



The University of Sydney
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Australian General Practice Statistics and Classification Centre
Family Medicine Research Centre

A collaborating unit of the
Australian Institute of Health and Welfare



BEACH-SAND Report

BETTERING THE EVALUATION AND CARE OF HEALTH

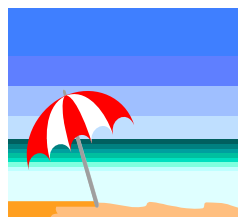
Inhaled corticosteroid use for asthma management in General Practice patients

Organisation: AGPSCC

*Data collection period: 21/02/2006 – 27/03/2006 and
2/05/2006 – 5/06/2006.*

Blocks 80C and 82B

COMMERCIAL IN CONFIDENCE



**Bettering the Evaluation and Care of Health (BEACH):
Measuring Patient Health and Health Care Delivery in General Practice**

SAND REPORT

Subject: *Inhaled Corticosteroid use for Asthma Management*

Organisation: *AGPSCC*

Data collection period: *21/02/2006 – 27/03/2006 and 2/05/2006 – 5/06/2006*

Research questions

1. What is the prevalence of asthma in the general practice population?
2. What proportion of patients with asthma are currently taking a medication for asthma management?
3. What is the distribution of current asthma severity (using the National Asthma Campaign's severity classification)?
4. What proportion of general practice patients with asthma are taking an inhaled corticosteroid (ICS) for asthma management? What is the current daily regimen for ICS?
5. In the clinical opinion of the GP, what proportion of general practice patients with asthma have their asthma adequately managed with the current daily dose of ICS?
6. What proportion of general practice patients with asthma have had their ICS dose altered since the resolution of their most recent exacerbation of asthma? What is the most common reason for changing / not changing / ceasing ICS dose since the last exacerbation of asthma?

Questions

Sand question	Research Question
<p>Does this patient suffer from asthma? Yes / No If 'No' end questions.</p>	<p>To determine the prevalence of asthma in the general practice population.</p>
<p>If 'Yes', their current medication is _ Short Acting Beta Agonist _ Long Acting Beta Agonist _ Inhaled Corticosteroid _ Combination product _ Leukotrine antagonist _ Cromolyn _ Other _____ _ None of the above - END</p>	<p>To determine the proportion of general practice patients with asthma who are currently taking a medication for asthma management.</p>
<p>Currently, how severe is the asthma? (See reference card)</p>	<p>To determine the distribution of current severity of asthma (using the National Asthma Campaign's severity classification).</p>
<p>If the patient is taking an inhaled Corticosteroid what is the current daily dose? <u>Name & Form</u> <u>Strength</u> <u>Dose</u> <u>Frequency</u> 1. _____ 2. _____ 3. _____</p>	<p>To determine the proportion of general practice patients with asthma who are currently taking an inhaled corticosteroid. To determine the current daily regimen for these patients.</p>
<p>Is the current daily dose adequately managing the asthma? Yes No Unsure <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>	<p>To determine, in the GP's clinical opinion, whether the current daily dose of ICS is adequately managing the patient's asthma.</p>
<p>Was the ICS dose altered since resolution of last exacerbation? – <input type="checkbox"/> No – because _____ <input type="checkbox"/> Yes – stopped ICS because _____ <input type="checkbox"/> Yes – Increased ICS using ICS alone / combination product (<i>please circle</i>) <input type="checkbox"/> Yes – Decreased ICS using ICS alone / combination product (<i>please circle</i>) <input type="checkbox"/> Yes – ICS new in last month <input type="checkbox"/> Don't know because _____</p>	<p>To determine the proportion of general practice patients with asthma who have had their ICS dose altered since the resolution of their most recent exacerbation of asthma. To determine the most common reason for changing / not changing / ceasing ICS dose since the last exacerbation of asthma.</p>

SUMMARY OF RESULTS

Sample analysed: 5,911 patient encounters from 201 GPs.

Results:

The age and sex distributions of respondents were similar to the distribution for all BEACH (general practice) encounters, with the majority (58.1%) of patients being female.

Of 5,911 general practice patients, GPs indicated that 686 patients (11.6%, 95% CI: 10.6-12.7) suffer from asthma. Patients aged 5-14 were significantly more likely to suffer from asthma (19.0%) than patients aged <1, 1-4, 45-64, 65-74 or 75+ (1.8%, 1.4%, 9.3%, 11.0% and 10.2% respectively). Female and male patients were not significantly different in their rate of asthma (12.1%, 95% CI: 10.8-13.3 and 11.1%, 95% CI: 9.7-12.5 respectively).

Only 9.4% of asthma patients do not take any asthma medication. About half (49.3%) take one medication, and another 32.0% take two medications to manage their asthma.

The medications most frequently used to manage asthma were short acting beta agonists (66.5 % of patients), combination (long acting beta agonist and inhaled corticosteroid) products (35.6% of patients) and inhaled corticosteroids (24.1%). Long acting beta agonists (single formulation) were used by 10.7% of asthma patients.

Of the 686 asthma patients, medication data was available for 671. Of these, over half (57.4%; 95% CI: 52.6-62.2) were taking an inhaled corticosteroid (ICS) either alone or as a combination product. Over 4 in 5 asthma patients (86.3%) were taking a reliever (beta agonist alone or in combination), while over half (57.4%) were taking a preventer (ICS alone or in combination). Of all patients with asthma over half (53.4%) were taking a reliever and preventer, a further 32.9% were taking a reliever only. Relatively few asthma patients were taking neither a reliever nor preventer (9.7%).

Of children with asthma, 76.8% had infrequent asthma, while 22% had frequent asthma. Only one child in the study had persistent asthma. Of adults with asthma, 34.8% had very mild and 34.4% had mild asthma. Close to a quarter of adult asthma patients (27.8%) had moderate asthma while 5.0% had severe asthma.

Of asthma patients taking an ICS, half were taking the generic fluticasone/salmeterol (55.7%), followed by fluticasone propionate and budesonide/eformoterol with 15.5% each.

GPs indicated that most asthma patients taking an ICS (88.4%) were having their asthma adequately managed by the current ICS dose. Only 6.7% of asthma patients on an ICS were not having their asthma adequately managed, and in another 4.9% they were unsure if the ICS dosage was adequately managing asthma.

The ICS dose was not altered since last asthma exacerbation for 62.4% of asthma patients on an ICS. A further 12.8% decreased their ICS dosage since last exacerbation and 9.0% stopped the ICS.

METHOD

BEACH Method

In the eighth and ninth year, BEACH data collection is being conducted from April 2005 to March 2007. Data for this report was collected in Blocks 80 and 82 – the tenth block of year eight and the second block of year nine. Each year, BEACH collects data from around 1,000 GPs who each record details about 100 consecutive consultations, thus providing an annual database of approximately 100,000 records.

GP recording periods are spread evenly over the year. A rolling recruitment of different GPs reduces GP recording fatigue. Sample size estimates show that about 1,000 different GPs are needed to provide adequate precision of estimates about what goes on in general practice.

The participating GPs are randomly selected from the HIC list of Australian active GPs (i.e. those who provided more than 375 GP services in the previous quarter).

The research instrument used for each consultation is a single page recording form containing the following consultation variables:

- date of encounter
- service item number/form of payment/indirect encounters (e.g. telephone consultations)
- patient age and sex
- patient status to practice (new or seen before)
- health care card status of patient
- patient post code and ethnic background
- patient's reasons for encounter (up to three)
- diagnoses/problems managed (up to four)
- status of each problem to the patient (new/old)
- whether problems are work related
- medications prescribed (up to 4 per problem)
- over the counter medications recommended
- medications provided by the GP
- brand name, strength and regimen of medication
- number of repeats for medication
- medication status - new or continued
- other treatments (up to 2 per problem)
- tests and investigations ordered
- referrals and hospital admissions.

SAND Method

Supplementary Analysis of Nominated Data (SAND) investigates other aspects of patient health or health care delivery in general practice not covered by the standard consultation based information (described above). The data collection period is broken down into 10 blocks of recording (5 weeks each). The aim is that each block will include data from 100 GPs, 20 GPs recording per week. Each GP's recording pad contains 3 components (40 A forms, 30 B forms and 30 C forms). The order of these components are randomised so that 40 A forms may appear first, second or third in the pad. The intention is to ensure that there is no order effect on the quality of the information collected.

Each SAND component represents a line of questioning that is asked of the patient or the GP in addition to the standard encounter based information. The only parts of SAND that remain constant for the year are A forms which investigate height and weight (to calculate BMI), alcohol use, and smoking status. Questions in the remaining space vary from block to block, and address other aspects of patient health/health care delivery in general practice, effectively sub-sampling the overall sample.

If a SAND topic is complicated or a clear definition is required, a "checklist"/ reference card may be prepared for use by the patient or GP. These checklists may be of symptoms / signs which characterise a particular condition/disease or a list of risk factors for disease. Checklists are based on information freely available and disseminated by related organisations or published research (eg: Diabetes Association or the International Osteoporosis Foundation).

Statistical Analysis

In general, the current investigation presents number of observations (n), rate per 100 patients and 95% confidence interval (CI). The analysis used procedures in SAS v8.2 that calculate standard errors that adjust for the cluster survey design¹.

The CI is calculated as the rate estimate \pm (1.96 x standard error). The CI is interpreted as "we are 95% confident that the true population value lies between the lower and upper values". There is some argument that the 95% CI provides the best estimate of how useful a finding is.

The relative standard error (Relative SE), commonly used by the Australian Bureau of Statistics, is a function of the standard error and the rate estimate, and also provides a measure of reliability of the rate estimate. For general purposes, it can be regarded that a Relative SE of 0-15 is reliable; 16-33 is slightly unreliable; 34-50 is extremely unreliable. A Relative SE of 51-100 would indicate that the estimate should not be used.

¹ SAS Institute. SAS/STAT® User's guide, Version 8. Cary, NC: SAS Institute Inc, 1999

RESULTS

Data collection period:	21/02/2006 – 27/03/2006 and 2/05/2006-5/06/2006.	
Anticipated sample size:	200 GPs each providing 30 encounters (ie 6,000 encounters)	
Actual sample size:	Number of GPs:	201
	Patient encounters in SAND block available	6,028
Sample used for analysis:	Number of GPs:	201
	Patient encounters in SAND block used for analysis INT	5,911

Table 1: Response to Asthma question/s

This table describes the sample collected for these Sand blocks. Of the 6,028 patient encounters with 201 GPs, the initial Asthma question was answered at 5,911 (98.1%) encounters. At 117 encounters with 54 GPs (1.9%), the initial Asthma question was left blank. This analysis was conducted on these 5,911 encounters.

Table 2.1: Age distribution of respondents

Patient age was provided at 5,887 of these encounters. Of these, 12.0% were aged less than 15 years, 10.2% were between 15 and 24 years, 22.6% were 25 to 44 years old, 27.1% 45-64 years and 28.1% were 65 years or over. Age of patient was missing at 24 encounters. The age distribution of patients at these encounters was similar to the age distribution for all BEACH encounters for the 2005-2006 data collection period.

Table 2.2: Sex distribution of respondents

At 58.1% (95% CI: 55.9-60.3) of encounters the patient was female. Sex of patient was missing at 32 encounters. The sex distribution of patients at these encounters was similar to the sex distribution for all BEACH encounters for the 2005-2006 data collection period.

Tables 2.3: Age Specific rate of patient sex

This table shows the age specific rate of patient sex. For example, among patients aged 15-24 years, 67.1% were female. There were 56 encounters where either age or sex of patient was missing.

Tables 2.4: Sex Specific rate of patient age group

This table shows the sex specific rate of patient age group. For example, among female patients, 24.8% were aged 25-44 years. There were 56 encounters where either age or sex of patient was missing.

Table 3.1: Rate of Asthma

Of the 5,911 patients, GPs indicated that 686 (11.6%, 95%CI: 10.6-12.7) had diagnosed asthma. One hundred and eighty four of the 201 GPs in this sample (91.5%) had at least one patient (of the 30 patients for whom this SAND was completed) who had asthma.

Table 3.1.1: Rate of Asthma – by patient age (age specific rate)

This table specifies the age specific rates of asthma i.e. the proportion of each age group who suffer from asthma. For example, among patients aged <1, 1.8% have asthma. Patients aged 5-14 were significantly more likely to suffer from asthma (19.0%) than patients aged <1, 1-4, 45-64, 65-74 or 75+ (1.8%, 10.4%, 9.3%, 11.0% and 10.2% respectively). Age was missing for 24 patients.

Table 3.1.2: Rate of Asthma – by patient sex (sex specific rate)

This table provides the sex specific rates of asthma. Female and male patients were not significantly different in their rate of asthma (12.1%, 95%CI: 10.8-13.3 and 11.1%, 95%CI: 9.7-12.5 respectively). Sex was not specified at 32 encounters.

Table 4.1: Number of current medications from list - Asthma patients

A list of seven medication groups was provided, and the GP was asked to tick all asthma medications currently being used. Of the 686 patients with asthma, data on number of medications were provided for 671. Only 63 (9.4%) asthma patients were not taking any asthma medication. About half the patients (49.3%) were taking one medication, and another 215 (32.0%) were taking two medications and 9.3% were taking three or more medications to manage their asthma.

Table 4.1.1: Number of current medications from list - Asthma patients

This table is similar to Table 4.1 – except that it groups 2 to 5 medications together. About 4 in 10 asthma patients (41.3%) were taking 2 or more medications for the management of asthma.

Table 4.1.2: Number of medications indicated in Asthma patients – by patient sex

The number of current asthma medications are listed for male and female patients. About equal proportions of male and female patients were taking one asthma medication (49.6% and 49.0% respectively). Proportions taking no medication and two plus medications were also similar for male and female patients.

Table 4.1.3: Medications when only ONE indicated

Of the 331 patients taking one medication for asthma (Table 4.1), the majority (58.0%) were taking a short acting beta-agonist only, followed by a combination product only (31.7%) and an inhaled corticosteroid (ICS) only (7.3%).

Table 4.1.4: Medications when two indicated

Of the 215 patients taking two medications for asthma (Table 4.1), nearly half (44.7%) were taking a short acting beta-agonist together with a combination product, followed by short acting beta-agonist together with an ICS (36.7%).

Table 4.1.5: Medications when three indicated

Of the 46 patients taking three medications for asthma (Table 4.1), 23 of these patients (50.0%) were taking both a short and long acting beta agonist and an inhaled corticosteroid.

Table 4.2.1: Treatment with a short acting beta agonist – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 446 (66.5%) were currently using a short acting beta agonist as part of their asthma management.

Table 4.2.2: Treatment with a long acting beta agonist – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 72 (10.7%) were currently using a long acting beta agonist as part of their asthma management.

Table 4.2.3: Treatment with an inhaled corticosteroid – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 162 (24.1%) were currently using an inhaled corticosteroid as part of their asthma management.

Table 4.2.4: Treatment with a combination product – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 239 (35.6%) were currently using a combination product as part of their asthma management.

Table 4.2.5: Treatment with a Leukotriene antagonist – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 8 (1.3%) were currently using a leukotiene antagonist as part of their asthma management.

Table 4.2.6: Treatment with a cromolyn – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 11 (1.6%) were currently using a cromolyn as part of their asthma management.

Table 4.2.7: Treatment with Other medication – Asthma patients

Of the 671 asthma patients for whom their medication data were available, 26 (3.9%) were currently using some other medication as part of their asthma management.

Table 4.2.7.1: Treatment with Other medication – other meds listed – Asthma patients

There were 26 ‘other medications’. This table shows the 24 that were specified. Spiriva, in various forms, was the most common, recorded for 12 patients with asthma.

Table 4.2.8: Treatment with ‘none of the above’ medications – Asthma patients

Of the 671 asthma patients for whom this medication data was available, 63 (9.4%) were currently using no medications as part of their asthma management program.

Table 4.2.9: Treatment with ANY inhaled corticosteroid (including combination products) – Asthma patients

This table sums together patients taking ICS (table 4.2.3) and/or combination product (table 4.2.4). Therefore, 385 patients (57.4%, 95% CI: 52.6-62.2) were taking some form of ICS as part of their asthma management.

Table 4.2.9.1: Treatment with ANY inhaled corticosteroid (including combination products) – Asthma patients – by age group

Older patients aged 65-74 and 75+ were significantly more likely to be using an ICS for asthma management (73.8% and 75.3% respectively) than younger patients (aged 0-24).

Table 4.2.9.2: Treatment with ANY inhaled corticosteroid (including combination products) – Asthma patients – by patient sex

Rates of ICS were not significantly different for male and female patients (52.7% and 60.5% respectively).

Table 4.3: Treatment with any reliever medication (Beta-agonists or combination product) – Asthma patients

Of the 671 asthma patients for whom we had medication data, 579 patients (86.3%: 95%CI: 83.2-89.4) were taking a reliever medication.

Table 4.3.1: Treatment with any reliever medication (Beta-agonists or combination product) – Asthma patients – by patient sex

Female patients were significantly more likely to be using a reliever medication than male patients (89.7% CIs: 86.2-93.2 and 80.9% CIs: 75.8-86.0 respectively)

Table 4.4: Treatment with any preventer medication (ICS or combination product) – Asthma patients

Of the 671 asthma patients for whom we have medication data, 385 patients (57.4%: 95%CI: 52.6-62.2) were taking a preventer medication.

Table 4.4.1: Treatment with any preventer medication (ICS or combination product) – Asthma patients – patient sex

The sex specific rates of taking a preventer medication were 52.7.5% for male patients and 60.5% for female patients. These rates were not significantly different as the confidence intervals overlap.

Table 4.5: Treatment with reliever/preventer medication – Asthma patients

The majority of patients with asthma (53.4%; 95%CI: 48.6-58.1) were on both reliever and preventer medications. A further 32.9% of asthma patients were on reliever medication only. Almost 1 in 10 asthma patients (9.7%) were on neither a reliever or a preventer medication.

Table 4.5.1: Treatment with reliever/preventer medication – Asthma patients – by patient sex

The sex specific rates of taking a reliever and preventer medication were 47.0% for male patients and 57.6% for female patients. These rates were not significantly different as the confidence intervals overlap.

Table 5.1: Severity of Asthma – Children with Asthma

GPs indicated the asthma severity on the children's scale for 82 patients. They reported that just over three-quarters (76.8%) of these children had 'infrequent' asthma, with 22.0% having 'frequent' asthma. Only one child was said to have 'persistent' asthma.

Table 5.2: Severity of Asthma – Adults with Asthma

GPs indicated the asthma severity on the adult scale for 503 patients. They reported that a third of the adults had 'very mild' asthma (34.8%), and another third had 'mild' asthma (34.4%). About a quarter of the adults (27.8%) had 'moderate' asthma, and a small proportion (3.0%) had 'severe' asthma.

Table 5.3.1: Asthma children with severity data – Taking an ICS (alone or in combination)

Of the 82 young patients rated on the children's severity scale (Table 5.1) 33 (40.2%) were taking an ICS, either alone or as a combination product.

Table 5.3.2: Asthma children – ICS Medication by severity

The severity specific rate by generic ICS for children is shown here. Fluticasone propionate was the ICS used for a third of children with infrequent asthma, 38.5% of children with frequent asthma and wasn't used by the child with persistent asthma. Fluticasone/salmeterol was the ICS used for a third of children with infrequent asthma, 46.2% of children with frequent asthma and was used by the child with persistent asthma.

Table 5.3.3: Asthma children – Severity by ICS Medication

The generic ICS specific rate by asthma severity for children is shown here.

Table 5.4.1: Asthma adults with severity data – Taking an ICS (alone or in combination)

Of the 500 patients for whom a severity rating was provided and specific medication data were available, 342 (68.4%) were taking an ICS, either alone or as a combination product.

Table 5.4.2: Asthma adults – ICS Medication by severity

The severity specific rate by generic ICS for adults is shown here. Fluticasone propionate was the ICS used for 17.2% of adults with very mild asthma, 17.1% of adults with mild asthma, 11.0% of adults with moderate asthma and was not used by adults with severe asthma. Fluticasone/salmeterol was the ICS used for 43.1% of adults with very mild asthma, 48.8% of adults with mild asthma, 70.9% of adults with moderate asthma and 75.0% of adults with severe asthma.

Table 5.4.3: Asthma adults – Severity by ICS Medication

The generic ICS specific rate by asthma severity for adults is shown here.

Table 6.1: Listed ICS meds – CAPS generic – Patients with asthma taking an ICS

Specific medication data were available for 361 of the 385 asthma patients taking an ICS (Table 4.2.9). Just over half (55.7%) of these taking an ICS were taking fluticasone/salmeterol, while 15.5% were taking fluticasone propionate and 15.5% budesonide/eformoterol.

Table 6.1.1: Listed ICS meds – CAPS fullcode

This table gives ICS medication details for the ICS generic medications listed above (Table 6.1).

Table 6.1.2: Reported daily dose – Generic medications for asthma management

This table shows the reported daily dose (RDD) of generic ICS medications used to manage patients asthma. It reports the mean, median, minimum and maximum daily dose. The highest RDD was for Beclomethasone with 361.8 mcg per day. Fluticasone propionate was the second highest with 295.1 mcg, then Budesonide with 177 mcg and Fluticasone/Salmeterol with 127 mcg.

Table 6.2: Does current ICS daily dose adequately manage asthma – Asthma patients on ICS

Information on whether the ICS daily dose adequately managed the patient's asthma was available for 327 of the 361 patients where ICS dosage data were available. The current ICS dosage adequately managed the asthma for 88.4% of these patients, while asthma was not adequately managed for 6.7%. For 4.9% of these patients, the GP was unsure whether the current ICS dosage was adequately managing the patient's asthma.

Table 6.2.1: Does current ICS daily dose adequately manage asthma – Asthma patients on ICS – by generic

This table describes the rates of adequacy of asthma management by the ICS generic being taken by patient. For example, Fluticasone propionate and Fluticasone/Salmeterol both adequately managed asthma in 88.2% of the patients taking them.

Table 6.3: Does current ICS daily dose adequately manage asthma – Child asthma patients on ICS

Management with current dose of ICS was adequate for 81.8% (95% CI: 56.7-100.0) of children with infrequent asthma, 60% (95% CI: 30.1-89.9) of children of frequent asthma, though it wasn't for the child with persistent asthma. These rates were not significantly different, perhaps due to the small sample size.

Table 6.4: Does current ICS daily dose adequately manage asthma – Adult asthma patients on ICS

Adult patients with very mild asthma had their asthma managed adequately in 92.3% of patients, 94.0% with mild asthma had it managed adequately, 87.4% with moderate asthma had it managed adequately whilst only 50% of adult patients with severe asthma had it managed adequately.

Table 7.1: Was ICS dose altered since last exacerbation – Asthma patients

Of the 361 patients for whom ICS dose data were provided, information about alterations to dose were given for 356. There were an additional 35 patients who had ceased ICS since the last exacerbation so that in all 391 responses to the last question were recorded. Of these 391 patients 62.4% had not altered dose since last exacerbation, dose had been reduced for 12.8%, ceased for 9.0% and increased for 7.7%.

Table 7.1.1: Was ICS dose altered since last exacerbation – Child (age<18) Asthma patients

Table 7.1.2: Was ICS dose altered since last exacerbation – Adult (age 18+) Asthma patients

Details as per Table 7.1 – split for children (aged <18) and adults (>=18). Adults were more likely to have had their ICS dosage lowered than children (adults 14.5% CI: 10.0-19.0 children 1.9% CI: 0.0-5.8).

Table 7.2: ICS dose changes by ICS generic group

This table details the rates of ICS change since last exacerbation – by ICS generic medication. For patients on beclomethasone, 80.0% (95% CI: 54.3-100.0) have not changed ICS dosage since last exacerbation, compared with 50.0%, 64.8%, 62.1% and 69.8% of patients on budesonide, fluticasone propionate, fluticasone/salmeterol and budesonide/eformeterol respectively.

Table 7.3: Reason given when ICS dose NOT altered since last exacerbation

This table lists verbatim the reason given by a GP when ICS dose had not been altered since last exacerbation. The majority of these descriptions relate to their asthma being stable and well controlled.

Table 7.4: Reason given when ICS stopped

This table lists verbatim the reason given by a GP when ICS stopped. The majority of these descriptions relate to the patient being symptom free or only requiring the medication infrequently (in the case of influenza).

Table 7.5: Reason given when GP doesn't know if ICS dose altered

This table lists verbatim the responses given by a GP when they did not know why the ICS had been stopped.

Table 1: Blocks 80c & 82b: Response to Asthma question

form	No. GPs	Total GPs	n	Distribution %
Asthma question completed	201	201	5911	98.06
Asthma question NOT completed	54	201	117	1.94
			====	
			6028	

Table 2.1: Blocks 80c and 82b: Age distribution of respondents

Patient Age	No GPs	No encs	percent	95% LCL	95% UCL	RSE
<1	72	112	1.90	1.46	2.35	11.83
1-4	125	250	4.25	3.54	4.95	8.45
5-14	142	342	5.81	4.97	6.64	7.29
15-24	172	601	10.21	8.88	11.53	6.59
25-44	197	1330	22.59	20.96	24.22	3.66
45-64	199	1598	27.14	25.59	28.70	2.90
65-74	183	743	12.62	11.51	13.73	4.46
75+	180	911	15.47	13.53	17.42	6.37
		====				
		5887				

Table 2.2: Blocks 80c and 82b: Sex distribution of respondents

Patient Sex	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Male	200	2463	41.89	39.69	44.10	2.67
Female	200	3416	58.11	55.90	60.31	1.93
		====				
		5879				

Table 2.3: Blocks 80c and 82b: Age Specific Rate by patient sex

Patient Age	Patient Sex	No GPs	No encs	Age Specific Rate	95% LCL	95% UCL	RSE
<1	Male	49	70	63.06	53.05	73.07	8.05
<1	Female	33	41	36.94	26.93	46.95	13.74
1-4	Male	84	137	55.02	48.77	61.27	5.76
1-4	Female	81	112	44.98	38.73	51.23	7.05
5-14	Male	98	168	49.70	44.41	55.00	5.41
5-14	Female	104	170	50.30	45.00	55.59	5.34
15-24	Male	109	197	32.89	27.42	38.36	8.44
15-24	Female	147	402	67.11	61.64	72.58	4.14
25-44	Male	164	478	36.10	32.31	39.90	5.33
25-44	Female	189	846	63.90	60.10	67.69	3.01
45-64	Male	177	677	42.58	39.15	46.00	4.08
45-64	Female	193	913	57.42	54.00	60.85	3.02
65-74	Male	154	351	47.43	43.52	51.34	4.18
65-74	Female	155	389	52.57	48.66	56.48	3.77
75+	Male	146	371	41.04	37.18	44.90	4.77
75+	Female	160	533	58.96	55.10	62.82	3.32
			====				
			5855				

Table 2.4: Blocks 80c and 82b: Sex Specific Rate by patient age-group

Patient Sex	Patient Age	No GPs	No encs	Sex Specific Rate	95% LCL	95% UCL	RSE
Male	<1	49	70	2.86	2.03	3.68	14.63
Male	1-4	84	137	5.59	4.36	6.83	11.23
Male	5-14	98	168	6.86	5.62	8.10	9.19
Male	15-24	109	197	8.04	6.45	9.63	10.02
Male	25-44	164	478	19.52	17.43	21.60	5.42
Male	45-64	177	677	27.64	25.61	29.68	3.74
Male	65-74	154	351	14.33	12.74	15.92	5.62
Male	75+	146	371	15.15	13.04	17.26	7.07
Female	<1	33	41	1.20	0.77	1.63	18.11
Female	1-4	81	112	3.29	2.63	3.94	10.12
Female	5-14	104	170	4.99	4.12	5.86	8.81
Female	15-24	147	402	11.80	10.08	13.53	7.41
Female	25-44	189	846	24.84	22.84	26.84	4.08
Female	45-64	193	913	26.81	24.82	28.79	3.76
Female	65-74	155	389	11.42	10.11	12.73	5.81
Female	75+	160	533	15.65	13.31	17.99	7.59
====							
5855							

Table 3.1: Rate of Asthma

Patient has Asthma?	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	184	686	11.61	10.56	12.65	4.56
No	200	5225	88.39	87.35	89.44	0.60
====						
5911						

Table 3.1.1: Rate of Asthma - by patient age

Patient age	Patient has Asthma?	No GPs	No encs	Age specific rate	95% LCL	95% UCL	RSE
<1	Yes	2	2	1.79	0.00	4.24	69.69
<1	No	71	110	98.21	95.76	100.00	1.27
1-4	Yes	23	26	10.40	6.61	14.19	18.47
1-4	No	117	224	89.60	85.81	93.39	2.14
5-14	Yes	52	65	19.01	14.68	23.34	11.55
5-14	No	130	277	80.99	76.66	85.32	2.71
15-24	Yes	71	98	16.31	13.19	19.43	9.70
15-24	No	164	503	83.69	80.57	86.81	1.89
25-44	Yes	102	170	12.78	10.49	15.08	9.10
25-44	No	194	1160	87.22	84.92	89.51	1.33
45-64	Yes	108	149	9.32	7.97	10.68	7.38
45-64	No	199	1449	90.68	89.32	92.03	0.76
65-74	Yes	61	82	11.04	8.55	13.52	11.41
65-74	No	178	661	88.96	86.48	91.45	1.42
75+	Yes	69	93	10.21	8.04	12.37	10.75
75+	No	176	818	89.79	87.63	91.96	1.22
====							
5887							

Table 3.1.2: Rate of Asthma - by patient sex

Patient sex	Patient has Asthma?	No GPs	No encs	Sex specific rate	95% LCL	95% UCL	RSE
Male	Yes	137	273	11.08	9.71	12.46	6.30
Male	No	199	2190	88.92	87.54	90.29	0.79
Female	Yes	164	412	12.06	10.79	13.33	5.35
Female	No	200	3004	87.94	86.67	89.21	0.73
		====					
		5879					

Table 4.1: Number of current medications from list - Asthma patients

Number current meds indicated	No GPs	No encs	percent	95% LCL	95% UCL	RSE
0	44	63	9.39	6.84	11.94	13.77
1	141	331	49.33	44.77	53.89	4.69
2	120	215	32.04	27.67	36.41	6.91
3	35	46	6.86	4.51	9.20	17.36
4	13	14	2.09	0.93	3.24	28.03
5	2	2	0.30	0.00	0.71	70.35
		====				
		671				

Table 4.1.1: Number of current medications from list - Asthma patients

Number current meds indicated	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Zero	44	63	9.39	6.84	11.94	13.77
One	141	331	49.33	44.77	53.89	4.69
Two+	136	277	41.28	36.53	46.04	5.84
		====				
		671				

Table 4.1.2: Number of meds indicated in Asthma patients - by patient sex

Patient sex	Number meds indicated	No GPs	No encs	Sex specific rate	95% LCL	95% UCL	RSE
Male	Zero	28	33	12.60	8.25	16.94	17.48
Male	One	86	130	49.62	43.19	56.05	6.57
Male	Two+	74	99	37.79	31.09	44.48	8.98
Female	Zero	22	30	7.35	4.35	10.35	20.68
Female	One	108	200	49.02	43.49	54.55	5.72
Female	Two+	106	178	43.63	37.78	49.48	6.80
		====					
		670					

Table 4.1.3: Medication when only ONE indicated

ACurrent med - Short Acting Beta Agonist	Current med - Long Acting Beta Agonists	Current med - Inhaled Corticosteriods	Current med - Combination product	Current med - Leukotriens antagonist	Current med - Cromolyn	Current med - other	Frequency Count	Percent of Total Frequency
Yes	No	No	No	No	No	No	192	58.01
No	Yes	No	No	No	No	No	8	2.42
No	No	Yes	No	No	No	No	24	7.25
No	No	No	Yes	No	No	No	105	31.72
No	No	No	No	No	Yes	No	1	0.30
No	No	No	No	No	No	Yes	1	0.30
							=====	=====
							331	100.00

Table 4.1.4: Medication combinations when TWO indicated

ACurrent med - Short Acting Beta Agonist	Current med - Long Acting Beta Agonists	Current med - Inhaled Corticosteriods	Current med - Combination product	Current med - Leukotriens antagonist	Current med - Cromolyn	Current med - other	Frequency Count	Percent of Total Frequency
Yes	Yes	No	No	No	No	No	8	3.72
Yes	No	Yes	No	No	No	No	79	36.74
Yes	No	No	Yes	No	No	No	96	44.65
Yes	No	No	No	Yes	No	No	3	1.40
Yes	No	No	No	No	Yes	No	4	1.86
Yes	No	No	No	No	No	Yes	5	2.33
No	Yes	Yes	No	No	No	No	10	4.65
No	Yes	No	Yes	No	No	No	1	0.47
No	No	Yes	Yes	No	No	No	1	0.47
No	No	Yes	No	No	No	Yes	3	1.40
No	No	No	Yes	Yes	No	No	1	0.47
No	No	No	Yes	No	Yes	No	1	0.47
No	No	No	Yes	No	No	Yes	3	1.40
							=====	=====
							215	100.00

Table 4.1.5: Medication combinations when THREE indicated

Current med - Short Acting Beta Agonist	Current med - Long Acting Beta Agonists	Current med - Inhaled Corticosteroids	Current med - Combination product	Current med - Leukotriens antagonist	Current med - Cromolyn	Current med - other	Frequency Count	Percent of Total Frequency
Yes	Yes	Yes	No	No	No	No	23	50.00
Yes	Yes	No	Yes	No	No	No	5	10.87
Yes	No	Yes	Yes	No	No	No	3	6.52
Yes	No	Yes	No	Yes	No	No	1	2.17
Yes	No	Yes	No	No	Yes	No	1	2.17
Yes	No	Yes	No	No	No	Yes	2	4.35
Yes	No	No	Yes	Yes	No	No	3	6.52
Yes	No	No	Yes	No	Yes	No	1	2.17
Yes	No	No	Yes	No	No	Yes	4	8.70
No	Yes	Yes	Yes	No	No	No	1	2.17
No	Yes	No	Yes	No	No	Yes	1	2.17
No	No	No	Yes	No	Yes	Yes	1	2.17
							=====	=====
							46	100.00

Table 4.2.1: Treatment with a Short acting beta agonist - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	159	446	66.47	61.79	71.15	3.57
No	114	225	33.53	28.85	38.21	7.07
		====				
		671				

Table 4.2.2: Treatment with a Long acting beta agonist - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	48	72	10.73	7.67	13.79	14.46
No	176	599	89.27	86.21	92.33	1.74
		====				
		671				

Table 4.2.3: Treatment with an Inhaled corticosteriod - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	104	162	24.14	20.36	27.93	7.95
No	169	509	75.86	72.07	79.64	2.53
		====				
		671				

Table 4.2.4: Treatment with a Combination product - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	129	239	35.62	30.98	40.26	6.60
No	153	432	64.38	59.74	69.02	3.65
		====				
		671				

Table 4.2.5: Treatment with a Leukotriene antagonist - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	8	9	1.34	0.37	2.31	36.61
No	184	662	98.66	97.69	99.63	0.50
		====				
		671				

Table 4.2.6: Treatment with a Cromolyn - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	11	11	1.64	0.69	2.59	29.24
No	184	660	98.36	97.41	99.31	0.49
		====				
		671				

Table 4.2.7: Treatment with Other medication - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	20	26	3.87	2.08	5.67	23.45
No	183	645	96.13	94.33	97.92	0.95
		====				
		671				

Table 4.2.7: Treatment with Other medication - Asthma patients

The FREQ Procedure

Current med - other : free text

AS5M7T	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ATROVENT	1	4.17	1	4.17
IPRATROPIUM	1	4.17	2	8.33
NUEGINE	1	4.17	3	12.50
NUELIN	1	4.17	4	16.67
NUELIN SR	1	4.17	5	20.83
NUELIN, PREDNISOLONE	1	4.17	6	25.00
ORAL STEROID	2	8.33	8	33.33
PREDNISOLONE	1	4.17	9	37.50
PREDNISONE	1	4.17	10	41.67
REDIPRED	1	4.17	11	45.83
SPIRIVA	12	50.00	23	95.83
STERIODS	1	4.17	24	100.00

Frequency Missing = 2

Table 4.2.8: Treatment with 'None of the above' medications - Asthma patients

Current medication	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	44	63	9.39	6.84	11.94	13.77
No	180	608	90.61	88.06	93.16	1.43
		====				
		671				

Table 4.2.9: Treatment with ANY Inhaled corticosteroid (including combination products) - Asthma

ANY Inhaled corticosteroid	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	165	385	57.38	52.61	62.15	4.21
No	125	286	42.62	37.85	47.39	5.67
		====				
		671				

Table 4.2.9.1: Treatment with ANY Inhaled corticosteroid including combination products - Asthma

Patient age	ANY Inhaled corticosteroid	No GPs	No encs	Age specific rate	95% LCL	95% UCL	RSE
<1	Yes	0	0	.	.	.	.
<1	No	0	0	.	.	.	.
1-4	Yes	9	10	40.00	21.01	58.99	24.07
1-4	No	15	15	60.00	41.01	78.99	16.04
5-14	Yes	21	24	37.50	24.58	50.42	17.46
5-14	No	35	40	62.50	49.58	75.42	10.48
15-24	Yes	42	47	48.45	37.87	59.04	11.07
15-24	No	38	50	51.55	40.96	62.13	10.41
25-44	Yes	57	75	44.91	36.49	53.33	9.50
25-44	No	61	92	55.09	46.67	63.51	7.75
45-64	Yes	86	99	68.75	60.98	76.52	5.73
45-64	No	38	45	31.25	23.48	39.02	12.61
65-74	Yes	49	59	73.75	63.18	84.32	7.26
65-74	No	17	21	26.25	15.68	36.82	20.40
75+	Yes	55	70	75.27	66.08	84.46	6.19
75+	No	21	23	24.73	15.54	33.92	18.84
		====					
		670					

Table 4.2.9.2: Treatment with ANY Inhaled corticosteroid including combination products - Asthma

Patient sex	ANY Inhaled corticosteroid	No GPs	No encs	Sex specific rate	95% LCL	95% UCL	RSE
Male	Yes	96	138	52.67	46.04	59.30	6.38
Male	No	82	124	47.33	40.70	53.96	7.10
Female	Yes	137	247	60.54	54.58	66.50	4.99
Female	No	87	161	39.46	33.50	45.42	7.65
		====		670			

Table 4.3: Treatment with ANY reliever medication (Beta agonists or combination prod) - Asthma p

ANY reliever	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	178	579	86.29	83.23	89.35	1.80
No	59	92	13.71	10.65	16.77	11.31
		====		671		

Table 4.3.1: Treatment with ANY reliever - Asthma patients by patient sex

Patient sex	ANY reliever	No GPs	No encs	Sex specific rate	95% LCL	95% UCL	RSE
Male	Yes	123	212	80.92	75.83	86.01	3.19
Male	No	40	50	19.08	13.99	24.17	13.52
Female	Yes	157	366	89.71	86.18	93.23	1.99
Female	No	30	42	10.29	6.77	13.82	17.35
		====		670			

Table 4.4: Treatment with ANY preventer medication (ICS or combination product) - Asthma patient

ANY preventer	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	165	385	57.38	52.61	62.15	4.21
No	125	286	42.62	37.85	47.39	5.67
		====		671		

Table 4.4.1: Treatment with ANY preventer - Asthma patients by patient sex

Patient sex	ANY preventer	No GPs	No encs	Sex specific rate	95% LCL	95% UCL	RSE
Male	Yes	96	138	52.67	46.04	59.30	6.38
Male	No	82	124	47.33	40.70	53.96	7.10
Female	Yes	137	247	60.54	54.58	66.50	4.99
Female	No	87	161	39.46	33.50	45.42	7.65
		====		670			

Table 4.5: Treatment with reliever/preventer medication - Asthma patients

Reliever/ Preventer?	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Rel+Prev	161	358	53.35	48.58	58.12	4.53
Rel only	109	221	32.94	28.38	37.50	7.02
Prev only	23	27	4.02	2.42	5.63	20.22
Neither	46	65	9.69	7.13	12.24	13.36
		====				
		671				

Table 4.5.1: Treatment with reliever/preventer - Asthma patients by patient sex

Patient sex	Reliever/ Preventer?	No GPs	No encs	Sex	95% LCL	95% UCL	RSE
				specific rate			
Male	Rel+Prev	89	123	46.95	40.34	53.55	7.13
Male	Rel only	65	89	33.97	27.79	40.15	9.23
Male	Prev only	13	15	5.73	2.66	8.79	27.13
Male	Neither	30	35	13.36	9.03	17.69	16.43
Female	Rel+Prev	136	235	57.60	51.63	63.57	5.26
Female	Rel only	76	131	32.11	26.83	37.39	8.33
Female	Prev only	10	12	2.94	1.07	4.82	32.33
Female	Neither	22	30	7.35	4.35	10.35	20.68
			====				
			670				

Table 5.1: Severity of Asthma - Children with Asthma

Severity - children	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Infrequent	53	63	76.83	67.11	86.55	6.33
Frequent	15	18	21.95	12.09	31.81	22.45
Persistent	1	1	1.22	0.00	3.61	98.12
		====				
		82				

Table 5.2: Severity of Asthma - Adults with Asthma

Severity - adults	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Very Mild	100	175	34.79	29.78	39.80	7.29
Mild	105	173	34.39	29.72	39.06	6.88
Moderate	90	140	27.83	23.26	32.41	8.33
Severe	14	15	2.98	1.43	4.54	26.44
		====				
		503				

Table 5.3.1: Asthma children with severity data - Taking an ICS (alone or combination)

Child on ICS?	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	28	33	40.24	29.26	51.23	13.65
No	42	49	59.76	48.77	70.74	9.19
====						
82						

Table 5.3.2: Asthma children - Medication by severity

Severity - children	Generic ICS	No GPs	No encs	Severity specific rate	95% LCL	95% UCL	RSE
Infrequent	Beclomethasone	1	1	6.67	0.00	20.23	98.60
Infrequent	Budesonide	2	2	13.33	0.00	31.82	67.19
Infrequent	Fluticasone propionate	5	5	33.33	7.69	58.97	37.27
Infrequent	Fluticasone/Salmeterol	5	5	33.33	7.69	58.97	37.27
Infrequent	Budesonide/Eformoterol	1	1	6.67	0.00	20.23	98.60
Infrequent	Ciclesonide	1	1	6.67	0.00	20.23	98.60
Frequent	Beclomethasone	0	0	.	.	.	.
Frequent	Budesonide	1	1	7.69	0.00	23.46	99.31
Frequent	Fluticasone propionate	5	5	38.46	10.87	66.05	34.76
Frequent	Fluticasone/Salmeterol	5	6	46.15	16.66	75.65	30.96
Frequent	Budesonide/Eformoterol	1	1	7.69	0.00	23.46	99.31
Frequent	Ciclesonide	0	0	.	.	.	.
Persistent	Beclomethasone	0	0	.	.	.	.
Persistent	Budesonide	0	0	.	.	.	.
Persistent	Fluticasone propionate	0	0	.	.	.	.
Persistent	Fluticasone/Salmeterol	1	1	100.00	100.00	100.00	0.00
Persistent	Budesonide/Eformoterol	0	0	.	.	.	.
Persistent	Ciclesonide	0	0	.	.	.	.
====							
29							

Table 5.3.3: Asthma children - Severity by Medication

Generic ICS	Severity - children	No GPs	No encs	ICS specific rate	95% LCL	95% UCL	RSE
Beclomethasone	Infrequent	1	1	100.00	100.00	100.00	0.00
Beclomethasone	Frequent	0	0	.	.	.	.
Beclomethasone	Persistent	0	0	.	.	.	.
Budesonide	Infrequent	2	2	66.67	11.10	100.00	41.67
Budesonide	Frequent	1	1	33.33	0.00	88.90	83.33
Budesonide	Persistent	0	0	.	.	.	.
Fluticasone propionate	Infrequent	5	5	50.00	17.72	82.28	32.27
Fluticasone propionate	Frequent	5	5	50.00	17.72	82.28	32.27
Fluticasone propionate	Persistent	0	0	.	.	.	.
Fluticasone/Salmeterol	Infrequent	5	5	41.67	10.93	72.40	36.88
Fluticasone/Salmeterol	Frequent	5	6	50.00	18.17	81.83	31.82
Fluticasone/Salmeterol	Persistent	1	1	8.33	0.00	24.74	98.45
Budesonide/Eformoterol	Infrequent	1	1	50.00	0.00	100.00	72.17
Budesonide/Eformoterol	Frequent	1	1	50.00	0.00	100.00	72.17
Budesonide/Eformoterol	Persistent	0	0	.	.	.	.
Ciclesonide	Infrequent	1	1	100.00	100.00	100.00	0.00
Ciclesonide	Frequent	0	0	.	.	.	.
Ciclesonide	Persistent	0	0	.	.	.	.
====							
29							

Table 5.4.1: Asthma adults with severity data - Taking an ICS (alone or combination)

Adult on ICS?	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	159	342	68.4	63.29	73.51	3.78
No	83	158	31.6	26.49	36.71	8.19
====						
500						

Table 5.4.2: Asthma adults - Medication by severity

Severity - adults	Generic ICS	No GPs	No encs	Severity specific rate	95% LCL	95% UCL	RSE
Very Mild	Salbutamol	1	1	1.72	0.00	5.14	100.29
Very Mild	Beclomethasone	4	4	6.90	0.56	13.23	46.51
Very Mild	Budesonide	4	4	6.90	0.82	12.97	44.61
Very Mild	Fluticasone propionate	9	10	17.24	7.91	26.57	27.40
Very Mild	Fluticasone/Salmeterol	21	25	43.10	28.97	57.24	16.60
Very Mild	Budesonide/Eformoterol	13	14	24.14	14.09	34.18	21.07
Mild	Salbutamol	0	0	.	.	.	.
Mild	Beclomethasone	4	4	3.10	0.16	6.04	48.03
Mild	Budesonide	17	18	13.95	7.99	19.92	21.65
Mild	Fluticasone propionate	17	22	17.05	9.77	24.34	21.61
Mild	Fluticasone/Salmeterol	51	63	48.84	39.29	58.38	9.89
Mild	Budesonide/Eformoterol	22	22	17.05	10.74	23.37	18.75
Moderate	Salbutamol	0	0	.	.	.	.
Moderate	Beclomethasone	1	1	0.79	0.00	2.35	100.35
Moderate	Budesonide	6	7	5.51	1.06	9.97	40.90
Moderate	Fluticasone propionate	13	14	11.02	5.39	16.66	25.86
Moderate	Fluticasone/Salmeterol	64	90	70.87	62.75	78.98	5.80
Moderate	Budesonide/Eformoterol	13	15	11.81	5.36	18.27	27.67
Severe	Salbutamol	0	0	.	.	.	.
Severe	Beclomethasone	0	0	.	.	.	.
Severe	Budesonide	1	1	8.33	0.00	24.15	96.05
Severe	Fluticasone propionate	0	0	.	.	.	.
Severe	Fluticasone/Salmeterol	9	9	75.00	50.23	99.77	16.72
Severe	Budesonide/Eformoterol	2	2	16.67	0.00	37.99	64.76
====							
326							

Table 5.4.3: Asthma adults - Severity by Medication

Generic ICS	Severity - adults	No GPs	No encs	ICS specific rate	95% LCL	95% UCL	RSE
Salbutamol	Very Mild	1	1	100.00	100.00	100.00	0.00
Salbutamol	Mild	0	0	.	.	.	.
Salbutamol	Moderate	0	0	.	.	.	.
Salbutamol	Severe	0	0	.	.	.	.
Beclomethasone	Very Mild	4	4	44.44	11.64	77.25	37.39
Beclomethasone	Mild	4	4	44.44	11.64	77.25	37.39
Beclomethasone	Moderate	1	1	11.11	0.00	31.86	94.59
Beclomethasone	Severe	0	0	.	.	.	.
Budesonide	Very Mild	4	4	13.33	0.92	25.75	47.17
Budesonide	Mild	17	18	60.00	41.05	78.95	16.00
Budesonide	Moderate	6	7	23.33	6.31	40.36	36.96
Budesonide	Severe	1	1	3.33	0.00	9.84	98.86
Fluticasone propionate	Very Mild	9	10	21.74	8.36	35.12	31.17
Fluticasone propionate	Mild	17	22	47.83	32.53	63.12	16.20
Fluticasone propionate	Moderate	13	14	30.43	16.61	44.26	23.01
Fluticasone propionate	Severe	0	0	.	.	.	.
Fluticasone/Salmeterol	Very Mild	21	25	13.37	7.75	18.99	21.29
Fluticasone/Salmeterol	Mild	51	63	33.69	26.45	40.93	10.88
Fluticasone/Salmeterol	Moderate	64	90	48.13	39.99	56.27	8.57
Fluticasone/Salmeterol	Severe	9	9	4.81	1.77	7.86	32.04
Budesonide/Eformoterol	Very Mild	13	14	26.42	13.41	39.42	24.94
Budesonide/Eformoterol	Mild	22	22	41.51	28.93	54.09	15.35
Budesonide/Eformoterol	Moderate	13	15	28.30	15.29	41.32	23.29
Budesonide/Eformoterol	Severe	2	2	3.77	0.00	9.00	70.10

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326

Table 6.1: Listed ICS meds - CAPS generic - Patients with Asthma taking an ICS

ICS-CAPS generic	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Salbutamol	1	1	0.28	0.00	0.83	100.17
Beclomethasone	9	10	2.77	0.94	4.60	33.43
Budesonide	31	36	9.97	6.69	13.25	16.66
Fluticasone propionate	43	56	15.51	11.29	19.73	13.77
Fluticasone/Salmeterol	121	201	55.68	49.81	61.55	5.34
Budesonide/Eformoterol	46	56	15.51	11.60	19.42	12.76
Ciclesonide	1	1	0.28	0.00	0.83	100.45

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361

Table 6.1.1: Listed ICS meds - CAPS fullcode
The FREQ Procedure

S_SC1	drug1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
R50896306131	Seretide 250/25 MDI 275 mcg	59	16.34	59	16.34
R50896302132	Seretide 250/50 accuhaler 300 mcg	55	15.24	114	31.58
R50896303132	Seretide 500/50 accuhaler 550 mcg	42	11.63	156	43.21
R50902003132	Symbicort turbuhaler 206 mcg	36	9.97	192	53.19
R50621600100	Flixotide NOS	20	5.54	212	58.73
R50896305131	Seretide 125/25 MDI 150 mcg	18	4.99	230	63.71
R50202003132	Pulmicort turbuhaler 400 mcg	15	4.16	245	67.87
R50896300100	Seretide NOS	15	4.16	260	72.02
R50902004132	Symbicort turbuhaler 412 mcg	15	4.16	275	76.18
R50202000100	Pulmicort NOS	9	2.49	284	78.67
R50621601131	Flixotide inhaler 125 mcg	7	1.94	291	80.61
R50621603131	Flixotide inhaler junior 50 mcg	7	1.94	298	82.55
R50896304131	Seretide 50/25 MDI 75 mcg	7	1.94	305	84.49
R50141700200	Qvar NOS	5	1.39	310	85.87
R50896301132	Seretide 100/50 accuhaler 150 mcg	5	1.39	315	87.26
R50902000100	Symbicort NOS	5	1.39	320	88.64
R50600100100	Fluticasone propionate NOS	4	1.11	324	89.75
R50600101131	Fluticasone propionate Aerosol 125 mcg	4	1.11	328	90.86
R50621602131	Flixotide inhaler 250 mcg	4	1.11	332	91.97
R50200100100	Budesonide NOS	3	0.83	335	92.80
R50202002132	Pulmicort turbuhaler 200 mcg	3	0.83	338	93.63
R50202003131	Pulmicort inhaler 200 mcg	3	0.83	341	94.46
R50600102131	Fluticasone propionate Aerosol 250 mcg	3	0.83	344	95.29
R50200103131	Budesonide aerosol 200 mcg	2	0.55	346	95.84
R50600103132	Fluticasone propionate Powder resp 100 mcg	2	0.55	348	96.40
R50621602132	Flixotide accuhaler 500 mcg	2	0.55	350	96.95
R30321601131	Ventolin inhaler 100 mcg	1	0.28	351	97.23
R50100100100	Beclomethasone NOS	1	0.28	352	97.51
R50100101131	Beclomethasone aerosol 50 mcg	1	0.28	353	97.78
R50121600200	Becotide NOS	1	0.28	354	98.06
R50121602231	Becotide inhaler 100 mcg	1	0.28	355	98.34
R50141704231	Qvar autohaler 100 mcg	1	0.28	356	98.61
R50200106132	Budesonide powder resp 400 mcg	1	0.28	357	98.89
R50600104132	Fluticasone propionate Powder resp 250 mcg	1	0.28	358	99.17
R50600105132	Fluticasone propionate Powder resp 500 mcg	1	0.28	359	99.45
R50621601132	Flixotide accuhaler 250 mcg	1	0.28	360	99.72
R51081402131	Alvesco inhaler 160 mcg	1	0.28	361	100.00

Frequency Missing = 24

Table 6.1.2: Reported daily dose - Generic Medications for asthma management

Generic medications	n	Mean RDD	drug1 - Dose measure	Median RDD	drug1 - Dose measure	Minimum	Maximum
Fluticasone/Salmeterol	191	127.0	mcg	64	mcg	32	1000
Fluticasone propionate	47	295.1	mcg	128	mcg	32	1000
Budesonide/Eformoterol	45	102.8	mcg	64	mcg	32	600
Budesonide	31	177.0	mcg	64	mcg	32	800
Beclomethasone	9	361.8	mcg	400	mcg	64	800
Fluticasone propionate	2	2.0	other doses/NOS	2	other doses/NOS	2	2
Budesonide	1	2.0	other doses/NOS	2	other doses/NOS	2	2
Fluticasone propionate	1	2.0	patch	2	patch	2	2
Budesonide/Eformoterol	1	4.0	patch	4	patch	4	4
Budesonide/Eformoterol	1	2.0	other doses/NOS	2	other doses/NOS	2	2
Ciclesonide	1	32.0	mcg	32	mcg	32	32
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	330						

Only includes medications with COMPLETE dosage information

Table 6.2: Does current ICS daily dose adequately manage asthma - Asthma patients on ICS

ICS manage asthma?	No GPs	No encs	percent	95% LCL	95% UCL	RSE
Yes	138	289	88.38	84.45	92.30	2.25
No	20	22	6.73	3.82	9.63	21.87
Unsure	15	16	4.89	2.47	7.31	25.04
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327						

Table 6.2.1: Does current ICS daily dose adequately manage asthma - Asthma patients on ICS by generic

ICS Generic	ICS manage asthma?	No GPs	No encs	Generic specific rate	95% LCL	95% UCL	RSE
Salbutamol	Yes	1	1	100.00	100.00	100.00	0.00
Salbutamol	No	0	0	.	.	.	.
Salbutamol	Unsure	0	0	.	.	.	.
Beclomethasone	Yes	7	7	100.00	100.00	100.00	0.00
Beclomethasone	No	0	0	.	.	.	.
Beclomethasone	Unsure	0	0	.	.	.	.
Budesonide	Yes	25	29	87.88	76.72	99.03	6.43
Budesonide	No	4	4	12.12	0.97	23.28	46.58
Budesonide	Unsure	0	0	.	.	.	.
Fluticasone propionate	Yes	35	45	88.24	77.82	98.65	5.98
Fluticasone propionate	No	1	2	3.92	0.00	11.50	97.85
Fluticasone propionate	Unsure	4	4	7.84	0.22	15.47	49.19
Fluticasone/Salmeterol	Yes	102	164	88.17	83.09	93.26	2.92
Fluticasone/Salmeterol	No	13	13	6.99	3.32	10.66	26.57
Fluticasone/Salmeterol	Unsure	9	9	4.84	1.74	7.94	32.45
Budesonide/Eformoterol	Yes	37	42	87.50	78.27	96.73	5.34
Budesonide/Eformoterol	No	3	3	6.25	0.00	13.25	56.71
Budesonide/Eformoterol	Unsure	3	3	6.25	0.00	12.94	54.18
Ciclesonide	Yes	1	1	100.00	100.00	100.00	0.00
Ciclesonide	No	0	0
Ciclesonide	Unsure	0	0
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327							

Table 6.3: Does current ICS daily dose adequately manage asthma - Child Asthma patients on ICS

Severity - children	DD manage asthma?	No GPs	No encs	Severity specific rate	95% LCL	95% UCL	RSE
Infrequent	Yes	9	9	81.82	56.72	100.00	14.60
Infrequent	No	1	1	9.09	0.00	27.80	97.96
Infrequent	Unsure	1	1	9.09	0.00	27.80	97.96
Frequent	Yes	6	6	60.00	30.09	89.91	23.73
Frequent	No	2	2	20.00	0.00	47.98	66.58
Frequent	Unsure	2	2	20.00	0.00	44.42	58.12
Persistent	Yes	0	0
Persistent	No	1	1	100.00	100.00	100.00	0.00
Persistent	Unsure	0	0
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22							

Table 6.4: Does current ICS daily dose adequately manage asthma - Adult Asthma patients on ICS

Severity - children	DD manage asthma?	No GPs	No encs	Severity specific rate	95% LCL	95% UCL	RSE
Very Mild	Yes	35	48	92.31	85.34	99.27	3.82
Very Mild	No	1	1	1.92	0.00	5.58	96.25
Very Mild	Unsure	3	3	5.77	0.00	12.08	55.39
Mild	Yes	76	110	94.02	89.72	98.32	2.31
Mild	No	2	2	1.71	0.00	4.10	70.83
Mild	Unsure	5	5	4.27	0.63	7.91	43.12
Moderate	Yes	67	104	87.39	81.21	93.58	3.58
Moderate	No	10	10	8.40	3.35	13.45	30.40
Moderate	Unsure	5	5	4.20	0.47	7.93	44.90
Severe	Yes	5	5	50.00	18.65	81.35	31.73
Severe	No	5	5	50.00	18.65	81.35	31.73
Severe	Unsure	0	0	.	.	.	.
		====					
		298					

Table 7.1: Was ICS dose altered since last exacerbation - Asthma patients

ICS dose altered?	No GPs	No encs	percent	95% LCL	95% UCL	RSE	
No	117	244	62.40	56.41	68.40	4.86	
Yes - stopped	27	35	8.95	5.41	12.50	20.04	
Yes - increased	24	30	7.67	4.51	10.84	20.90	
Yes - decreased	38	50	12.79	8.70	16.87	16.18	
Yes - new ICS in last month	13	13	3.32	1.55	5.10	27.01	
Dont know	18	19	4.86	2.67	7.04	22.77	
		====					
		391					

Table 7.1.1: Was ICS dose altered since last exacerbation - Child (age <18) Asthma patients

ICS dose altered?	No GPs	No encs	percent	95% LCL	95% UCL	RSE	
No	26	34	65.38	51.07	79.70	10.84	
Yes - stopped	7	7	13.46	3.45	23.48	36.84	
Yes - increased	4	4	7.69	0.31	15.07	47.52	
Yes - decreased	1	1	1.92	0.00	5.83	100.69	
Yes - new ICS in last month	5	5	9.62	1.06	18.17	44.08	
Dont know	1	1	1.92	0.00	5.83	100.69	
		====					
		52					

Table 7.1.2: Was ICS dose altered since last exacerbation - Adult (age 18+) Asthma patients

ICS dose altered?	No GPs	No encs	percent	95% LCL	95% UCL	RSE	
No	110	210	62.13	55.89	68.37	5.08	
Yes - stopped	21	27	7.99	4.32	11.65	23.23	
Yes - increased	23	26	7.69	4.46	10.93	21.27	
Yes - decreased	38	49	14.50	10.01	18.99	15.67	
Yes - new ICS in last month	8	8	2.37	0.74	3.99	34.71	
Dont know	17	18	5.33	2.85	7.80	23.54	
		====					
		338					

Table 7.2: ICS dose changes by ICS generic grouping

Variable	N	Statistics			Lower 95%	Upper 95%
		Clusters	Percent	CL for Mean	CL for Mean	
No	244	117	62.4	56.4	68.4	
Yes - stopped	35	27	9.0	5.4	12.5	
Yes - increased	30	24	7.7	4.5	10.8	
Yes - decreased	50	38	12.8	8.7	16.9	
Yes - new ICS in last month	13	13	3.3	1.6	5.1	
Don't know	19	18	4.9	2.7	7.0	

Domain Analysis: drugen

drugen	Variable	N	Clusters	Percent	Lower 95% CL for Mean	Upper 95% CL for Mean
Beclomethasone	No	8	7	80.0	54.3	100.0
	Yes - stopped	0	0	0.0	0.0	0.0
	Yes - increased	0	0	0.0	0.0	0.0
	Yes - decreased	1	1	10.0	0.0	29.0
	Yes - new ICS in last month	1	1	10.0	0.0	29.0
	Don't know	0	0	0.0	0.0	0.0
Budesonide	No	16	15	50.0	31.4	68.6
	Yes - stopped	3	2	9.4	0.0	22.4
	Yes - increased	3	3	9.4	0.0	19.4
	Yes - decreased	6	5	18.8	3.1	34.4
	Yes - new ICS in last month	1	1	3.1	0.0	9.2
	Don't know	3	3	9.4	0.0	19.7
Fluticasone propionate	No	35	28	64.8	50.0	79.6
	Yes - stopped	7	6	13.0	2.5	23.4
	Yes - increased	1	1	1.9	0.0	5.5
	Yes - decreased	5	5	9.3	1.9	16.6
	Yes - new ICS in last month	3	3	5.6	0.0	11.6
	Don't know	3	3	5.6	0.0	11.5

Table 7.2: ICS dose changes by ICS generic grouping

The SURVEYMEANS Procedure

Domain Analysis: drugen

drugen	Variable	N	Clusters	Percent	Lower 95% CL for Mean	Upper 95% CL for Mean
Fluticasone/Salmeterol	No	121	81	62.1	54.1	70.0
	Yes - stopped	12	11	6.2	2.5	9.8
	Yes - increased	21	18	10.8	5.8	15.7
	Yes - decreased	29	22	14.9	8.7	21.0
	Yes - new ICS in last month	3	3	1.5	0.0	3.3
	Don't know	9	9	4.6	1.7	7.5
	Budesonide/Eformoterol	No	37	31	69.8	57.2	82.4
	Yes - stopped	3	3	5.7	0.0	12.0
	Yes - increased	3	3	5.7	0.0	11.9
	Yes - decreased	6	6	11.3	2.7	20.0
	Yes - new ICS in last month	2	2	3.8	0.0	9.0
	Don't know	2	2	3.8	0.0	9.0

Table 7.3: Reason given when ICS dose NOT altered since last exacerbation

The FREQ Procedure

ICS dose altered - because : free text

AS5ICST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ADEQUATE CONTROL	1	0.53	1	0.53
ASSOCIATED INFECTION	1	0.53	2	1.06
ASTHMA ON THIS DOSE UNDER	1	0.53	3	1.59
ASTHMA WELL CONTROLLED	2	1.06	5	2.65
BEEN AWAY	1	0.53	6	3.17
BETTER CONTROL	1	0.53	7	3.70
BREAKTHROUGH SYMPTOMS	1	0.53	8	4.23
CHANGED MEDICATION	1	0.53	9	4.76
CHRONIC ASTHMA	1	0.53	10	5.29
CHRONIC STABLE ASTHMA	1	0.53	11	5.82
CONDITION STABLE	2	1.06	13	6.88
CONTROL EXCELLENT	1	0.53	14	7.41
CONTROL GOOD	2	1.06	16	8.47
CONTROLLED	2	1.06	18	9.52
CONTROLLED SYMPTOMS	1	0.53	19	10.05
CONTROLLED WELL	1	0.53	20	10.58
CONTROLLED WELL/EMPHYSEMA	1	0.53	21	11.11
CURRENT DOSE INADEQUATE	1	0.53	22	11.64
CURRENT EXACERBATION	1	0.53	23	12.17
DOING WELL	1	0.53	24	12.70
DON'T KNOW	1	0.53	25	13.23
EXAC B/C OF INFECTION	1	0.53	26	13.76
EXAC. MANG. W/ EXT. VENTO	1	0.53	27	14.29
EXACERB. ON LOWER DOSE	1	0.53	28	14.81
FIRST TRIAL	1	0.53	29	15.34
FREQUENT EXACERBATION	1	0.53	30	15.87
GOOD CONTROL	8	4.23	38	20.11
GOOD CONTROL OF SYMPTOMS	3	1.59	41	21.69
GOOD DOSE	1	0.53	42	22.22
GOOD SYMPTOMS CONTROL	1	0.53	43	22.75
HAS WORSE ASTHMA IN WINTE	1	0.53	44	23.28
HAVING ACUTE ATTACK NOW	1	0.53	45	23.81
I DIDN'T SEE HER	1	0.53	46	24.34
IN STABLE DOSE	1	0.53	47	24.87
INADEQUATE SINCE THEN	1	0.53	48	25.40
INITIATION OF RX	1	0.53	49	25.93
IT CONTROLS THE ASTHMA	1	0.53	50	26.46
JUST FINISHED EXACERBATIO	2	1.06	52	27.51
JUST STARTED LAST WEEK	1	0.53	53	28.04
KEEPS WELL CONTROLLED	1	0.53	54	28.57
LAST ATTACK WITH FLU 7/05	1	0.53	55	29.10
LAST EXACERB WAS MINOR	1	0.53	56	29.63
LONG TIME SINCE EXACERBAT	1	0.53	57	30.16
LOWER DOSE - EXACERBATION	1	0.53	58	30.69
MAINTAIN CONTROL	1	0.53	59	31.22
MAINTAINED	1	0.53	60	31.75
MAX DOSE	1	0.53	61	32.28
MAXIMAL DOSE	1	0.53	62	32.80
MAXIMUM DOSE	1	0.53	63	33.33

Table 7.3: Reason given when ICS dose NOT altered since last exacerbation

The FREQ Procedure

ICS dose altered - because : free text

AS5ICST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
MILD ASTHMA	1	0.53	64	33.86
MONITERED CAREFULLY	1	0.53	65	34.39
MOSTLY CAL & SPECIALIST	1	0.53	66	34.92
N/A	3	1.59	69	36.51
NEVER HAD TO	1	0.53	70	37.04
NEWLY DIAGNOSED	1	0.53	71	37.57
NIL EXACERBATION YEARS	1	0.53	72	38.10
NIL SEVERE ATTACK	1	0.53	73	38.62
NO ATTACKS SINCE 2005	1	0.53	74	39.15
NO EXACERBATION	4	2.12	78	41.27
NO EXACERBATIONS	1	0.53	79	41.80
NO FOLLOW UP	1	0.53	80	42.33
NO NEED	3	1.59	83	43.92
NO RECENT EXACERBATION	4	2.12	87	46.03
NO RECENT EXACERBATIONS	1	0.53	88	46.56
NO RECORD OF EXACERBATION	1	0.53	89	47.09
NO SYMPTOMS	1	0.53	90	47.62
NOT INCREASE THEN	1	0.53	91	48.15
NOT NEEDED	4	2.12	95	50.26
NOT ON ICS	2	1.06	97	51.32
NOT ON IT	1	0.53	98	51.85
NOT REQUIERD	1	0.53	99	52.38
NOT REQUIRED	3	1.59	102	53.97
NOT TAKING	1	0.53	103	54.50
NOT USED	1	0.53	104	55.03
NOT USUALLY MY PATIENT	1	0.53	105	55.56
NOT YET RESOLVED	1	0.53	106	56.08
NOW 3-4 YRS AGO	1	0.53	107	56.61
ON MAXIMAL DOSE	1	0.53	108	57.14
ONGOING SYMPTOMS	1	0.53	109	57.67
ORAL STERIODS	1	0.53	110	58.20
PATIENT IS STABLE	1	0.53	111	58.73
PATIENT STABLE	1	0.53	112	59.26
PATIENT STABLE ON IT	1	0.53	113	59.79
POOR COMPLIANCE WITH DRUG	1	0.53	114	60.32
PREGNANT EXACERBATION	1	0.53	115	60.85
PREV DECREASE CAUS FLARES	1	0.53	116	61.38
PREV RESPIRATORY FAILURE	1	0.53	117	61.90
PREVIOUSLY NEED LOW LEVEL	1	0.53	118	62.43
REDUCING CAUSES SOB	1	0.53	119	62.96
REINTRODUCED TODAY	1	0.53	120	63.49
RELATIVELY MILD	1	0.53	121	64.02
REQ'D TO CONTROL SYMPTOMS	1	0.53	122	64.55
RESP. INFECTION ONLY	1	0.53	123	65.08
SELF MANAGING	1	0.53	124	65.61
SENSITISATION PROGRAM	1	0.53	125	66.14
SETTLED	1	0.53	126	66.67
SEVERE ASTHMA/COPD MAX TX	1	0.53	127	67.20
STABLE	19	10.05	146	77.25

Table 7.3: Reason given when ICS dose NOT altered since last exacerbation

The FREQ Procedure

ICS dose altered - because : free text

AS5ICST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
STABLE & SYMPTOM FREE	1	0.53	147	77.78
STABLE ASTHMA	1	0.53	148	78.31
STABLE ASTHMA FOR 2 YRS	1	0.53	149	78.84
STABLE LONG TERM	1	0.53	150	79.37
STABLE ON CURRENT DOSAGE	1	0.53	151	79.89
STABLE ON CURRENT DOSE	3	1.59	154	81.48
STABLE ON THIS	1	0.53	155	82.01
STABLE ON THIS DOSE	1	0.53	156	82.54
STABLE, NOT ON ICS	1	0.53	157	83.07
STERIODS ADDED	1	0.53	158	83.60
SYMPTOMS STABLE	1	0.53	159	84.13
SYMPTOMS WELL CONTROLLED	1	0.53	160	84.66
SYMPTOMS WOULD WORSEN	1	0.53	161	85.19
THIS DOSAGE IS REQUIRED	1	0.53	162	85.71
THIS IS REQUIRED DOSE	1	0.53	163	86.24
THIS IS THE BEST DOSE	1	0.53	164	86.77
TRIED < DOSE, > SYMPTOMS	1	0.53	165	87.30
UNKNOWN PATIENT	1	0.53	166	87.83
UNSURE	1	0.53	167	88.36
URTI	1	0.53	168	88.89
USE APRIL TO NOV ONLY	1	0.53	169	89.42
USE ONLY FOR EXACERBATION	1	0.53	170	89.95
USE SERETIDE FOR EXAC.	1	0.53	171	90.48
USES DRUG SHORT TERM	1	0.53	172	91.01
USUALLY WELL CONTROLLED	1	0.53	173	91.53
V SEVERE ASTHMA IN PAST	1	0.53	174	92.06
WAS ON DOPAGON	1	0.53	175	92.59
WAS ON FLIXOLIDE	1	0.53	176	93.12
WAS ON MAINTENANCE	1	0.53	177	93.65
WELL	1	0.53	178	94.18
WELL CONTROLLED	8	4.23	186	98.41
WELL UNDER CONTROL	1	0.53	187	98.94
WINTER TIME	1	0.53	188	99.47
WORKING WELL	1	0.53	189	100.00

Frequency Missing = 55

Table 7.4: Reason given when ICS STOPPED

The FREQ Procedure

ICS dose altered - because : free text

AS5ICST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
ATTACKS INFREQUENT	1	2.94	1	2.94
DID NOT HAVE SYMPTOMS	1	2.94	2	5.88
GET ASTHMA WITH INFECTION	1	2.94	3	8.82
INFREQ, EPISODIC W/HAYFE	1	2.94	4	11.76
INFREQUENT MILD ASTHMA	1	2.94	5	14.71
IS USED EPISODICALLY	1	2.94	6	17.65
NIL ASTHMA SINCE	1	2.94	7	20.59
NO ATTACK	1	2.94	8	23.53
NO SYMPTOMS WITH URTI	1	2.94	9	26.47
NOT GETTING ASTHMA ATTACK	1	2.94	10	29.41
NOT NEEDED	2	5.88	12	35.29
NOT REQUIRED	1	2.94	13	38.24
ONLY NEEDED WHEN SICK	1	2.94	14	41.18
PREGNANCY	2	5.88	16	47.06
RESOLVED	1	2.94	17	50.00
SETTLED	1	2.94	18	52.94
SHE WAS FINE	1	2.94	19	55.88
SIDE EFFECTS	1	2.94	20	58.82
SINGULAIR WORKS	1	2.94	21	61.76
STABLE ON USUAL DOSE	1	2.94	22	64.71
SYMPTOM FREE	1	2.94	23	67.65
SYMPTOMS GONE	1	2.94	24	70.59
SYMPTOMS RESOLVED	1	2.94	25	73.53
USE ONLY INTERMITTENTLY	1	2.94	26	76.47
USES WHEN NECESSARY	1	2.94	27	79.41
USES WHENEVER NECESSARY	3	8.82	30	88.24
WAS BETTER	1	2.94	31	91.18
WAS OK	1	2.94	32	94.12
WELL AFTER INFLUENZA	1	2.94	33	97.06
WELL POST INFLUENZA	1	2.94	34	100.00

Frequency Missing = 1

Table 7.5: Reason given when GP does not know if ICS dose altered

The FREQ Procedure

ICS dose altered - because : free text

AS5ICST	Frequency	Percent	Cumulative Frequency	Cumulative Percent
COMPLIANCE ERRATIC	1	7.14	1	7.14
HAVE HER OWN GP MANAGE	1	7.14	2	14.29
LAST EXACERBATION UNKNOWN	1	7.14	3	21.43
NEVER SEEN FOR ASTHMA	1	7.14	4	28.57
NEW PATIENT	1	7.14	5	35.71
NO EXACERBATION	1	7.14	6	42.86
NO RECENT EXACERBATION	1	7.14	7	50.00
NOT SEEN WITH EXACERBATIO	1	7.14	8	57.14
NOT STARTED YET	1	7.14	9	64.29
PATIENT CANNOT RECALL	1	7.14	10	71.43
PATIENT TAKES IT PRN	1	7.14	11	78.57
POOR COMPLIANCE	1	7.14	12	85.71
SO LONG AGO	1	7.14	13	92.86
WASN'T ON BEFORE	1	7.14	14	100.00

Frequency Missing = 5

Severity of asthma reference card

Children

Severity*	Common features
Infrequent episodic	Episodes 6-8 weeks or more apart and from 1 to 2 days up to 1-2 weeks duration; usually triggered by URTI or environmental allergen; attacks generally not severe; symptoms rare between attacks; normal examination and lung function except when symptomatic.
Frequent episodic	Attacks <6 weeks apart; attacks more troublesome; minimal symptoms such as exercise induces wheeze between attacks; normal examination and lung function except when symptomatic; commonly troubled through winter months only.
Persistent	Symptoms most days; nocturnal asthma > 1/wk with sleep disturbance; early morning chest tightness; exercise intolerance and spontaneous wheeze; daily use of beta2 antagonist; abnormal lung function; history of emergency room visits or hospital admissions.

Adults

Severity*	Common features
Very mild	Episodic
Mild	Occasional symptoms (up to 2/wk); exacerbations >6-8 weeks apart; normal FEV ₁ when asymptomatic
Moderate	Symptoms most days; exacerbations <6-8 weeks apart which affect day-time activity and sleep; exacerbations last several days; occasional emergency room visit.
Severe	Persistent; limited activity level; nocturnal symptoms > 1/wk; frequent emergency room visits and hospital admission in past year; FEV ₁ may be significantly reduced between exacerbations.

* The severity classes are adapted from the NAC Asthma Management Handbook 1998 edition, updated March 2002

PLEASE READ CAREFULLY

The shaded section of the following forms asks questions about **INHALED CORTICOSTEROID USE FOR ASTHMA**.
 You may tear out this page as a guide to completing the following section of forms.

INSTRUCTIONS

Ask **ALL** of the **next 30 PATIENTS** the following questions in the order in which the patients are seen.
 Please **DO NOT** select patients to suit the topic being investigated.

Presence of asthma

Ask each patient if they **currently suffer from asthma**.
 If **No** asthma - no further questions

Current medications used

If **'Yes'**, please use the tick boxes to indicate whether any of the listed types of **asthma medication** are being used by this patient for their asthma management.
 If **none** of these medications are currently being used for asthma management you may **end the questions here**.

Inhaled Corticosteroid Use

If the patient is using an **Inhaled Corticosteroid (ICS)** please write the **daily regimen** including **name, form, strength, dose and frequency** - for example :-

Name & Form	Strength	Dose	Freq
Fluticasone (inhaler)	250mcg	1 puff	bd

Severity of asthma

Please indicate the **current severity** of this patient's asthma. Use the **'Severity of asthma reference card'** included in your research pack to estimate the severity level and tick the appropriate box to indicate the response.

Adequacy of management

In your **clinical opinion** is the current daily dose of ICS **adequately** managing the patient's asthma?

Dose change since resolution of last exacerbation

Please indicate whether or not the **dose of Inhaled Corticosteroid** has been **changed since the most recent exacerbation of asthma was resolved**. Where required, please indicate a **reason** for the change, for example:-

Was ICS dose altered since resolution of last exacerbation?

- No - because _____
- Yes - Stopped ICS because _____
- Yes - Increased ICS using **ICS alone / combination product** (please circle)
- Yes - Decreased ICS using **ICS alone / combination product** (please circle)
- Yes - ICS new in last month
- Don't know because _____

<p>Does this patient suffer from Asthma?</p> <p><input type="checkbox"/> Yes →</p> <p><input type="checkbox"/> No</p> <p>↓</p> <p>End questions</p>	<p>If 'Yes' current medication is</p> <p><input type="checkbox"/> Short Acting Beta Agonist</p> <p><input type="checkbox"/> Long Acting Beta Agonist</p> <p><input type="checkbox"/> Inhaled Corticosteroid</p> <p><input type="checkbox"/> Combination product</p> <p><input type="checkbox"/> Leukotriene antagonist</p> <p><input type="checkbox"/> Cromolyn</p> <p><input type="checkbox"/> Other _____</p> <p><input type="checkbox"/> None of above - END</p>	<p>Currently, how severe is the patient's asthma? (See cards)</p> <table border="0"> <tr> <td>Child</td> <td>Adult</td> </tr> <tr> <td><input type="checkbox"/> Infrequent</td> <td><input type="checkbox"/> Very mild</td> </tr> <tr> <td><input type="checkbox"/> Frequent</td> <td><input type="checkbox"/> Mild</td> </tr> <tr> <td><input type="checkbox"/> Persistent</td> <td><input type="checkbox"/> Moderate</td> </tr> <tr> <td></td> <td><input type="checkbox"/> Severe</td> </tr> </table> <p>BL80C</p>	Child	Adult	<input type="checkbox"/> Infrequent	<input type="checkbox"/> Very mild	<input type="checkbox"/> Frequent	<input type="checkbox"/> Mild	<input type="checkbox"/> Persistent	<input type="checkbox"/> Moderate		<input type="checkbox"/> Severe	<p>If the patient is taking an Inhaled Corticosteroid (ICS) what is the current daily dose?</p> <table border="1"> <thead> <tr> <th>Name & Form</th> <th>Strength</th> <th>Dose</th> <th>Freq</th> </tr> </thead> <tbody> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </tbody> </table> <p>Is the current daily dose adequately managing the asthma? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure</p>	Name & Form	Strength	Dose	Freq	_____	_____	_____	_____	<p>Was ICS dose altered since resolution of last exacerbation?</p> <ul style="list-style-type: none"> <input type="checkbox"/> No - because _____ <input type="checkbox"/> Yes - Stopped ICS because _____ <input type="checkbox"/> Yes - Increased ICS using ICS alone / combination product (please circle) <input type="checkbox"/> Yes - Decreased ICS using ICS alone / combination product (please circle) <input type="checkbox"/> Yes - ICS new in last month <input type="checkbox"/> Don't know because _____
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_____	_____	_____	_____																			