkbox"/> Does not stop breathing as dose is released</li> <li><input type="checkbox"/> Takes Autohaler out of mouth &amp; holds breath</li> <li><input type="checkbox"/> Holds breath for 5-10 seconds</li> <li><input type="checkbox"/> Pushes lever down gently</li> <li><input type="checkbox"/> Replaces cover</li> </ul> <p><b>SCORE ...../15</b></p>	<p><b>AEROLISER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Lifts off cap</li> <li><input type="checkbox"/> Holds the base, turns mouthpiece in direction of arrow</li> <li><input type="checkbox"/> Removes capsule from blister pack &amp; places inside</li> <li><input type="checkbox"/> Holds device upright, squeezes side buttons once</li> <li><input type="checkbox"/> Breathes out</li> <li><input type="checkbox"/> Breathes out away from device</li> <li><input type="checkbox"/> Places mouthpiece in mouth</li> <li><input type="checkbox"/> Seals lips around mouthpiece</li> <li><input type="checkbox"/> Takes a long deep breath in</li> <li><input type="checkbox"/> Holds breath for 10 seconds</li> <li><input type="checkbox"/> Breathes out slowly</li> <li><input type="checkbox"/> Shakes device to see if medication left</li> <li><input type="checkbox"/> Breathes in, holds &amp; exhales as before</li> <li><input type="checkbox"/> Throws empty capsule</li> <li><input type="checkbox"/> Replaces cap</li> </ul> <p><b>SCORE ...../15</b></p>

**GENERAL PATIENT INFORMATION**

First name: ..... Last Name: .....

Contact Phone No: ..... (h) ..... (w)  
..... (m)

Age: ..... Sex: M/F Occupation: .....

Name of GP usually seen for asthma: .....

**ASTHMA HISTORY**

Age of onset (tick only one):

- \* Infancy
- \* Childhood 2-12 years
- \* More than 12 years  → Enter age of onset: .....

Do you have any related illnesses or conditions (eg. Allergic rhinitis, hayfever, eczema)?

.....  
.....

Have you had your asthma reviewed in the last 12 months? Yes  No

When did you last have your asthma reviewed by a doctor? .....

Do you have a Written Action Plan for your asthma? Yes  No

**ASTHMA MEDICATION USE**

Many people find a way of using their asthma medicines which suits them. This may differ from the instructions on the label or from what their doctor has said. We would like to ask you a few questions about how you use your medicines.

In the box below are some ways in which people have said they use their medicines.

For each of the statements, please tick the box which best applies to you.

<b>Your own way of using your asthma medicines</b>	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
I forget to take them					
I alter the dose					
I stop taking them for a while					
I decide to miss out a dose					
I take less than instructed					

MARS©

What medications are you currently taking for your asthma?

.....  
 .....

What concerns do you have about your asthma medication?

.....  
 .....

Cont'd

Dear Patient, pages 7-10 contain questions regarding your views on the impact of your asthma on your quality of life and facts on asthma. Please work your way through these questions. Remember, everyone is different, so there are no right or wrong answers. Ask your Pharmacist for help if you don't understand a question. When you are finished return them to your Pharmacist.

## IMPACT OF ASTHMA ON QUALITY OF LIFE

Please read the following statements and circle the option that best applies to you over the last 4 WEEKS.

1. I have been troubled by episodes of shortness of breath

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

2. I have been troubled by wheezing attacks

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

3. I have been troubled by tightness in the chest

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

4. I have been restricted in walking down the street on level ground or doing light housework because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

5. I have been restricted in walking up hills or doing heavy housework because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

6. I have felt tired or a general lack of energy

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

7. I have been unable to sleep at night

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

8. I have felt sad or depressed

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

9. I have felt frustrated with myself

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

10. I have felt anxious, under tension or stressed

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

11. I have felt that asthma is preventing me from achieving what I want from life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

12. Asthma has interfered with my social life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

13. I have been limited in going to certain places because they are bad for my asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

14. I have been limited in going to certain places because I have been afraid of getting an asthma attack and not being able to get help

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

15. I have been restricted in sports, hobbies or other recreations, because of my asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

16. I have felt generally restricted

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

17. I have felt that asthma is controlling my life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

18. I have been worried about my present or future health because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

19. I have worried about asthma shortening my life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

20. I have felt dependent on my asthma sprays

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

## ASTHMA FACTS

For each statement about asthma, please circle **T** if you think the statement is true or **F** if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

- |                                                                                                                                                                                |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 1. You can become addicted to asthma medications if you use them all the time.                                                                                                 | T | F |
| 2. An asthma action plan can prevent hospitalisations due to asthma.                                                                                                           | T | F |
| 3. You may have fewer asthma attacks if you can identify and avoid things that trigger them.                                                                                   | T | F |
| 4. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure.                     | T | F |
| 5. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication.                 | T | F |
| 6. Side effects are less likely with inhaled medications than with tablets.                                                                                                    | T | F |
| 7. With preventer medications, it does not matter if some doses are missed or if you go on or off.                                                                             | T | F |
| 8. If you get a cold or flu, you should increase your asthma medications.                                                                                                      | T | F |
| 9. Some medications can trigger asthma attacks.                                                                                                                                | T | F |
| 10. You should use “preventer medication” when you have an asthma attack.                                                                                                      | T | F |
| 11. Going from a cold to a hot environment can trigger asthma, but going from a hot to a cold environment does not trigger asthma.                                             | T | F |
| 12. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma.                                                                   | T | F |
| 13. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. | T | F |

***THANK YOU FOR ANSWERING THESE QUESTIONS.  
PLEASE RETURN THEM TO YOUR PHARMACIST.***

<b>Appendix 30</b>
--------------------

Name.....Date.....

**Post education Inhaler Technique****Please tick actions completed and add ticks to calculate score when completed.**

<p><b>ACCUHALER</b></p> <input type="checkbox"/> Puts thumb into thumb grip groove <input type="checkbox"/> Pushes in anticlockwise direction until click is heard OR pushes lever until it clicks <input type="checkbox"/> Exhales <input type="checkbox"/> Exhales away from device <input type="checkbox"/> Places lip over mouthpiece & inhales deeply <input type="checkbox"/> Holds breath for 10 seconds <input type="checkbox"/> Breathes out <input type="checkbox"/> Breathes out away from the Accuhaler <input type="checkbox"/> Waits before repeating procedure <input type="checkbox"/> Pulls the groove back into place <p><b>SCORE ...../10</b></p>	<p><b>METERED DOSE INHALER + SPACER</b></p> <input type="checkbox"/> Removes Cap <input type="checkbox"/> Shakes Inhaler <input type="checkbox"/> Puts mouthpiece of Inhaler in correct end of spacer <input type="checkbox"/> Breathes out <input type="checkbox"/> Places spacer mouthpiece between lips <input type="checkbox"/> Presses Inhaler once to actuate <input type="checkbox"/> Breathes in <input type="checkbox"/> Holds breath for 10 seconds <input type="checkbox"/> Breathes out & then in <input type="checkbox"/> Holds for further 5 sec OR breathes in & out 3-4 times <p><b>SCORE ...../10</b></p>
<p><b>TURBUHALER</b></p> <input type="checkbox"/> Removes Cover <input type="checkbox"/> Holds Inhaler upright at 90 degrees <input type="checkbox"/> Turns bottom until click is heard <input type="checkbox"/> Clicks only once <input type="checkbox"/> Exhales <input type="checkbox"/> Exhales away from device <input type="checkbox"/> Puts mouthpiece in mouth <input type="checkbox"/> Breathes in forcefully <input type="checkbox"/> Removes mouthpiece before exhaling <input type="checkbox"/> Holds breath <input type="checkbox"/> Exhales away from mouthpiece <input type="checkbox"/> Waits 20-30 seconds before clicking for next dose <p><b>SCORE ...../12</b></p>	<p><b>METERED DOSE INHALER</b></p> <input type="checkbox"/> Removes Cap <input type="checkbox"/> Shakes Inhaler <input type="checkbox"/> Tilts head back OR keeps at level <input type="checkbox"/> Exhales (to functional residual capacity) <input type="checkbox"/> Inserts mouthpiece & closes lips firmly around rim OR holds mouthpiece 2-4 cm from mouth <input type="checkbox"/> Actuates Inhaler once <input type="checkbox"/> Begins to inhale as soon as actuation is done <input type="checkbox"/> Continues slow deep inspiration <input type="checkbox"/> Holds breath for 5-10 seconds <input type="checkbox"/> Exhales <input type="checkbox"/> Shakes canister <input type="checkbox"/> Waits 20-30 seconds before next actuation <input type="checkbox"/> Replaces cap <p><b>SCORE ...../13</b></p>
<p><b>AUTOHALERS</b></p> <input type="checkbox"/> Removes Cover <input type="checkbox"/> Holds Autohaler upright <input type="checkbox"/> Pushes lever up <input type="checkbox"/> Shakes the Autohaler <input type="checkbox"/> Breathes out before inserting mouthpiece <input type="checkbox"/> Inserts mouthpiece <input type="checkbox"/> Closes lips around mouthpiece <input type="checkbox"/> Hands do not block air vents while mouthpiece in <input type="checkbox"/> Device held upright while insertion into mouth <input type="checkbox"/> Breathes in <input type="checkbox"/> Does not stop breathing as dose is released <input type="checkbox"/> Takes Autohaler out of mouth & holds breath <input type="checkbox"/> Holds breath for 5-10 seconds <input type="checkbox"/> Pushes lever down gently <input type="checkbox"/> Replaces cover <p><b>SCORE ...../15</b></p>	<p><b>AEROLISER</b></p> <input type="checkbox"/> Lifts off cap <input type="checkbox"/> Holds the base, turns mouthpiece in direction of arrow <input type="checkbox"/> Removes capsule from blister pack & places inside <input type="checkbox"/> Holds device upright, squeezes side buttons once <input type="checkbox"/> Breathes out <input type="checkbox"/> Breathes out away from device <input type="checkbox"/> Places mouthpiece in mouth <input type="checkbox"/> Seals lips around mouthpiece <input type="checkbox"/> Takes a long deep breath in <input type="checkbox"/> Holds breath for 10 seconds <input type="checkbox"/> Breathes out slowly <input type="checkbox"/> Shakes device to see if medication left <input type="checkbox"/> Breathes in, holds & exhales as before <input type="checkbox"/> Throws empty capsule <input type="checkbox"/> Replaces cap <p><b>SCORE ...../15</b></p>

<b>ASTHMA FACTS</b> <b>Post Education</b>
----------------------------------------------

For each statement about asthma, please circle **T** if you think the statement is true or **F** if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

- |                                                                                                                                                                                |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 1. You can become addicted to asthma medications if you use them all the time.                                                                                                 | T | F |
| 2. An asthma action plan can prevent hospitalisations due to asthma.                                                                                                           | T | F |
| 3. You may have fewer asthma attacks if you can identify and avoid things that trigger them.                                                                                   | T | F |
| 4. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure.                     | T | F |
| 5. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication.                 | T | F |
| 6. Side effects are less likely with inhaled medications than with tablets.                                                                                                    | T | F |
| 7. With preventer medications, it does not matter if some doses are missed or if you go on or off.                                                                             | T | F |
| 8. If you get a cold or flu, you should increase your asthma medications.                                                                                                      | T | F |
| 9. Some medications can trigger asthma attacks.                                                                                                                                | T | F |
| 10. You should use “preventer medication” when you have an asthma attack.                                                                                                      | T | F |
| 11. Going from a cold to a hot environment can trigger asthma, but going from a hot to a cold environment does not trigger asthma.                                             | T | F |
| 12. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma.                                                                   | T | F |
| 13. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. | T | F |

***THANK YOU FOR ANSWERING THESE QUESTIONS.***  
***PLEASE RETURN THEM TO YOUR PHARMACIST.***

**Appendix 31**

**QUESTIONNAIRE  
Visit 2**

*Your participation in filling out this questionnaire is voluntary. However the information you give us will help the research team analyse the outcomes of the service. The information will remain confidential and the only person who will have access to it is your pharmacist and the researchers. Before the information is entered in any data analysis program, your personal details like address and name will be removed.*

*Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney on (02) 9351 - 4811*



**PHARMACIST-LED GROUP  
ASTHMA EDUCATION  
PROGRAM**

<b>ASSESS ASTHMA SEVERITY</b>
-------------------------------

First name: ..... Last Name:  
 .....

Contact Phone No: ..... (h) .....  
 (w)

**➔** ***PHARMACIST**, complete the following with your patient to assess asthma severity.*

1. Please circle the most appropriate response that describes the patient's asthma status **in the last one month**.

ASTHMA FEATURE	FREQUENCY		
Wheeze, chest tightness, cough breathlessness	Occasional	Most days	Every day
Night time symptoms	No	Less than once a week	Once a week or more
Asthma symptoms wakening	No	Less than once a week	Once a week or more
Hospital admission or emergency room in the past year	No		Yes
Life threatening Attack (ICU or ventilator) in the last 5 years	No		Yes
Reliever use	Less than twice a week	Most days	More than 3-4 times per day

Modified from National Asthma Council Australia 2002

## Inhaler Technique

**Please tick actions completed and add ticks to calculate score when completed.**

<ul style="list-style-type: none"> <li><input type="checkbox"/> Puts thumb into thumb grip groove</li> <li><input type="checkbox"/> Pushes in anticlockwise direction until click is heard OR pushes lever until it clicks</li> <li><input type="checkbox"/> Exhales</li> <li><input type="checkbox"/> Exhales away from device</li> <li><input type="checkbox"/> Places lip over mouthpiece &amp; inhales deeply</li> <li><input type="checkbox"/> Holds breath for 10 seconds</li> <li><input type="checkbox"/> Breathes out</li> <li><input type="checkbox"/> Breathes out away from the Accuhaler</li> <li><input type="checkbox"/> Waits before repeating procedure</li> <li><input type="checkbox"/> Pulls the groove back into place</li> </ul> <p><b>SCORE ...../10</b></p>	<p><b>METERED DOSE INHALER + SPACER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cap</li> <li><input type="checkbox"/> Shakes Inhaler</li> <li><input type="checkbox"/> Puts mouthpiece of Inhaler in correct end of spacer</li> <li><input type="checkbox"/> Breathes out</li> <li><input type="checkbox"/> Places spacer mouthpiece between lips</li> <li><input type="checkbox"/> Presses Inhaler once to actuate</li> <li><input type="checkbox"/> Breathes in</li> <li><input type="checkbox"/> Holds breath for 10 seconds</li> <li><input type="checkbox"/> Breathes out &amp; then in</li> <li><input type="checkbox"/> Holds for further 5 sec</li> <li><input type="checkbox"/> OR breathes in &amp; out 3-4 times</li> </ul> <p><b>SCORE ...../10</b></p>
<p><b>TURBUHALER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cover</li> <li><input type="checkbox"/> Holds Inhaler upright at 90 degrees</li> <li><input type="checkbox"/> Turns bottom until click is heard</li> <li><input type="checkbox"/> Clicks only once</li> <li><input type="checkbox"/> Exhales</li> <li><input type="checkbox"/> Exhales away from device</li> <li><input type="checkbox"/> Puts mouthpiece in mouth</li> <li><input type="checkbox"/> Breathes in forcefully</li> <li><input type="checkbox"/> Removes mouthpiece before exhaling</li> <li><input type="checkbox"/> Holds breath</li> <li><input type="checkbox"/> Exhales away from mouthpiece</li> <li><input type="checkbox"/> Waits 20-30 seconds before clicking for next dose</li> </ul> <p><b>SCORE ...../12</b></p>	<p><b>METERED DOSE INHALER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cap</li> <li><input type="checkbox"/> Shakes Inhaler</li> <li><input type="checkbox"/> Tilts head back OR keeps at level</li> <li><input type="checkbox"/> Exhales (to functional residual capacity)</li> <li><input type="checkbox"/> Inserts mouthpiece &amp; closes lips firmly around rim OR holds mouthpiece 2-4 cm from mouth</li> <li><input type="checkbox"/> Actuates Inhaler once</li> <li><input type="checkbox"/> Begins to inhale as soon as actuation is done</li> <li><input type="checkbox"/> Continues slow deep inspiration</li> <li><input type="checkbox"/> Holds breath for 5-10 seconds</li> <li><input type="checkbox"/> Exhales</li> <li><input type="checkbox"/> Shakes canister</li> <li><input type="checkbox"/> Waits 20-30 seconds before next actuation</li> <li><input type="checkbox"/> Replaces cap</li> </ul> <p><b>SCORE ...../13</b></p>
<p><b>AUTOHALERS</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Removes Cover</li> <li><input type="checkbox"/> Holds Autohaler upright</li> <li><input type="checkbox"/> Pushes lever up</li> <li><input type="checkbox"/> Shakes the Autohaler</li> <li><input type="checkbox"/> Breathes out before inserting mouthpiece</li> <li><input type="checkbox"/> Inserts mouthpiece</li> <li><input type="checkbox"/> Closes lips around mouthpiece</li> <li><input type="checkbox"/> Hands do not block air vents while mouthpiece in</li> <li><input type="checkbox"/> Device held upright while insertion into mouth</li> <li><input type="checkbox"/> Breathes in</li> <li><input type="checkbox"/> Does not stop breathing as dose is released</li> <li><input type="checkbox"/> Takes Autohaler out of mouth &amp; holds breath</li> <li><input type="checkbox"/> Holds breath for 5-10 seconds</li> <li><input type="checkbox"/> Pushes lever down gently</li> <li><input type="checkbox"/> Replaces cover</li> </ul> <p><b>SCORE ...../15</b></p>	<p><b>AEROLISER</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Lifts off cap</li> <li><input type="checkbox"/> Holds the base, turns mouthpiece in direction of arrow</li> <li><input type="checkbox"/> Removes capsule from blister pack &amp; places inside</li> <li><input type="checkbox"/> Holds device upright, squeezes side buttons once</li> <li><input type="checkbox"/> Breathes out</li> <li><input type="checkbox"/> Breathes out away from device</li> <li><input type="checkbox"/> Places mouthpiece in mouth</li> <li><input type="checkbox"/> Seals lips around mouthpiece</li> <li><input type="checkbox"/> Takes a long deep breath in</li> <li><input type="checkbox"/> Holds breath for 10 seconds</li> <li><input type="checkbox"/> Breathes out slowly</li> <li><input type="checkbox"/> Shakes device to see if medication left</li> <li><input type="checkbox"/> Breathes in, holds &amp; exhales as before</li> <li><input type="checkbox"/> Throws empty capsule</li> <li><input type="checkbox"/> Replaces cap</li> </ul> <p><b>SCORE ...../15</b></p>

**ASTHMA MEDICATION USE**

Many people find a way of using their asthma medicines which suits them. This may differ from the instructions on the label or from what their doctor has said. We would like to ask you a few questions about how you use your medicines.

In the box below are some ways in which people have said they use their medicines.

For each of the statements, please tick the box which best applies to you.

<b>Your own way of using your asthma medicines</b>	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
I forget to take them					
I alter the dose					
I stop taking them for a while					
I decide to miss out a dose					
I take less than instructed					

MARS©

What medications are you currently taking for your asthma?

.....  
 .....

What concerns do you have about your asthma medication?

.....  
 .....

Cont'd

Dear Patient, pages 5-7 contain questions regarding your views on the impact of your asthma on your quality of life and facts on asthma. Please work your way through these questions. Remember, everyone is different, so there are no right or wrong answers. Ask your Pharmacist for help if you don't understand a question. When you are finished return them to your Pharmacist.

## IMPACT OF ASTHMA ON QUALITY OF LIFE

Please read the following statements and circle the option that best applies to you over the last 4 WEEKS.

1. I have been troubled by episodes of shortness of breath

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

2. I have been troubled by wheezing attacks

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

3. I have been troubled by tightness in the chest

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

4. I have been restricted in walking down the street on level ground or doing light housework because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

5. I have been restricted in walking up hills or doing heavy housework because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

6. I have felt tired or a general lack of energy

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

7. I have been unable to sleep at night

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

8. I have felt sad or depressed

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

9. I have felt frustrated with myself

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

10. I have felt anxious, under tension or stressed

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

11. I have felt that asthma is preventing me from achieving what I want from life

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

12. Asthma has interfered with my social life

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

13. I have been limited in going to certain places because they are bad for my asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1_____	2_____	3_____	4_____	5_____

Cont'd ...

14. I have been limited in going to certain places because I have been afraid of getting an asthma attack and not being able to get help

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

15. I have been restricted in sports, hobbies or other recreations, because of my asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

16. I have felt generally restricted

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

17. I have felt that asthma is controlling my life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

18. I have been worried about my present or future health because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

19. I have worried about asthma shortening my life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

20. I have felt dependent on my asthma sprays

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

## ASTHMA FACTS

For each statement about asthma, please circle **T** if you think the statement is true or **F** if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

- |                                                                                                                                                                                |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 1. You can become addicted to asthma medications if you use them all the time.                                                                                                 | T | F |
| 2. An asthma action plan can prevent hospitalisations due to asthma.                                                                                                           | T | F |
| 3. You may have fewer asthma attacks if you can identify and avoid things that trigger them.                                                                                   | T | F |
| 4. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure.                     | T | F |
| 5. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication.                 | T | F |
| 6. Side effects are less likely with inhaled medications than with tablets.                                                                                                    | T | F |
| 7. With preventer medications, it does not matter if some doses are missed or if you go on or off.                                                                             | T | F |
| 8. If you get a cold or flu, you should increase your asthma medications.                                                                                                      | T | F |
| 9. Some medications can trigger asthma attacks.                                                                                                                                | T | F |
| 10. You should use “preventer medication” when you have an asthma attack.                                                                                                      | T | F |
| 11. Going from a cold to a hot environment can trigger asthma, but going from a hot to a cold environment does not trigger asthma.                                             | T | F |
| 12. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma.                                                                   | T | F |
| 13. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. | T | F |

***THANK YOU FOR ANSWERING THESE QUESTIONS  
PLEASE RETURN THEM TO YOUR PHARMACIST***



**10. Please circle the number on a scale of 1-5, about how useful you found the asthma class in terms of the following asthma-related aspects.**

	Not Useful at All	Not Very Useful	Neither Useful nor Not Useful	Useful	Very Useful
1. Knowledge and understanding about asthma.	1	2	3	4	5
2. Knowledge and understanding about asthma symptoms	1	2	3	4	5
3. Knowledge and understanding about common triggers	1	2	3	4	5
4. Knowledge and understanding about how to avoid triggers	1	2	3	4	5
5. Understanding the role of the different types of asthma medication	1	2	3	4	5
6. Knowing when to use different asthma medications	1	2	3	4	5
7. Helping me overcome problems associated with taking my asthma medications	1	2	3	4	5
8. Using my inhaler correctly	1	2	3	4	5
9. How to use my asthma medication when my asthma gets worse	1	2	3	4	5

**11. Please circle the number on a scale of 1-5, about how satisfied you have been with the Pharmacist's;**

	Very Dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very Satisfied
1. Provision of information	1	2	3	4	5
2. Interest in your problems	1	2	3	4	5
3. Helpfulness	1	2	3	4	5
4. Ability to answer questions	1	2	3	4	5
5. Knowledge about asthma	1	2	3	4	5

12. In your opinion, has participation in the asthma class increased your knowledge about asthma management? Yes                  No

13. What were some issues about asthma management that you learnt during the program?

.....  
.....  
.....

14. Have any asthma-related problems been solved during this program? Yes                  No

What kind of problems?

.....  
.....  
.....

15. What did you get out of the asthma program? What did it do for you?

.....  
.....  
.....

16. Is there any way the asthma class could be improved? Yes                  No  
How can it be improved?

.....  
.....  
.....

17. How does this kind of education compare to other asthma education that you have received previously?

.....  
.....  
.....

**Appendix 33**

**QUESTIONNAIRE  
Visit 3**

*Your participation in filling out this questionnaire is voluntary. However the information you give us will help the research team analyse the outcomes of the service. The information will remain confidential and the only person who will have access to it is your pharmacist and the researchers. Before the information is entered in any data analysis program, your personal details like address and name will be removed.*

*Any person with complaints about the conduct of a research study can contact the secretary of the Human Ethics Committee, University of Sydney on (02) 9351 - 4811*



**PHARMACIST-LED GROUP  
ASTHMA EDUCATION  
PROGRAM**

<b>ASSESS ASTHMA SEVERITY</b>
-------------------------------

First name: ..... Last Name: .....  
 .....  
 Contact Phone No: ..... (h) .....  
 (w) .....

**➔** ***PHARMACIST**, complete the following with your patient to assess asthma severity.*

1. Please circle the most appropriate response that describes the patient's asthma status **in the last one month**.

ASTHMA FEATURE	FREQUENCY		
Wheeze, chest tightness, cough breathlessness	Occasional	Most days	Every day
Night time symptoms	No	Less than once a week	Once a week or more
Asthma symptoms wakening	No	Less than once a week	Once a week or more
Hospital admission or emergency room in the past year	No		Yes
Life threatening Attack (ICU or ventilator) in the last 5 years	No		Yes
Reliever use	Less than twice a week	Most days	More than 3-4 times per day

Modified from National Asthma Council Australia 2002

## Inhaler Technique

**Please tick actions completed and add ticks to calculate score when completed.**

<input type="checkbox"/> Puts thumb into thumb grip groove <input type="checkbox"/> Pushes in anticlockwise direction until click is heard OR pushes lever until it clicks <input type="checkbox"/> Exhales <input type="checkbox"/> Exhales away from device <input type="checkbox"/> Places lip over mouthpiece & inhales deeply <input type="checkbox"/> Holds breath for 10 seconds <input type="checkbox"/> Breathes out <input type="checkbox"/> Breathes out away from the Accuhaler <input type="checkbox"/> Waits before repeating procedure <input type="checkbox"/> Pulls the groove back into place  <b>SCORE ...../10</b>	<input type="checkbox"/> <b>METERED DOSE INHALER + SPACER</b> <input type="checkbox"/> Removes Cap <input type="checkbox"/> Shakes Inhaler <input type="checkbox"/> Puts mouthpiece of Inhaler in correct end of spacer <input type="checkbox"/> Breathes out <input type="checkbox"/> Places spacer mouthpiece between lips <input type="checkbox"/> Presses Inhaler once to actuate <input type="checkbox"/> Breathes in <input type="checkbox"/> Holds breath for 10 seconds <input type="checkbox"/> Breathes out & then in <input type="checkbox"/> Holds for further 5 sec OR breathes in & out 3-4 times  <b>SCORE ...../10</b>
<input type="checkbox"/> <b>TURBUHALER</b> <input type="checkbox"/> Removes Cover <input type="checkbox"/> Holds Inhaler upright at 90 degrees <input type="checkbox"/> Turns bottom until click is heard <input type="checkbox"/> Clicks only once <input type="checkbox"/> Exhales <input type="checkbox"/> Exhales away from device <input type="checkbox"/> Puts mouthpiece in mouth <input type="checkbox"/> Breathes in forcefully <input type="checkbox"/> Removes mouthpiece before exhaling <input type="checkbox"/> Holds breath <input type="checkbox"/> Exhales away from mouthpiece <input type="checkbox"/> Waits 20-30 seconds before clicking for next dose  <b>SCORE ...../12</b>	<input type="checkbox"/> <b>METERED DOSE INHALER</b> <input type="checkbox"/> Removes Cap <input type="checkbox"/> Shakes Inhaler <input type="checkbox"/> Tilts head back OR keeps at level <input type="checkbox"/> Exhales (to functional residual capacity) <input type="checkbox"/> Inserts mouthpiece & closes lips firmly around rim OR holds mouthpiece 2-4 cm from mouth <input type="checkbox"/> Actuates Inhaler once <input type="checkbox"/> Begins to inhale as soon as actuation is done <input type="checkbox"/> Continues slow deep inspiration <input type="checkbox"/> Holds breath for 5-10 seconds <input type="checkbox"/> Exhales <input type="checkbox"/> Shakes canister <input type="checkbox"/> Waits 20-30 seconds before next actuation <input type="checkbox"/> Replaces cap  <b>SCORE ...../13</b>
<input type="checkbox"/> <b>AUTOHALERS</b> <input type="checkbox"/> Removes Cover <input type="checkbox"/> Holds Autohaler upright <input type="checkbox"/> Pushes lever up <input type="checkbox"/> Shakes the Autohaler <input type="checkbox"/> Breathes out before inserting mouthpiece <input type="checkbox"/> Inserts mouthpiece <input type="checkbox"/> Closes lips around mouthpiece <input type="checkbox"/> Hands do not block air vents while mouthpiece in <input type="checkbox"/> Device held upright while insertion into mouth <input type="checkbox"/> Breathes in <input type="checkbox"/> Does not stop breathing as dose is released <input type="checkbox"/> Takes Autohaler out of mouth & holds breath <input type="checkbox"/> Holds breath for 5-10 seconds <input type="checkbox"/> Pushes lever down gently <input type="checkbox"/> Replaces cover  <b>SCORE ...../15</b>	<input type="checkbox"/> <b>AEROLISER</b> <input type="checkbox"/> Lifts off cap <input type="checkbox"/> Holds the base, turns mouthpiece in direction of arrow <input type="checkbox"/> Removes capsule from blister pack & places inside <input type="checkbox"/> Holds device upright, squeezes side buttons once <input type="checkbox"/> Breathes out <input type="checkbox"/> Breathes out away from device <input type="checkbox"/> Places mouthpiece in mouth <input type="checkbox"/> Seals lips around mouthpiece <input type="checkbox"/> Takes a long deep breath in <input type="checkbox"/> Holds breath for 10 seconds <input type="checkbox"/> Breathes out slowly <input type="checkbox"/> Shakes device to see if medication left <input type="checkbox"/> Breathes in, holds & exhales as before <input type="checkbox"/> Throws empty capsule <input type="checkbox"/> Replaces cap  <b>SCORE ...../15</b>

**ASTHMA MEDICATION USE**

Many people find a way of using their asthma medicines which suits them. This may differ from the instructions on the label or from what their doctor has said. We would like to ask you a few questions about how you use your medicines. In the box below are some ways in which people have said they use their medicines.

For each of the statements, please tick the box which best applies to you.

<b>Your own way of using your asthma medicines</b>	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
I forget to take them					
I alter the dose					
I stop taking them for a while					
I decide to miss out a dose					
I take less than instructed					

MARS©

Do you have a written Asthma Action Plan? Yes  No

What medications are you currently taking for your asthma?  
 .....  
 .....

What concerns do you have about your asthma medication?  
 .....  
 .....

Cont'd

Dear Patient, pages 5-7 contain questions regarding your views on the impact of your asthma on your quality of life and facts on asthma. Please work your way through these questions. Remember, everyone is different, so there are no right or wrong answers. Ask your Pharmacist for help if you don't understand a question. When you are finished return them to your Pharmacist.

## IMPACT OF ASTHMA ON QUALITY OF LIFE

Please read the following statements and circle the option that best applies to you over the last 4 WEEKS.

1. I have been troubled by episodes of shortness of breath

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

2. I have been troubled by wheezing attacks

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

3. I have been troubled by tightness in the chest

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

4. I have been restricted in walking down the street on level ground or doing light housework because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

5. I have been restricted in walking up hills or doing heavy housework because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

6. I have felt tired or a general lack of energy

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

7. I have been unable to sleep at night

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

8. I have felt sad or depressed

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

9. I have felt frustrated with myself

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

10. I have felt anxious, under tension or stressed

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

11. I have felt that asthma is preventing me from achieving what I want from life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

12. Asthma has interfered with my social life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

13. I have been limited in going to certain places because they are bad for my asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

14. I have been limited in going to certain places because I have been afraid of getting an asthma attack and not being able to get help

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

15. I have been restricted in sports, hobbies or other recreations, because of my asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

16. I have felt generally restricted

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

17. I have felt that asthma is controlling my life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

18. I have been worried about my present or future health because of asthma

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

19. I have worried about asthma shortening my life

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

20. I have felt dependent on my asthma sprays

Not at all	Mildly	Moderately	Severely	Very Severely
1 _____	2 _____	3 _____	4 _____	5 _____

Cont'd ...

## ASTHMA FACTS

For each statement about asthma, please circle **T** if you think the statement is true or **F** if you think the statement is false. Do not respond if you are not sure or do not know whether the statement is true or false.

- |                                                                                                                                                                                |   |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|
| 1. You can become addicted to asthma medications if you use them all the time.                                                                                                 | T | F |
| 2. An asthma action plan can prevent hospitalisations due to asthma.                                                                                                           | T | F |
| 3. You may have fewer asthma attacks if you can identify and avoid things that trigger them.                                                                                   | T | F |
| 4. When you know that you are going to be exposed to something that triggers your asthma, you should take the recommended medication just before exposure.                     | T | F |
| 5. When you know that you are going to be exposed to something that triggers your asthma, you should wait until you develop symptoms before taking medication.                 | T | F |
| 6. Side effects are less likely with inhaled medications than with tablets.                                                                                                    | T | F |
| 7. With preventer medications, it does not matter if some doses are missed or if you go on or off.                                                                             | T | F |
| 8. If you get a cold or flu, you should increase your asthma medications.                                                                                                      | T | F |
| 9. Some medications can trigger asthma attacks.                                                                                                                                | T | F |
| 10. You should use “preventer medication” when you have an asthma attack.                                                                                                      | T | F |
| 11. Going from a cold to a hot environment can trigger asthma, but going from a hot to a cold environment does not trigger asthma.                                             | T | F |
| 12. Parents should give “reliever medication” to a child as soon as they recognise the first sign of asthma.                                                                   | T | F |
| 13. Blue puffer (Ventolin), Brown puffer (Flixotide) and Green puffer (Serevent) are called “preventer medications”, so they should be used everyday even though you are well. | T | F |

***THANK YOU FOR ANSWERING THESE QUESTIONS  
PLEASE RETURN THEM TO YOUR PHARMACIST***

## Appendix 34

### A Pharmacist-led Group Asthma Education Program Workshop Training Program Sunday 6 March 2005



#### Program Goal

To empower people with asthma to use their asthma medication as recommended

#### Learning objectives

*By the end of this session you will be better will be better able to:*

- Use the 'Talk in the Box' as resource for pharmacist-led asthma education
- Use the 'Suggested Session Guidelines' to sequence a small group education session
- Use micro skills of teaching relevant to engaging active learning about asthma medication

<b>Pre-session assessment (15 mins)</b>	
	Asthma Knowledge Questionnaire Assess inhaler technique
<b>INTRODUCTION to the WORKSHOP (30 mins)</b>	
VICKY	Welcome & overview
FRAN	<ul style="list-style-type: none"> <li>• Educational dimensions to be covered</li> </ul>
VICKY	<ul style="list-style-type: none"> <li>• The 'Talk in the box' and additional teaching/learning resources</li> </ul>
<b>1. ASTHMA DISEASE PROCESS and SYMPTOMS (40 mins)</b>	
CAROL	<ul style="list-style-type: none"> <li>• Current and future treatment</li> <li>• Current problems in management</li> </ul>
VICKY	<ul style="list-style-type: none"> <li>• <b>Explaining the key concept</b></li> </ul>
FRAN	<ul style="list-style-type: none"> <li>• The micro skill of Explaining</li> <li>• Using a portable whiteboard and flip chart in small groups</li> <li>• Micro skill of Variation</li> </ul>
<b>2. TRIGGERS (15 mins)</b>	
VICKY	<ul style="list-style-type: none"> <li>• Example of a group activity</li> </ul>
<b>REFRESHMENTS BREAK (15 mins)</b>	
<b>3. ASTHMA MEDICATIONS (35 mins)</b>	
FRAN	<ul style="list-style-type: none"> <li>• The design of the Key Learning Concept</li> </ul>
BANDANA	<ul style="list-style-type: none"> <li>• Adherence</li> </ul>
FRAN	<ul style="list-style-type: none"> <li>• Micro skill of Group Discussion</li> </ul>
<b>4. INHALER TECHNIQUE (20 mins)</b>	
SINTHIA	<ul style="list-style-type: none"> <li>• Demonstration as a micro skill</li> </ul>
<b>5. ASTHMA ACTION PLANS (10 mins)</b>	
VICKY	<ul style="list-style-type: none"> <li>• Take home messages and emphasising the low rates of use of AAPs</li> </ul>
<b>CONCLUSION and THANKS</b>	

<b>Appendix 35</b>
--------------------

## A Pharmacist-led Group Asthma Education Program

### FACILITATORS' GUIDE ONLY 2.5 hour Sunday Workshop

#### Program Goal

To empower people with asthma to use their asthma medication as recommended for controlling their asthma

#### Learning objectives

*By the end of this session the participant pharmacist will be better able to:*

- Use the 'Talk in the Box' as resource for pharmacist-led asthma education
- Use the 'Suggested Session Guidelines' to sequence a group education session in their pharmacy
- Use micro skills of teaching relevant to engaging active learning about asthma medication

<b>Resources</b>	<b>Activity and Key Points</b>
<b>Pre-session assessment (15 mins)</b>	
<p><b>Placebos</b></p> <p><b>Assessment tools</b> Inhaler Technique Checklist (pre-session)</p> <p>Asthma Knowledge Questionnaire</p> <p><b>Nametags + WB pens</b></p>	<ol style="list-style-type: none"> <li>1. Invite to write name on tag (+ WB pen)</li> <li>2. Invite individuals to complete the Asthma Knowledge Questionnaire</li> <li>3. Assess inhaler technique using checklist</li> </ol>
<b>INTRODUCTION to the WORKSHOP (30 mins)</b>	
<p><b>VICKY</b> (10 mins)</p>	<p>Welcome Group</p> <p>Introduce the staff present</p> <ol style="list-style-type: none"> <li>1. Why Group Asthma Education Focus on proper use of medication</li> <li>2. Overview of the study</li> </ol>

<p><b>FRAN</b>  <b>Handout</b>  Educator's facilitation skills  (10 mins)</p>	<p><b>Educational dimensions to be covered:</b></p> <ol style="list-style-type: none"> <li>1. Basic principle: active learning</li> <li>2. Move through the structure of the Suggested Session</li> <li>3. Show the design of the key learning concept</li> <li>4. Model the use of some of the learning resources</li> <li>5. Tease out related facilitation skills <ul style="list-style-type: none"> <li>• Explaining</li> <li>• Variation</li> <li>• Demonstration</li> <li>• Group discussion</li> <li>• Giving feedback</li> </ul> </li> </ol>
<p><b>VICKY</b>  (10 mins)  <b>Resources</b></p> <ol style="list-style-type: none"> <li>1. Talk in a box</li> <li>2. Session outline</li> <li>3. Whiteboard</li> </ol>	<p><b>The ‘Talk in the box’ and teaching/learning resources</b></p> <ol style="list-style-type: none"> <li>1. Talk in a box contents (mastercopies) <ul style="list-style-type: none"> <li>• 3X Brochures (Asthma Foundation + GSK)</li> <li>• Asthma Action Plans (NAC)</li> <li>• Assessment tool: set of Inhaler Technique Checklists (<i>pre-session- post session</i>)</li> <li>• Suggested Session Guidelines</li> </ul> </li> <li>2. Whiteboard + A3 chart enlargements of specific OHTs</li> </ol>
<p><b>1. ASTHMA DISEASE PROCESS and SYMPTOMS (40 mins)</b></p>	
<p><b>CAROL</b>  (10 mins)  <b>Handout</b>  NAC</p>	<p><b>Current and future treatment</b>  <b>Current problems in management</b></p>
<p><b>VICKY</b>  (5 mins)</p> <p><b>Portable W/Board</b>  <b>Overhead 4</b>  What is Asthma?</p> <p><b>Model</b>  Airways</p>	<p><i>Explaining the key concept</i></p> <p><b>EXPLAIN:</b> <i>What happens during an asthma attack?</i></p> <p><b>USE MODEL AIRWAYS TO DEMONSTRATE</b></p> <div style="border: 1px solid black; padding: 10px; background-color: #f0f0f0;"> <p><b>KEY POINTS</b></p> <p>Airway narrowing occurs because of two different events:</p> <ol style="list-style-type: none"> <li>1. The muscle around the <b>outside</b> of the airways tightens, and,</li> <li>2. The lining <b>inside</b> the airways becomes red and swollen (inflammation) and extra mucus (sticky fluid) may be produced</li> </ol> </div>

<p><b>FRAN</b></p> <p><b>EdOH</b> (15 mins)</p>	<p><b>Micro skill of Explaining</b></p> <ul style="list-style-type: none"> <li>• Answers a question</li> <li>• Unpack key concept</li> <li>• Uses visual resources to enhance understanding</li> <li>• Uses examples and analogies to enhance understanding (lungs like... a tree)</li> <li>• Reminder: Use lay language)</li> </ul>
	<p><i>Using a Portable whiteboard and flip chart in small groups</i></p> <ul style="list-style-type: none"> <li>• <b>Visual resource</b></li> <li>• Focus attention</li> <li>• Participation: <i>quick tally</i> as a learning activity</li> <li>• Blank page for <i>brainstorm</i></li> </ul>
<p><b>FRAN</b> (10 mins)</p>	<p><i>Micro skill of Variation</i></p>
<p><b>2. TRIGGERS (15 mins)</b></p>	
<p><b>VICKY</b> <b>Overhead 6</b> Triggers (10 mins)</p>	<p><b>Example of a group activity</b> GROUP ACTIVITY</p> <ol style="list-style-type: none"> <li>1. Based on the items shown in each section of the diagram: What do each of the main categories of triggers seems to be ? (label chart)</li> <li>2. <i>Quick tally</i>: <b>Which are your triggers?</b> (record on chart)</li> <li>3. <i>Brainstorm</i>: Work around each trigger group and brainstorm: <b>What are ways we can avoid each of these trigger groups?</b> (not all are avoidable)</li> </ol>
<p><b>FRAN</b> (5 mins)</p>	<ul style="list-style-type: none"> <li>• What missing from the chart (food additives) (Issue of infringing on copyright by changing a resource)</li> <li>• Brainstorm as T&amp;L Activity</li> <li>• Lay language instead of terminology</li> <li>• Annotating chart</li> </ul>
<p><i>REFRESHMENTS</i> (15 mins)</p>	<p><i>BREAK</i></p>

<b>3. ASTHMA MEDICATIONS (35 mins)</b>	
<b>FRAN</b> (10 mins) <b>EdOH</b>	<b>The design of the key learning concept</b>
<b>BANDANA</b> (15 mins) <b>Blank chart</b> Problems  <b>WB pen</b>	<b>Adherence</b> <b>ACTIVITY</b> 1. <i>Brainstorm:</i> What do you think are the main problems people face in taking their medication as prescribed?  2. <i>Discussion:</i> What strategies could be used to overcome each of these?
<b>FRAN</b> (10 mins)	<b>Micro skill of Group Discussion</b> 1. Starting and finishing 2. Using questions 3. Getting participation 4. Rewarding contributions
<b>4. INHALER TECHNIQUE (20 mins)</b>	
<b>SINTHIA</b> (20 mins) <b>Equipment</b> Placebo inhalers  Assessment tools Inhaler technique Checklist (white page)	<b>1. Relate to earlier pre session practice</b> <b>2. Using a checklist to assess</b> <b>3. Critical steps – value of exaggeration to learning</b> <b>4. Demonstration as a micro skill</b> 1. <b>Read</b> 2. <b>Read+ demonstration</b> 3. <b>Complete manoeuvre</b> 4. <b>Reinforce with diagrams in product information</b>  <b>5. Practice session in pairs + critical feedback</b>
<b>FRAN ???</b> (If time permits)	<b>Skill of demonstration</b>
<b>5. ASTHMA ACTION PLANS and the role of medications (10 mins)</b>	
<b>VICKY</b> (10 mins)	<ul style="list-style-type: none"> <li>• <b>Emphasising the low rates of use of AAPs</b></li> </ul>
<b>Session Conclusion (10 mins)</b>	
<b>VICKY</b> (10 mins)	Any ‘burning questions’?  What needs to be done by the pharmacists?  <b>THANK YOU</b>

**Appendix 36**

**Feedback from Pharmacists**

*Your opinion about the program is valuable to us. Please take a couple of minutes to complete this questionnaire regarding the Asthma Class you conducted.*

1. What did you gain from the delivery of education to a group of people with asthma?

2. Was the asthma class conducted as planned? Yes    No  
If not, what changes occurred?

3. What aspects of the asthma class worked well and why?

4. What difficulties if any, did you face when educating the group? (Your suggestions on how these could be overcome would be welcome)

5. On a scale of 1 to 5, how successful do you feel your asthma class went?

Topic 1: Asthma disease process and symptoms

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

## Topic 2: Asthma triggers and avoidance strategies

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

## Topic 3; Asthma medications

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

## Topic 4; Taking asthma medications and overcoming problems faced

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

## Topic 5; Inhaler technique

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

## Topic 6; Asthma Action Plans and the role of medications

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

## The timing of the topics covered

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely

6. On a scale of 1 to 5, how well did you think the group responded to the education?

1	2	3	4	5
Not at All	Slightly	Moderately	Very successful	Extremely Well

7. On a scale of 1 to 5, how helpful were the manuals you received prior to the training?

1	2	3	4	5
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Not at All      Slightly      Moderately      Very helpful      Extremely Helpful

8. On a scale of 1 to 5, how relevant was the training you received?

1	2	3	4	5
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Not at All      Slightly      Moderately      Very relevant      Extremely relevant

9. Was the training you received adequate? Yes    No

If not, what other support is required?

10. On a scale of 1 to 5, how useful was the 'Talk in a Box' resource for the education?

1	2	3	4	5
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Not at All      Slightly      Moderately      Very useful      Extremely Useful

11. On a scale of 1 to 5, how useful were the 'Suggested Guidelines' for the education?

1	2	3	4	5
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Not at All      Slightly      Moderately      Very useful      Extremely Useful

12. Other Comments