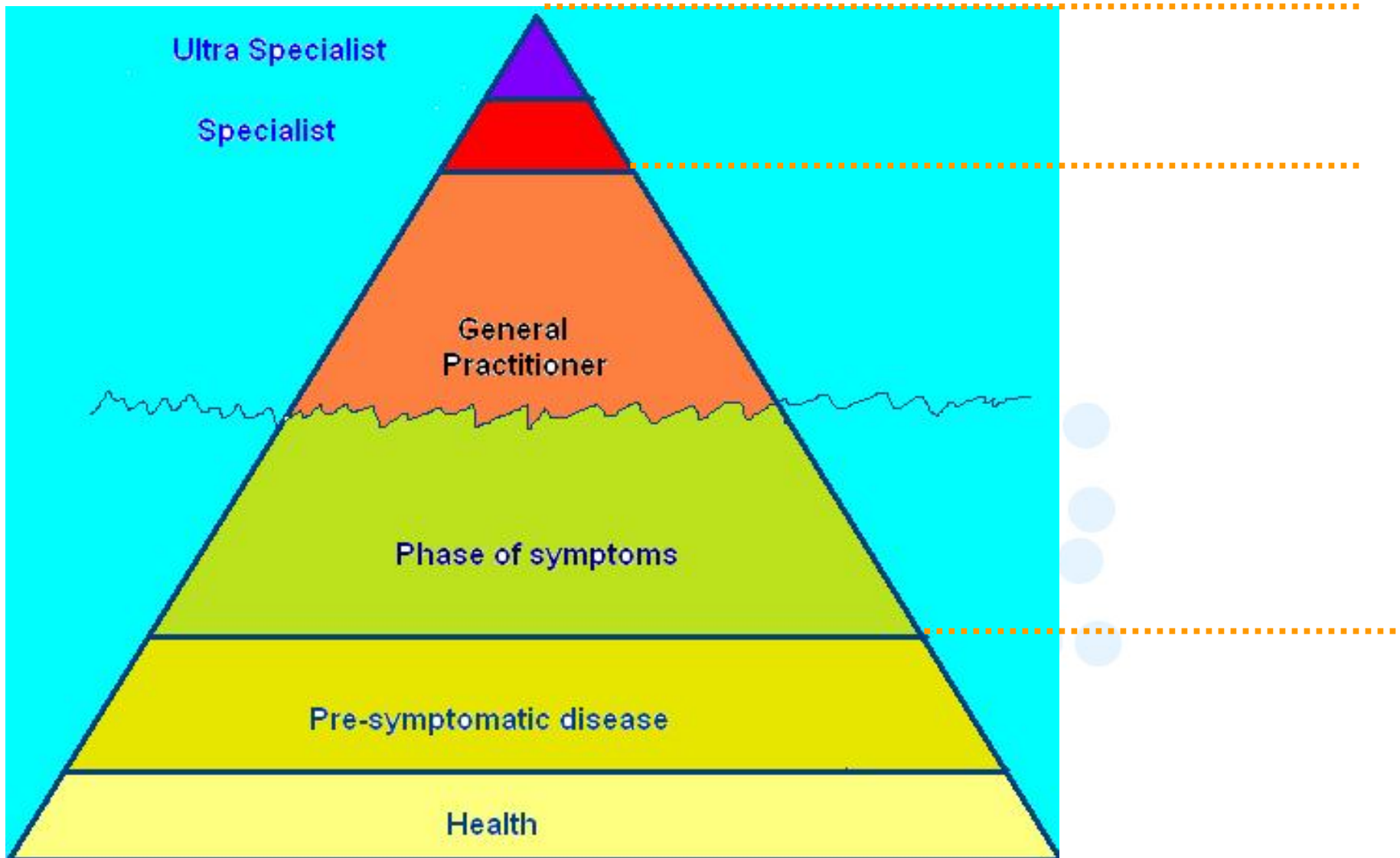


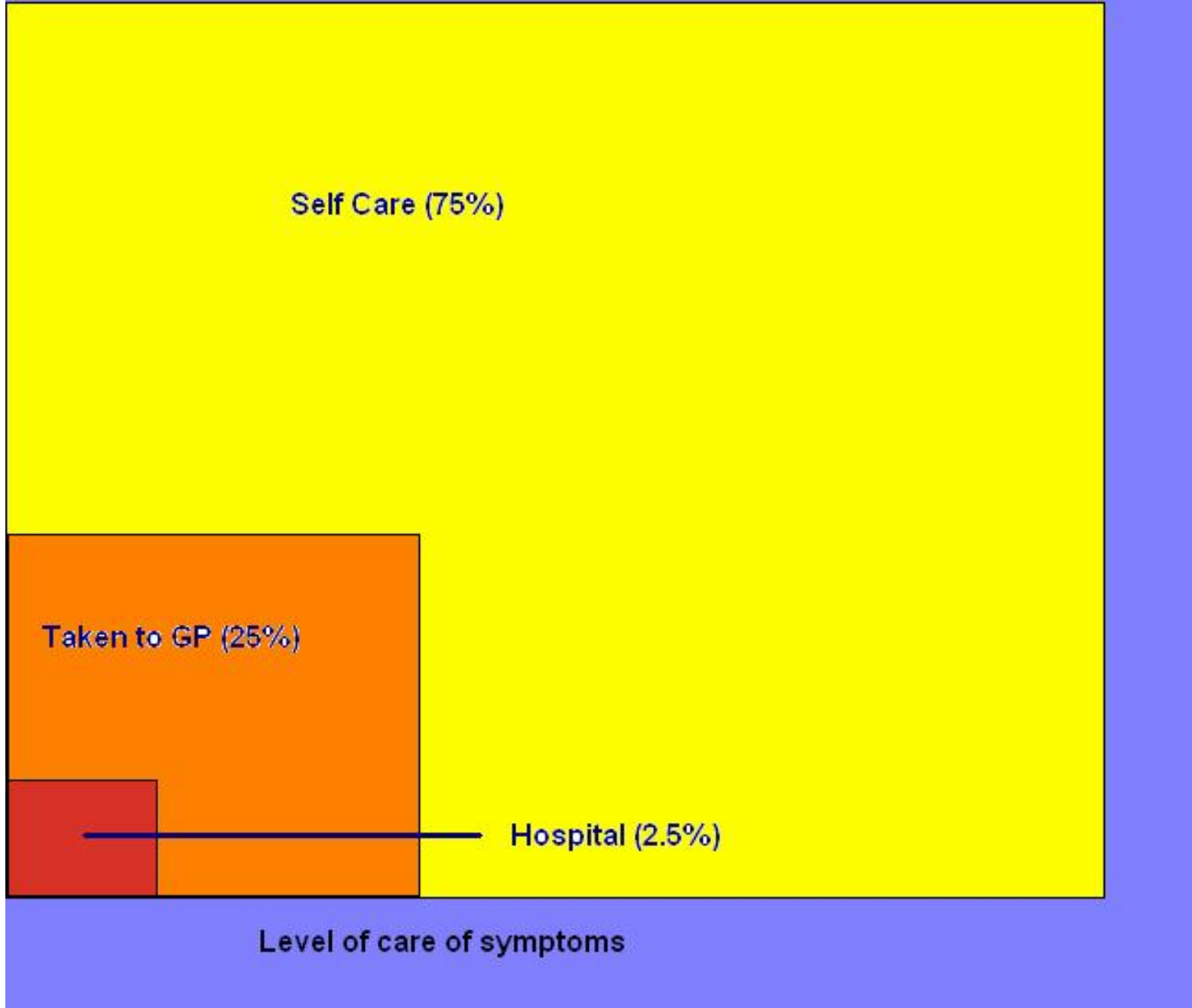


The role and synergies with general practice and primary care

April 2007

Siân Williams





80% of UK GP consultations are for long term conditions

Respiratory conditions are the most common reason for consultation

Third of UK population consults GP at least once a year for respiratory problems

National Organisations



The College of
Family Physicians
of Canada

Le Collège des
médecins de famille
du Canada



P.L. SHUPYK NATIONAL MEDICAL ACADEMY OF
POST-GRADUATE EDUCATION

semfyc.es

sociedad española de medicina de familia y comunitaria



The Royal New Zealand
College of General Practitioners

Primacy of primary care

Qualities

- personal
- accessible
- continuing
- comprehensive

Requirements

- effective
- efficient
- Innovative
- progressive

Respiratory groups

- Australia, National Asthma Council (Australia)
- Bangladesh, National Primary Care Respiratory Group (NPCRG Bangladesh)
- Belgium Primary Care Respiratory Group
- Canada, Family Physician Airways Group of Canada (FPAGC)
- Cyprus, Cyprus Respiratory Group
- Denmark, Danish Respiratory Group
- Ireland, Irish Respiratory Group
- Italy, Societa' Italiana di Medicina Generale (SIMG)
- New Zealand, New Zealand Primary Care Respiratory Group
- Norway, Lunge i Praksis (LiP)
- Pakistan, The Allergy and Asthma Clinics and The Institute of Asthma and Allergy
- Saudi Arabia, Saudi Respiratory Asthma Group (SRAG)
- Spain, Grupo Respiratorio (GRAP)
- Sweden, Swedish Respiratory Group in Primary Care
- The Netherlands, CAHAG
- UK, General Practice Airways Group (GPIAG)

IPCRG Respiratory groups: associates

- 
- Afghanistan
 - Brazil
 - Chile
 - France
 - Germany, Respiratory Group
 - Greece, Cretan Guidelines Review Group (Greece)
 - India
 - Iran
 - Nigeria
 - Poland
 - Portugal (GEADR - Grupo de Estudos da Asma e Doenças Respiratórias)
 - Romania
 - Sri Lanka
 - Thailand
 - Turkey
 - United Arab Emirates
 - United States
 - Ukraine
 - EFA
 - NRTC

Shared decision-making in long-term care



Albert G. Mulley, MD, MPP

Unwarranted and warranted sources of practice variation

Unwarranted

- Variable access to resources and expertise
- Insufficient research
- Unfounded enthusiasm
- Parochial perspectives
- Faulty interpretation
- Poor information flow
- Poor communication
- Role confusion

↓ **Knowledge-Based**

Warranted

- Clinical differences among patients
- Variable risk attitudes
- Variable preferences among health outcomes
- Variable willingness to make time trade-offs
- Variable tolerance for decision responsibility

↑ **Patient-Centered**

Professional skills/competences decision quality

Knowledge-Based

- Manage all relevant knowledge and expertise
 - Access and critically appraise evidence
 - Access and selectively use expertise of colleagues
 - Access and use guidelines and other support when appropriate
 - Acknowledge uncertainty
 - Recognize uniqueness
- Avoid over-learning and selective inattention; maintain context
- Communicate effectively

Patient-Centered

- Tailor evidence for individuals
- Frame problems from the patient's perspective
- Communicate options and probabilities of outcomes
- Help patients to accurately imagine alternative futures
- Elicit and accommodate patients' informed preferences
- Elicit motivation when needed
- Build patients' confidence and affirm their competence
- Use patients' experiences as a source of knowledge

Systems-Minded – highest and best use

Influencing others: what's needed?

| | |
|---------------------|------------------|
| Endorsement | Education |
| Publications | Promotion |

Endorsement

- Respected third party support for messages

Publications

- Independent peer-reviewed publications

Primary Care Respiratory Journal

Medline listed

Primary care authors

Primary care editorial board

Primary care audience



Education

- Work on beliefs and behaviours
- Use networking, peer learning and support
- Recognise the different IDENTITIES people have
 - What do you consider to be legitimate work [Checkland BJGP Jan 2007]?

Exchange good practice



International Primary Care
IPCRG
Respiratory Group

HOME | MAIN IPCRG SITE | CONTACT US

Treating Childhood Asthma

An international primary care response to Professor Ulrich Wahn's contention that there be discrete guidelines for managing children with asthma, and that there be more specific research on children

"Sharing ideas, thoughts and experience"

| DISCUSSION GUIDE | THE FULL SET OF QUESTIONS |
|---|---|
| Our discussion guide, developed by an international primary care panel, has elicited some fascinating information and could be used as the structure for a local meeting, or as an interviewing guide ▶ | The complete set of questions sent to the international panel ▶ |
| | THE RESPONSES Some questions produced very practical responses. These are arranged by country and by subject <ul style="list-style-type: none"> ▶ Responses by country ▶ Responses by subject |

OUR NEWSLETTER
DISCUSSION FORUM
USEFUL LINKS
QUESTIONS (PDF)

Acknowledge variation in resource availability

OPINION

IPCRG OPINION 2

Theophylline

Theophylline, usually administered orally, is an effective bronchodilator which may be used in the management of both asthma and chronic obstructive pulmonary disease (COPD). It is widely available, and less expensive than many other bronchodilators. However, theophylline can be a difficult drug to use safely. It has serious side-effects, a narrow therapeutic window, and requires vigilant monitoring of plasma levels to avoid the risk of toxicity. Guidelines for both asthma and COPD, therefore, recommend that oral theophylline be reserved for patients with difficult-to-control symptoms in spite of standard asthma therapy, or patients who are unable to use or do not have access to inhaled therapy. Sub-therapeutic dosing can be clinically useful in atopic asthma, attenuating airway inflammation and with fewer side-effects than therapeutic doses. Theophylline may have an anti-inflammatory action useful in the prevention of asthma. However, these preventive properties are regarded as considerably less effective than those of inhaled corticosteroids (ICS).

MODE OF ACTION

Theophylline's exact mode of action remains unclear. It is a methylxanthine, similar to caffeine, and works by inducing relaxation in the bronchial smooth muscle. This may be due to a non-selective inhibition of phosphodiesterase, resulting in increased intracellular cyclic adenosine monophosphate (cAMP) levels. Theophylline does not have an instant effect. It takes some time for theophylline to build up in the blood stream, where it must

stay at a constant level to have a lasting effect. So when to take the drug and how much of the drug to take are matters that must be strictly monitored. There are many factors that influence blood levels of theophylline. It is cleared from the circulation by the liver. Clearance varies significantly between individuals and is affected by a number of other drugs (for example, diltiazem, verapamil, frusemide, ciprofloxacin, cimetidine, allopurinol, azithromycin, carbamazepine, clarithromycin, erythromycin, diuretics, lithium, oral contraceptives, phenytoin, prednisone, propranolol, nifedipine, efedrine, epinephrine, phenylephrine and phenylpropranolamine.) Theophylline's half life is reduced by smoking. As advice on smoking cessation is a central part of the management of both asthma and COPD it is important to be aware that theophylline doses may need to be reduced as patients succeed in reducing their tobacco consumption. Patients with alcoholism or any other type of liver disease or liver irritation will require very close monitoring and may not be good candidates for its use.

SIDE-EFFECTS AND TOXICITY

Side-effects of theophylline include: tachycardia, palpitations, nausea and other gastro-intestinal disturbances, headache, CNS stimulation, insomnia, arrhythmias and convulsions. Signs of toxicity include vomiting (which may be severe and intractable), agitation, restlessness, dilated pupils, sinus tachycardia, and hyperglycaemia. More serious effects are haematemesis, convulsions, and

supraventricular and ventricular arrhythmias. There is a risk of hypokalaemia, which may be potentiated by combined use with high-dose beta₂ agonists.

PRESCRIBING DATA

Most sustained-release preparations should be given twice-daily (although some preparations are once-daily, administered in the evening). Sustained-release theophylline tablets or capsules should not be chewed because too much medicine may be released at once, causing toxic effects. It is recommended to 'start low – go slow', with regular review of serum levels and slow titration of dose to give steady state serum levels of 10-12 mg/L¹ (Box 1). Sometimes, up to 20mg/L may be tolerated. Serum levels should be taken nine to ten hours after ingestion. Particular caution needs to be taken with the use of theophylline in elderly patients because of differences in pharmacokinetics, the increased likelihood of co-morbidities and the use of other medications. Careful note should be made of drug interactions (see mode of action).

BOX 1

| RECOMMENDED TITRATION OF THEOPHYLLINE DOSE FOR TWICE-DAILY PREPARATIONS ¹ | |
|--|---|
| WEEK 1 | 200mg every 12 hours for 1 week. |
| WEEK 2 | If serum levels are low increase to 300mg every 12 hours for 1 week. |
| WEEK 3 and beyond | If serum levels are low increase by 100mg every 12 hours each week till therapeutic range achieved. |

Spirometry

Acknowledge knowledge levels, need for technical support

Spirometry is the gold standard for the diagnosis, assessment and monitoring of COPD,¹ and may assist the diagnosis of asthma.² It can also contribute to the diagnosis of other causes of dyspnoea.

Which Spirometer?

Ideally, a spirometer should have a graphical display to allow technical errors to be detected. It should be able to produce a hard copy.

Regular calibration is essential. Some spirometers need to be calibrated before each session using a calibration syringe. Others hold their calibration between annual services. Check manufacturers' instructions.

Three types of spirometer are commonly used in primary care:

- Small, hand held meters which provide digital readings. These are the cheapest option and small enough to fit into a medical bag, but the lack of graphs can make it difficult to judge when a blow is complete. Predicted charts and a calculator will be needed to interpret the results.
- Portable meters with integral printers. These are more expensive but they will undertake all the calculations, including reversibility. Small displays of the volume time graph help monitor the blow and the printout includes a flow volume loop.
- Systems designed to work with a computer which will display a graph, calculate predicted and reversibility and provide a print-out. Integral memories allow data to be recorded outside the practice and uploaded when convenient.

How is spirometry performed?

Starting with full inspiration the patient blows out as hard and fast as possible until the lungs are 'empty'.

Sit or stand? Sitting is safer for the elderly and infirm, though standing may give better readings.

Three satisfactory blows should be performed:

- The blow should continue until a volume plateau is reached. This may take more than 12 seconds in people with severe COPD (in whom a slow, unforced manoeuvre may give a more accurate assessment of vital capacity).
- FVC and FEV₁ readings should be within 5% or 100ml
- The expiratory volume-time graph should be smooth and free from irregularities.

Reversibility tests

Reversibility tests involve measuring spirometry before and after treatment and can help distinguish between COPD and asthma (but note that spirometry may be normal in stable asthma).

Preparation of the patient:

The patient's condition should be stable (ie at least 6 weeks since an exacerbation).

Before a bronchodilator reversibility test the patient should stop their short acting β_2 agonist for 6 hours, long acting bronchodilator for 12 hours and theophyllines for 24 hours.

Procedure

- Perform baseline spirometry
- **Bronchodilator reversibility:** Administer bronchodilator (at least 400mcg salbutamol, e.g. 5mg by nebuliser). Perform post bronchodilator spirometry after 15 minutes.
- **Steroid reversibility:** A steroid trial (30 - 40mg daily for 2 weeks or 1,000 μ g of ICS for three months) may be appropriate. An increase in FEV₁ of >12% and >200mls is significant. An increase >20% and >400mls suggests a diagnosis of asthma.

Training

Poorly performed spirometry produces misleading results. Training for operators, with regular updates and quality audits are fundamental.

Training courses

- Spirometry manufacturers can provide training in the use of their equipment. Some run spirometry courses.
- Most COPD training courses include training in spirometry.

References:

1. Global Strategy for the diagnosis, management and prevention of chronic obstructive pulmonary disease. GOLD Workshop summary; updated 2003. Available from <http://www.goldcopd.com>
2. Global Strategy for Asthma Management and Prevention GINA Workshop Report; updated November 2003. Available on <http://ginasthma.com/>

The “so what” factor

Users' guide to asthma control tools
 Date of preparation May 2006

KEY

| | | | | |
|-----------|---|-------------|-------------|--------------------|
| Very poor | If this criterion is important, not good enough | Good enough | Recommended | Highly recommended |
| | | | | |

| CRITERIA / TOOL | Technically sound (reliable and valid) | Clinically meaningful | Practical for use in primary care consultations | Flexible administration eg postal, telephone, self completion, electronic | Suitable for different age ranges: children and adults | Available in different languages (1) |
|------------------------------|--|-----------------------|---|---|--|--------------------------------------|
| RCP 3 Questions | | | | | | |
| RCP 21 Questions | | | | | | |
| Rules of two TM | | | | | | |
| The 30 Second Asthma Test TM | | | | | | |
| ACQ | | | | | | |
| ACT | | | | | | |

Note 1
 Availability in other languages does not necessarily mean that it is validated for use in that language. Check if the translation has been validated using appropriate methodology. Also, there may be cultural adaptations that are needed.

Description

RCP 3 Questions <http://www.brit-thoracic.org.uk/asthma-management-tools.html>. 3 items (not lung function) each with Y/N response; assessment of control over last week/month. 30 seconds to complete. Only validated for use in UK English. Only used in adults. Very good face validity. Has been used as paper self-completion, telephone and electronic.

RCP 21 Questions Fuller and newer version of the RCP 3 Questions. More items so interpretation is better than RCP 3 questions but validation less clear. Used by the GPSAG research unit in Aberdeen as its approved asthma template. Only validated for use in UK English. Only used in adults. Very good face validity. Has been used as paper self-completion, telephone and electronic.

Rules of two TM The "Rules of Two"™ is a registered service mark of the Baylor Health Care System and the tool is used widely in the USA <http://www.baylorforhealth.com/medicalexpress/asthma/asthmaprograms.htm#Ro2>. 3 items (not lung function) each with Y/N response; assesses control over different periods for various items. 30 seconds to complete. Reliability and validity problematic. No responsiveness measurement. Patient paper completion. Adult only. US English only.

The 30 Second Asthma Test TM Used and recommended in asthma guidelines in Canada for 5 years: <http://www.asthmaincanada.com/>. Adapted from the Canadian Consensus Report, updated 2005. 6 items (not lung function) each with Y/N response and scored as poor control if Y to ≥1 item; assesses control over different periods for various items. 30 seconds to complete. Not validated. There is also a children's version. Patient completion on paper or website www.asthmaincanada.com. English and Canadian French.

ACQ Designed for research and regarded by researchers as the international gold standard. 6 items (not lung function) each with 7 possible responses; control level calculated from mean scores; assesses control over past 1 week. See <http://www.goltech.co.uk/Asthma1.htm#acq>. Require permission from author Professor Elizabeth Juniper: juniper@goltech.co.uk; +44 (0) 1243 572124. Good validation: meets standards for responsiveness. Validated for paper and phone patient completion. 2-3 minutes to complete. Cannot be analysed by "eyeballing". Validated for age 16 and over. Children's version in development - abstract accepted for IPCRG conference June 2005. 60+ languages. Validated in all languages. Cultural adaptations made. Should be completed prior to the consultation.

ACT 5 items (not lung function) each with 5 possible responses; control level calculated from adding score for 5 items; assesses control over past 4 weeks. <http://www.asthmacontroltest.com/>. Good validation. 2-3 minutes to complete. 80+ languages but only validated for use in some languages eg Spanish. Patient completion. Validated for paper completion although also available for completion on website: www.asthmacontroltest.com. Age 12 and over. A child ACT for ages 4-11 years is in development. Should be completed prior to the consultation.

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Promotion

- So what's in it for me?

Shared decision-making

- Patients AND general practitioners need help making good decisions
- Work with their beliefs, behaviours, identity
- Test messages for BOTH to achieve change

IPCRG and the GA²LEN campaign

- GPs want GP-written and validated information
- Dr Dermot Ryan representing IPCRG at planning and writing group
- Dissemination by e-alert, PCRJ, website, post (subject to resources)
- Collaboration: Wonca
- Conference 28-31 May 2008, Seville