Scottish Reduction in Antibiotic Prescribing (ScRAP) Programme
Foreword

We are pleased to present this new resource, the Scottish Reduction of Antibiotic Prescribing (ScRAP) Programme, which provides materials for Antimicrobial Management and Medicines Management Teams to support primary care prescribers to reduce unnecessary use of antibiotics.

Antimicrobial resistance and the lack of new antibiotics has been described by the World Health Organisation as one of the top 3 threats to humankind and was described recently by Dame Sally Davies, Chief Medical Officer at the Department of Health, as ‘as big a threat as terrorism’. In Scotland, the Scottish Antimicrobial Prescribing Group (SAPG) was established in 2008 to lead the national antimicrobial stewardship agenda to address antimicrobial resistance and through working with local Antimicrobial Management Teams and clinicians across primary and secondary care has greatly improved prescribing of antibiotics and contributed to the current reduced rates of Healthcare Associated Infections (HAI).

Primary care prescribers have a good track record in changing their practice on ‘what to prescribe’ to reduce use of broad spectrum antibiotics and use recommended narrow spectrum antibiotics to manage common infections. However with prescribing rates for antibiotics on the increase and evidence suggesting that antibiotics are still prescribed unnecessarily for self-limiting upper respiratory tract infections it is time to shift focus onto ‘whether to prescribe’ in a bid to reduce total antibiotic use.

In 2012, a National Therapeutic Indicator for Total Use of Antibiotics was introduced to stimulate improvement in prescribing practice. In 2013, this was designated an HAI level 3 Quality Indicator to support the Clostridium difficile infection HEAT target.
To support NHS boards to meet the target level for this Quality Indicator, SAPG in collaboration with NHS Education for Scotland, secured HAI funding to work with the Scottish Prescribing Advisers Association to develop and test a blended learning resource which we have named the ScRAP Programme. ScRAP builds on the important role of Prescribing Advisers in influencing change in prescribing behaviours. The health improvement approach of the programme will enable whole medical practices to reflect on their individual and collective prescribing of antibiotics, and effect improvement together whilst also providing participants with a valuable Continuing Professional Development opportunity.

We commend the ScRAP programme to you; please encourage GP Practices (including non-medical and out-of-hours prescribers) to sign up and use the resource to facilitate reducing unnecessary antibiotic prescribing within your Board.

Professor Dilip Nathwani  
Chairman of SAPG

Dr Jacqueline Sneddon  
Project Lead SAPG
Scottish Reduction in Antimicrobial Prescribing (ScRAP) Programme

This programme has been developed by NHS Education for Scotland in conjunction with the Scottish Antimicrobial Prescribing Group (SAPG).

What is it?
The programme is presented as an educational toolkit to help prescribers to reduce unnecessary prescribing of antibiotics, and also to support NHS Boards in delivering the level 3 HEAT target on antibiotic volume described previously.

It follows a quality improvement methodology, and is designed as an ‘off the shelf’ educational resource for use by those engaging with primary care prescribers, both medical and non-medical. It uses a blended learning approach that will help engage and meet a variety of personal learning styles.

For whom?
This national programme is designed to support and assist Antimicrobial Management Teams (AMT}s) and prescribing support teams within NHS Boards. It is intended to be used to engage with primary care prescribers to facilitate structured academic detailing activity and reflection, focusing on antimicrobial prescribing in respiratory tract infections.

When?
It is anticipated that the ScRAP Programme will be used in the arena of either General Medical Services Quality & Outcomes Framework Medicines Management Actions (i.e. ‘practice visits’) or as part of additional activity when engaging with prescribers (such as GP appraisal or audit).

How?
The resource is designed to be easily integrated as a useful and valuable CPD activity for prescribers to help meet the requirements of their professional bodies. It also follows a quality improvement pathway, requiring prescribers to consider what changes if any, they will make as a practice and how/when that will be reviewed by means of clinical audit (using the GP audit tool).
Format
This programme contains a full description and link to the various resources available to facilitators (usually Health Board AMT / prescribing teams) and recipients of the programme (primary care prescribers).

The programme explores antimicrobial prescribing using a number of elements including:

- recommended pre-event online learning
- reflection on Prescribing Information System for Scotland (PRISMS) data for the practice/individual prescriber
- a facilitated 90 minute structured learning event supported by a pre-recorded DVD presentation.

The DVD supports the facilitator by providing all the key clinical evidence around the need to reduce unnecessary prescribing of antimicrobials. The presentation with voice-over ensures consistency in delivery of the key messages, and allows the facilitator to engage the prescribers in local discussion on the evidence presented.

Importantly, the programme introduces strategies for changing patient interaction through exploration of consultation models and the use of alternative strategies, such as delayed prescriptions. Within the 90 minute event, time is allocated for the facilitator to provide local antimicrobial usage data and facilitate discussion and agreement on how to reduce unnecessary antimicrobial prescribing.
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- Overcoming resistance to change

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- Managing complications – myth busters
- Managing complications – targeted use of antibiotics
- Managing complications – alternative strategies: delayed prescriptions
- Event closure - CPD certificate & evaluation form
Introduction

Supporting improvement in antibiotic prescribing in primary care: Reducing total antibiotic use through a national quality indicator
Background

The Scottish Antimicrobial Prescribing Group (SAPG) was established in 2008 with the primary objective of coordinating and delivering a national framework for antimicrobial stewardship to enhance the quality of antimicrobial prescribing and management in Scotland.

The initial priority was to drive reduction in the use of broad spectrum antibiotics that increase the risk of *Clostridium difficile* infection (CDI). Within NHS Boards, Antimicrobial Management Teams (AMTs) have developed prescribing guidelines for first line empirical treatment of infections commonly encountered in primary care based on an evidence-based template approved by SAPG. Initiatives to change prescribing behaviour through encouraging compliance with local prescribing guidelines have been successful: 400,000 (47.5%) fewer items for high risk antibiotics (cephalosporins, fluoroquinolones and co-amoxiclav) have been dispensed in Scotland since 2008.

SAPG recognise the importance of reducing total antibiotic use through reducing unnecessary prescribing as a key aspect of antimicrobial stewardship. The key area for reduction in antibiotic use is in the management of self-limiting respiratory tract infections (RTI) as a quarter of the population will visit their GP with a RTI each year, accounting for 60% of all antibiotic prescriptions [1].

A reduction in the unnecessary use of antibiotics will yield the following benefits:

- Reduction in the development of antimicrobial resistance at population and individual level
- Reduction in CDI
- Reduction in avoidable harm through fewer adverse effects
- Reduction in the medicalisation of self limiting conditions and the associated GP workload
- Reduction of NHS prescribing costs.
Development of a quality indicator for total antibiotic use

In August 2011, the HAI Taskforce National Advisory Group supported a proposal from SAPG to improve the quality of antibiotic prescribing in Scotland measured through the establishment of a national standard for total antibiotic use in primary care. After discussion, total use of antibiotics was introduced in April 2012 as one of ten National Therapeutic Indicators (NTIs) [2] developed by the Scottish Government Prescribing Efficiency and Productivity work stream.

National data shows that in 2011 the use of systemic antibiotics in primary care was 3.4% higher (162,000 prescription items) than in 2010, following a decreasing trend in the period 2008-2010. As a result of this recent increase SAPG believes the introduction of a national quality indicator for total antibiotic use may provide an additional stimulus to reduce unnecessary prescribing. This will consequently reduce the pressure for selection of antimicrobial resistance and other forms of ecological damage associated with antibiotic use. This work is further supported by the Audit Scotland Report on Prescribing in General Practice published in January 2013, which tasked boards to work with GP practices to help reduce the unnecessary use of antibiotics [3]. In response to SAPG advice, a new national quality indicator for reduction of total antibiotic prescribing was identified as a key HAI Level 3 indicator for 2013-14 in the CMO CNO letter issued on 1st May 2013 [4].

The national quality indicator will build on the methodology developed for NTIs as this approach has been accepted by NHS Board Medicines Management Advisers and clinicians. This approach establishes a ‘best in class’ level, set at the 25\textsuperscript{th} percentile of all GP practices in Scotland and acknowledges there is variation in the use of antibiotics across practices. To achieve the quality indicator, practices must either achieve an equivalent or lower prescribing rate to that of the Scottish 25\textsuperscript{th} percentile, or achieve an acceptable minimum reduction towards that level. The acceptable minimum level of reduction used in all of the NTIs is defined as a reduction in the number of items/1000 patients/day equivalent to one fifth of the national inter-quartile range.

The quality indicator introduced in 2013-14 is that antibiotic use, expressed in items/1000/day in at least 50\% of practices in each NHS Board will be at or below the 25\textsuperscript{th} percentile of Scottish practices or will have made an acceptable move toward that level.

An illustration of how the new quality indicator target level relates to current national prescribing rates and individual board rates is shown in Figure 1 below.
National data on total antibiotic use

Using prescribing data for January to March 2013 for the level for the 25th percentile of all GP practices in Scotland was 1.8 items/1000/day (Figure 1).

Therefore ≤ 1.8 items/1000/day is regarded as the ‘best in class’ level and becomes the threshold at which practices meet the target level for the quality indicator.

Practices can also meet the target level by making an acceptable move towards this threshold defined as a reduction equivalent to one fifth of the national inter-quartile range. The national inter-quartile range for the baseline period is 0.69 items/1000/day (upper quartile – lower quartile).

The 50% of GP practices currently within the inter-quartile range would need to make a reduction in total antibiotic prescribing of at least 0.14 items/1000/day. This translates into a reduction of around 6 to 7% or a reduction of around one antibiotic item in every 16 items prescribed in 2013.

For high prescribing practices (above the upper quartile threshold of 2.49 items/1000/day), the minimum acceptable reduction of one fifth of inter-quartile range represents a reduction of approximately 4% or a reduction of one antibiotic item in every 25 items prescribed in 2013.
Board level data on total antibiotic use

Some NHS Boards have a greater percentage of their GP practices than others in the lowest prescribing quartile, i.e. practices already at or below the threshold for the target level. Therefore the number of practices in each board which will require to reduce their antibiotic prescribing varies markedly between boards. (see Table 1)

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Number (%) of practices within Scotland 25&lt;sup&gt;th&lt;/sup&gt; percentile</th>
<th>Number of practices which require to reduce antibiotic prescribing to meet NHS Board target of ≥50% practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>AYRSHIRE &amp; ARRAN</td>
<td>4 (7%)</td>
<td>24</td>
</tr>
<tr>
<td>BORDERS</td>
<td>7 (30%)</td>
<td>5</td>
</tr>
<tr>
<td>DUMFRIES &amp; GALLOWAY</td>
<td>5 (15%)</td>
<td>12</td>
</tr>
<tr>
<td>FIFE</td>
<td>15 (26%)</td>
<td>14</td>
</tr>
<tr>
<td>FORTH VALLEY</td>
<td>12 (21%)</td>
<td>17</td>
</tr>
<tr>
<td>GRAMPIAN</td>
<td>24 (30%)</td>
<td>16</td>
</tr>
<tr>
<td>GREATER GLASGOW &amp; CLYDE</td>
<td>52 (20%)</td>
<td>79</td>
</tr>
<tr>
<td>HIGHLAND</td>
<td>33 (33%)</td>
<td>17</td>
</tr>
<tr>
<td>LANARKSHIRE</td>
<td>12 (12%)</td>
<td>37</td>
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<tr>
<td>LOTHIAN</td>
<td>56 (45%)</td>
<td>6</td>
</tr>
<tr>
<td>ORKNEY</td>
<td>6 (60%)</td>
<td>-</td>
</tr>
<tr>
<td>SHETLAND</td>
<td>4 (40%)</td>
<td>1</td>
</tr>
<tr>
<td>TAYSIDE</td>
<td>16 (24%)</td>
<td>18</td>
</tr>
<tr>
<td>WESTERN ISLES</td>
<td>1 (10%)</td>
<td>4</td>
</tr>
<tr>
<td><strong>SCOTLAND</strong></td>
<td><strong>247 (25%)</strong></td>
<td><strong>247</strong></td>
</tr>
</tbody>
</table>

Table 1. Number of practices in each NHS Board in the lowest 25% of practices and number of practices which require to reduce prescribing to reach target level (January – March 2013)
The new measure was introduced as a level 3 indicator for NHS Boards from June 2013 (using January – March 2013 data as the baseline) and replaces the current primary care CDI HEAT target indicator (seasonal variation of fluoroquinolones ≤5%) which was introduced in 2009. Boards are encouraged to continue to monitor seasonal variation of quinolone prescribing and this will continue to be reported at a national level as part of the Primary Care Indicators Report.

References


   http://www.sehd.scot.nhs.uk/pca/PCA2012(M)08.pdf

   http://www.auditscotland.gov.uk/docs/health/2013/nr_130124_gp_prescribing.pdf

Overcoming resistance to change

Any change can be challenging to implement. In order to help facilitators assess and plan for their sessions with prescribers, the following model may be helpful:

- *Gleicher’s Formula for Change* developed by Kathie Dannemiller.

**Gleicher’s Formula for Change**

\[ D \times V \times F > R \]

- \( D \) = dissatisfaction with how things are
- \( V \) = vision of what is possible
- \( F \) = first concrete steps that can be taken towards that vision
- \( R \) = resistance to change

\( D, V \) and \( F \) are the three factors that are required to drive change and their product must be greater than the resistance encountered. If any one of these is low or absent it is unlikely that change will be implemented.

NHS Education for Scotland can provide education and training on facilitation skills for those who require it. Please contact NHS Education for Scotland (Pharmacy) by email:

**pharmacy@nes.scot.nhs.uk**

**Reference**

Key reference sources for facilitators

In addition to the online modules, the following evidence base is provided for the facilitator in preparation for delivering the educational event. All references quoted on the DVD are detailed later in this resource. They are also available as a PDF containing electronic links on the NES Pharmacy website (www.nes.scot.nhs.uk/pharmacy)
<table>
<thead>
<tr>
<th>Publication</th>
<th>eLink</th>
<th>Rationale for inclusion</th>
</tr>
</thead>
</table>
| National Prescribing Centre  
The management of common infections in primary care  
● Contains some basic information on the topic |
| Respiratory tract infections – antibiotic prescribing  
Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care  
● Heavily referenced in DVD therefore considered vital facilitator pre-reading |
| Van der Velden et al. Effectiveness of physician-targeted interventions to improve antibiotic use for respiratory tract infections.  
● Provides background to ScRAP philosophy |
| Butler et al. Effectiveness of multifaceted educational programme to reduce antibiotic dispensing in primary care: practice based randomised controlled trial.  
● Provides background to ScRAP philosophy |
<table>
<thead>
<tr>
<th>Publication</th>
<th>eLink</th>
<th>Rationale for inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Antimicrobial Prescribing Group</td>
<td><a href="http://www.scottishmedicines.org.uk/SAPG/Scottish_Antimicrobial_Prescribing_Group__SAPG">http://www.scottishmedicines.org.uk/SAPG/Scottish_Antimicrobial_Prescribing_Group__SAPG</a>_</td>
<td>General awareness of activity and resources available via the SAPG website</td>
</tr>
<tr>
<td>NHS Education for Scotland. Scottish online appraisal resource 2013</td>
<td><a href="http://www.scottishappraisal.scot.nhs.uk/scottish-gp-appraisal-toolkit-(online-forms)/domain-2/what-is-qia/audit.aspx">http://www.scottishappraisal.scot.nhs.uk/scottish-gp-appraisal-toolkit-(online-forms)/domain-2/what-is-qia/audit.aspx</a></td>
<td>For accessing recommended GP audit format</td>
</tr>
</tbody>
</table>

This information is also available as a PDF containing electronic links on the NES Pharmacy website: [www.nes.scot.nhs.uk/pharmacy](http://www.nes.scot.nhs.uk/pharmacy) and looking under Educational Resources/by topic/infectious diseases/antibiotics or [http://ow.ly/pDXzh](http://ow.ly/pDXzh)
Pre-event online learning

To allow participating practices/prescribers to gain maximum benefit from the Programme, the following online modules should be recommended for completion before the learning event.
While not compulsory, these modules allow those with a particular interest or learning need to update their knowledge of antimicrobial prescribing in advance of the facilitated event.

These modules are free of charge but require registration with the host sites to complete the activity.

The following information can also be found as an electronic version, for insertion into emails, to encourage prescribers to undertake the online learning prior to the event.

www.nes.scot.nhs.uk/pharmacy
and look under Educational Resources/by topic/infectious diseases/antibiotics
or http://ow.ly/pDXzh

1. Antibiotic Prescribing for Today’s Practitioners: NES online case studies
This uses LEARNPRO software as a method of providing interactive case studies / scenarios for the learner to consider. Case studies 1, 5, 6 and 7 are community based patient cases and especially relevant.

Course Guidance Information
All learners should complete the introductory unit called “Antibiotic Prescribing for Today’s Practitioners” first and then select any of the following recommended vignettes.

- Sore throat in a 15 year old in a community setting
- Earache in a young child in a community setting
- Sticky eyes in a young child in a community setting
- Suspected UTI in a 46 year old woman in a community setting

2. Managing Acute Respiratory Tract Infections: Royal College of General Practitioners (RCGP) online learning
This is a very good educational module available on the RGCP CPD website.
Facilitators guide to the DVD
Introduction

The learning event is intended to be approximately 90 minutes in length. This is flexible, however, depending on the level of interaction by the prescribers in the practice, or more practically, how long can be dedicated to the session. The event could be delivered in 60 minutes, however pilot events demonstrated that sessions overran or discussion was curtailed before agreement on prescribing improvement strategies were agreed. Therefore it is recommended to allocate 90 minutes per event if possible.

It is important to note that future strategies for reducing unnecessary prescribing of antimicrobials must be agreed by the whole practice together, and so usefulness and success of the Programme requires all relevant members of the practice to attend the event together. The DVD presentation is intended to support the event facilitator. Please remember it is the facilitator who leads the event, NOT the DVD. The DVD presentation with voice-over delivers the clinical content thus allowing the facilitator to focus on engaging local discussion and future strategies with prescribers.

This section of the guide provides the facilitator with guidance on how to open the session and a description of the DVD presentation.
DVD content description

Opening the session

It is recommended that the facilitator introduces the event covering the points given below:

- Welcome
- Aim of ScRAP Programme and the event
- Brief outline of nature of event (e.g. DVD presentation interspersed with opportunity for discussion, reflection on own prescribing data, examples of patient consultations to explore, opportunity to agree what (if any) changes the practice will make together, and how that will be measured (e.g. audit) and finally, an encouragement to maximise use of the event as a valuable CPD opportunity to record.

- The DVD presentation runs for a total of 25 minutes (without discussion time) and contains eight short sections:
  - Humorous patient consultation video (as icebreaker)
  - Resisting resistance – presenting the evidence
  - Resisting resistance – presenting local prescribing data
  - Patient expectations – examining a typical patient consultation
  - Managing complications – myth busters
  - Managing complications – targeted use of antibiotics
  - Managing complications – alternative strategies; delayed prescriptions
  - Event exit
Each section follows the same format:

- Section introduced by facilitator
- DVD commentary explores the topic then pauses with set of discussion points
- DVD commentary signposts to facilitator to engage prescribers in discussion about points raised

The content of each of the eight brief sections is described as follows:

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<thead>
<tr>
<th>Traffic Light</th>
<th>Description</th>
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<tbody>
<tr>
<td>Green</td>
<td>What is included?</td>
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<tr>
<td>Yellow</td>
<td>Intended learning points for prescribers</td>
</tr>
<tr>
<td>Red</td>
<td>Key points for facilitators to include in discussion</td>
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</table>

The DVD provides an opening generic side to allow the facilitator to introduce the event.

It is recommended that the facilitator pauses the DVD presentation for discussion, then restarts when the group are ready to move onto the next section of the programme.
Humorous patient consultation - icebreaker

What is included?
This section contains a video clip of a “worst case scenario” patient consultation, done in a light hearted exaggerated way to begin the session.

A signpost is given to the facilitator to begin a discussion with prescribers on what they think drives high antibiotic use.

Intended learning points for prescribers
This section is intended primarily for the facilitator to set the scene, and introduce the interactive nature of the event through early engagement with prescribers’ views. This may include:

- Lack of acknowledgement of resistance as an issue
- Patient expectations
- Prescriber concerns over causing unintended harm by not prescribing an antibiotic

Initial discussion should allow the facilitator to determine what elements of the programme are more likely to have an impact on that particular group to deliver a change in antibiotic prescribing behaviours.
Key points for facilitators to consider

Prior to commencing the DVD presentation, facilitators should consider their own introduction to delegates. This is important to establish the relationship and subsequent interaction between the facilitator and the supporting DVD, i.e. the facilitator is the host and the DVD is the support!

The icebreaker video clip was developed by a GP from NHS Highland, Dr Gail Haddock, who is also a member of SAPG. It is intended as a humorous look at a patient consultation where the patient is putting pressure on the GP to prescribe her an antibiotic!

As a guide 10 minutes could be spent in this section.
Resisting resistance – the evidence

What is included?
A series of evidence-based quotes relating to antibiotic usage and resistance at a population and individual patient level.

Intended learning points for prescribers
Affirming high antibiotic use causes higher resistance.
Affirming impact of antibiotic use on individual resistance.
Public awareness of the resistance problem is higher than healthcare professionals may realise.

Key points for facilitators to consider
This section is intended to focus on linking antibiotic usage to increased resistance and include the raised awareness of this issue in the public eye.
The evidence around impact of antibiotic use (on individual resistance) is often a more powerful lever for change with prescribers who are not engaged by the population aspect of resistance.
As a guide, this will be a shorter engagement with prescribers i.e. 5 minutes

It is recommended that the facilitator has knowledge of the evidence base associated with this section.

Publication and eLink

European Centre for Disease Prevention & Control. 
_Surveillance of antimicrobial consumption in Europe, 2010_

Scottish Medicines Consortium / Scottish Antimicrobial Prescribing Group. 
_Report on Antimicrobial Use and Resistance in Humans in 2011_

Goossens et al. 
Outpatient antibiotic use in Europe and association with resistance: a cross-national database study. 
_Lancet 2005; 365: 579-587_

Costelloe et al. 
Effect of antibiotic prescribing in primary care on antimicrobial resistance in individual patients: systematic review and meta-analysis 
_BMJ 2010:340 c2090_
[http://www.bmj.com/content/340/bmj.c2096](http://www.bmj.com/content/340/bmj.c2096)
Resisting resistance – presenting local prescribing data

What is included?
Commentary introduces national data on antibiotic usage.
Signpost to hand over to facilitator to discuss local PRISMS data.

Intended learning points for prescribers
Increased awareness of how antibiotic usage in their practice compares with peers both locally and nationally.

This section is often of most interest to prescribers and important in facilitating a change in prescribing behaviour. An adequate proportion of the event should be allocated to this element of the discussion.
Key points for facilitators to consider

Academic detailing is a form of non-commercial-based educational outreach. The process involves face-to-face education of prescribers by trained health care professionals, typically pharmacists, physicians, or nurses. The goal of academic detailing is to change prescribing of targeted drugs to be consistent with medical evidence, support patient safety, to be cost-effective medication choices and overall, to improve patient care.

Academic detailing is the key component of this section. Prescribing support teams have used this technique to facilitate change in medicines usage across a wide range of topics.

A specific format of data provision is not provided. It is recommended that facilitators use prescribing data in a format that has proved successful in encouraging change in individual circumstances.

Facilitators who are unfamiliar with discussing this aspect with prescribers may wish to liaise with local prescribing teams in advance of the event, to arrange for this data to be made available to the prescribers during the event.
Ensure the focus of discussion is around antibiotic volume. A brief discussion around antibiotic choice such as broad spectrum antibiotics that increase the risk of Clostridium difficile infection may be included to demonstrate and provide assurance that change is achievable in this therapeutic area.

In addition to local prescribing information format, facilitators may wish to review the pre-built options available on the PRISMS.

The choice of providing individual prescriber level data will be at the discretion of the facilitator and dependant on their previous experience with the prescriber group. It is more important to address the issue of antibiotic prescribing as a combined practice and agree subsequent change collectively.

Experience from the pilot phase of the ScRAP programme identified that prescribers often question the impact of local out-of-hours prescribing on prescribing data. It is recommended that out-of-hours prescribers are also engaged in this programme.

This section provides the opportunity for the facilitator to highlight any local prescribing guidelines relating to antimicrobial use that may be relevant.
It is recommended that the facilitator has knowledge of the evidence base associated with this section.

**Publication and eLink**

Soumerai SB, Avorn J. Principles of educational outreach (‘academic detailing’) to improve clinical decision making.

*JAMA.* 1990;263(4):549

Patient expectations – examining a typical patient consultation

What is included?
Commentary quotes evidence to show that healthcare professionals’ understanding of patient expectation may not be as accurate as we think.

Video of an exemplar patient consultation for suspected Respiratory Tract Infection.

Intended learning points for prescribers
Re-affirming the usefulness of ICE (ideas, concerns & expectations) technique of patient consultation.

Focus of consultation was not on the prescriber arguing for or against prescribing antibiotics but on addressing the patient’s ideas, concerns and expectations.

Psychologists suggest it is not helpful to engage in discussions on issues of antibiotic resistance with patients when choosing not to prescribe antibiotics; rather it is more important to address patient concerns and provide reassurance, including potential follow up.
Key points for facilitators to consider

It is important to note that this exemplar patient consultation was developed by GP advisers in NHS Education for Scotland who specialise in consultation skills training for GPs. It is not intended to be a perfect example but a typical consultation which focuses on properly examining and reassuring the patient.

As with all pre-planned consultations, it could be criticised for being idealistic. However, note that in this case, it has been developed by practising GPs for prescribers to discuss the positive elements and any less helpful aspects.

Discussion could include the following:

- What would happen if one prescriber in the practice is not signed up to decreasing unnecessary antibiotic prescribing?
- Would the patient(s) in your practice know which GP(s) are more likely to prescribe antibiotics? Would they consult them next if you refused to prescribe antibiotics?
- How can practice(s) avoid this?

It is important to begin discussions on importance of a whole practice approach and try to reach agreement on this.
It is recommended that the facilitator has knowledge of the evidence base associated with this section.

**Publication and eLink**

van Duijn et al.
Illness behaviour and antibiotic prescription in patients with respiratory tract symptoms

Matthys et al.
Patients’ ideas, concerns, and expectations (ICE) in general practice: impact on prescribing
*Br J Gen Pract.* 2009 January 1; 59(558): 29–36
[http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2605528/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2605528/)
Managing complications – myth busters

What is included?
The DVD presentation quotes evidence around the Numbers Needed to Treat (NNT) to prevent complications associated with simple RTIs. Increased awareness of the Numbers Needed to Harm (NNH) associated with antibiotic treatment is also included.

Intended learning points for prescribers
Re-affirming understanding of limited value of using antibiotics to prevent complications.

Key points for facilitators to consider
In this section the DVD makes reference to a number of studies which limit the place in therapy of antibiotics in respiratory tract infections. It is highly recommended that the facilitator is familiar with the reference sources in order to facilitate a useful discussion at the end of this section.
It is recommended that the facilitator has knowledge of the evidence base associated with this section.

Publication and eLink

Spinks et al. Antibiotics for sore throat. 
*Cochrane database of systematic review issue 4 2006*  

*Cochrane database of systematic reviews issue 1 2013*  
http://summaries.cochrane.org/CD000219/antibiotics-for-middle-ear-infection-acute-otitis-media-in-children

Young et al. Antibiotics for adults with clinically diagnosed acute rhinosinusitis- a meta analysis of individual patient care.  
*Lancet* 2008; 371:908-914  

Ahovuo-Saloranta et al. Antibiotics for acute maxillary sinusitis.  
*Cochrane database of systematic reviews issue 2 2008*  
http://summaries.cochrane.org/CD000243/antibiotics-for-acute-maxillary-sinusitis

Fahey et al. Antibiotics for acute bronchitis.  
*Cochrane database of systematic reviews issue 4 2004*  
Peterson et al. Protective effects of antibiotics.  
*BMJ* 2007;335:982-984  

Howie et al. Antibiotics, sore throat and rheumatic fever.  
*BJGP* 1985; 35 : 223-224  
[http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1960005/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1960005/)

Taylor et al. Antibiotics, sore throat and acute nephritis.  
*BJGP* 1983; 33 : 783-786  
[http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1971091/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1971091/)
Managing complications – targeted use of antibiotics

**What is included?**
DVD presentation discusses where the evidence base determines how & where the use of antibiotics is justified in treating RTIs.

**Intended learning points for prescribers**
Reaffirm valued place in therapy of antibiotics and importance of prescribing therapeutic doses for correct duration.

**Key points for facilitators to consider**
This section is key to reassure the delegate that the session is not intended to discourage antibiotic use completely. It is important to acknowledge the important place antibiotics have in therapy, particularly in addressing concerns over unintended harm.
It is recommended that the facilitator has a knowledge of the evidence base associated with this section.

**Publication and eLink**


*Clinical Guideline 69*

[http://guidance.nice.org.uk/CG69](http://guidance.nice.org.uk/CG69)


*Lancet 2006; 368: 1429-1435.*

Managing complications – alternative strategies: delayed prescriptions

What is included?
The evidence base for and against delayed prescriptions.
Commentary on the duration of symptoms for RTIs.

Intended learning points for prescribers
Raise awareness of the option of using delayed prescriptions as a strategy to deal with managing risk and patient expectation.
Discuss other means of managing potential/perceived complications e.g. return appointments within 3 days etc.

Key points for facilitators to consider
The use of information prescriptions is not included. Facilitators may wish to include these as a supplementary discussion point.
A pragmatic discussion on the limitations and practicalities of implementing delayed prescriptions is valuable and of interest to many prescribers. The practice of prescribers agrees to trial the use of delayed prescriptions for a set period then review.
Facilitators may also wish to consider the role of other stakeholders such as community pharmacists and the role they can play in supporting the reduction in unnecessary use of antibiotics.
It is recommended that the facilitator has knowledge of the evidence base associated with this section.

Spurling et al. Delayed antibiotics for respiratory infections. 
*Cochrane Database of Systematic Reviews 2013, Issue 4. Cochrane 2013*

*Clinical Guideline 69*
[http://guidance.nice.org.uk/CG69](http://guidance.nice.org.uk/CG69)

Gwaltney JM. Rhinovirus infections in an industrial population. II. Characteristics of illness and antibody response.
*JAMA 1967;202:494–498.*
Event closure

What is included?
Signpost for facilitator led discussion to:

- Determine strategy for moving forward
- Develop an action plan and practice agreement - including suggestion of carrying out a GP Audit after 3-6 months?
- Complete an evaluation form at end of event (optional)
- Discuss potential of event to populate and record prescribers’ CPD records.

Intended learning points for prescribers
Consolidate learning points and identify key actions for change.

Broker agreement between all prescribers to make the agreed changes.

Discuss how and when these changes will be reviewed/audited.
Key points for facilitators to consider
This section should be considered vital in finishing off a successful learning event.

Agreement to change
Facilitators are strongly recommended to seek commitment from all relevant members of the practice or group to a practice wide strategy or agreement for change. This is an extremely important element in successful quality improvement programmes.

Evaluation
Adequate time should be allocated to allow the delegates to complete their individual evaluation of the event using a standard CPD form and/or any local evaluation your health board wishes to use (samples are provided in the pdf of electronic resources at http://ow.ly/pDXzh and can be printed off for prescribers to use).
Follow up

Facilitators may wish to use one of the suggested options for follow up to determine if the ScRAP Programme has had the desired effect of reducing unnecessary antibiotic prescribing:

- Using PRISMS data to link to key performance indicators associated with GMS contract prescribing actions as part of Medicines Management Section of GMS Scotland QoF contract

- Local prescribing incentive scheme

- GP audit and appraisal

- Scottish Antimicrobial Prescribing Group (SAPG) Audit Tool for Primary Care Management of Infection (http://ow.ly/pDY5q)

- Agreement from prescribers to follow up with an electronic survey (available from NES) at a later date, to evaluate impact of the ScRAP Programme
And a final word...

We hope that you will find this Facilitator Guide helpful in delivering the ScRAP Programme to prescribers, as you work in partnership with your Antimicrobial Management Team to decrease unnecessary prescribing of antibiotics in your own area.

Further copies can be obtained by contacting NES (Pharmacy) at: pharmacy@nes.scot.nhs.uk

All feedback on this Programme is welcome. If you have any queries or require further information, please contact:

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**Project manager** – Graeme Bryson

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Disclaimer

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External Websites

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