### Churchill Medical Centre

# Doing ground breaking stuff no-one's done before















Dr Pete Smith OBE VP NAPC

## Churchill Medical Centre

# Implementing evidence from 50 years ago

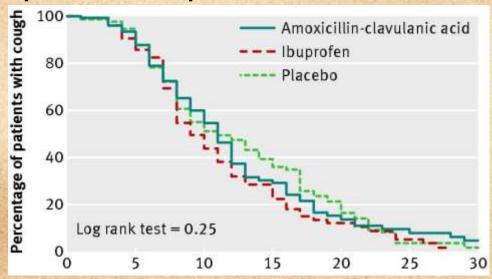
Elmes, PC et al Value of ampicillin in the hospital treatment of exacerbations of chronic bronchitis.

BMJ 11/1965;2(5467):904-8



## CARDIFF 2013

- Cardiff 2013
- Llor et al Efficacy of anti-inflammatory or antibiotic treatment in patients with non-complicated acute bronchitis and discoloured sputum: randomised placebo controlled trial BMJ 2013;347:f5762
- Antibiotics don't work for cough even with purulent sputum – don't use them.



## CARDIFF 2013

It doesn't matter
 whether it's viral or
 bacterial – they still
 don't work.











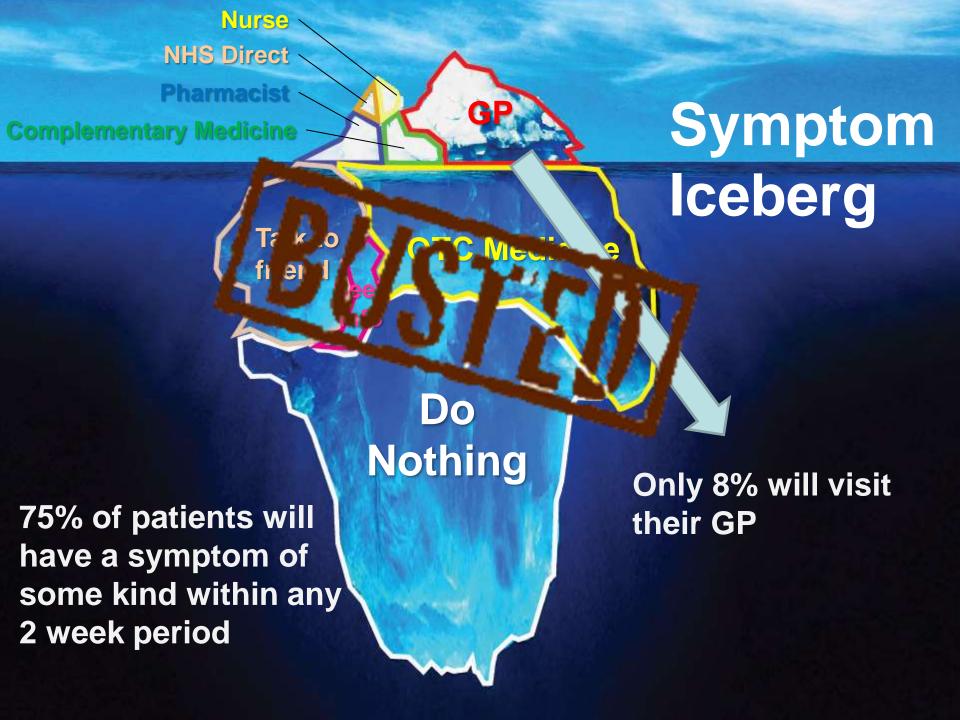




## **2012 MYTHBUSTING**

## Myths

- Everyone goes to their GP for the slightest symptom
- General practice is not very evidence based so it's dangerous to refuse antibiotics
- It takes too long to encourage self care



# What percentage of GP interventions are evidence based?



1963 Forsyth – half a century ago, 20% evidence based prescriptions

1995 Gill, - 81% interventions in GP evidence based

### **Tweetment**

 90% of coughs last up to 3 weeks and will not be helped by antibiotics unless you are elderly, very ill or have another health condition

138 characters















Talking and walking

# BITE-SIZED CHALLENGE FOR WINTER 2012

# Bite sized challenge for this winter

Multidisciplinary team – everyone involved

- Start with respiratory illnesses
- Consistent messages
- Evidence based literature
- Positive messages
- Delayed/no prescribing strategy

### **NICE 2008**

### Everyone needs to know:

- acute otitis media: 4 days
- Acute sore throat/acute pharyngitis: 1 week
- common cold: 1½ weeks
- acute rhinosinusitis: 2½ weeks
- acute cough/acute bronchitis: 3 weeks

## Cough – simply the evidence

- 90% of coughs last up to three weeks (whether or not treated with antibiotics or chest signs present) (Cochrane)
- 2. The same number reattend even if given antibiotics (Cochrane)
- Delayed or no prescribing strategy if not at an increased risk of developing complications (NICE)
- 4. Antibiotic may sometimes be given if
  - suggestion of complications or
  - at risk of complications elderly, very ill, have comorbidities and or significant history (NICE)

### Evidence based advice on RTIs

### NORMAL DURATION OF RTIS

Otitis media: 4 days
Sore throat/pharyngitis/tonsillitis: 1 week
Common cold: 1½ weeks
Acute rhinosinusitis: 2½ weeks
Cough: 3 weeks

### **NB: CHILDREN UNDER 5 WITH FEVER**

• 5 days or more of fever need to be seen: AMBER risk

 0-3 months: temp over 38 or 3-6 months over 39 need to be seen within 2 hours: RED risk

### **ACUTE OTITIS MEDIA**

Ear infections are very common in young children; last 4 days; painkillers main treatment unless with a discharge or under 2 years, both ears.

- 3/4 of all children have had an ear infection by age 2
- Commonest between 3-18 months
- · Not unusual to have up to 3 attacks a year
- Will usually last 4 days

Nice recommends ONLY consider antibiotics if: There is a discharge, or under 2 with infection in both ears

### When to seek advice

- High temp not coming down
- · New discharge
- Vomiting
- Dizziness
- Floppy
- Lethargy
- · Severely unwell
- Irritable
- · Unwell and still not clearing after 2-3 days

### COUGH

• 90% cough last up to 3 weeks, whether or not treated with antibiotics even if chest signs present.

### When to seek advice

- Getting worse
- · Coughing up blood
- Cough lasts for more than three to four weeks.
- Develop chest and/or shoulder pain.
- Difficult breathing
- · Losing weight over a period of six weeks or more
- · Voice becomes hoarse.
- Ends of fingers take on a 'club-like' shape.
- New swellings in the neck or above the collar bones.

### DELAYED PRESCRIBING OR NO PRESCRIBING STRATEGY

if not at risk of complications:

- Elderly
- Very ill
- · Co-morbidities e.g. COPD
- · Significant history

### **SORE THROAT**

- 90% clear within 1 week, antibiotics or not
- Do not give antibiotics unless 3 or more Centor criteria present:
  - Tonsillar exudates
  - · Cervical lymphadenopathy
  - · History of fever
  - · Absence of a cough

### When to seek advice

- Persistent high temperature for more than three days that does not come down with ibuprofen and/or paracetamol.
- Not getting better or that gets worse after 4 to 5 days
- Hard to breathe in or your throat feels like it's closing up
- Drooling and difficult to swallow.
- Pain is severe and does not respond to over the counter pain killers.
- · Voice becomes muffled.
- · Difficult to drink enough fluids and become dehydrated
- Symptoms so bad that they prevent you from functioning normally.
- · Immunocompromised (including steroids)





### National Institute for Health and Clinical Excellence care pathway for respiratory tract infections

At the first face-to-face contact in primary care, including walk-in centres and emergency departments, offer a clinical assessment, including:

history (presenting symptoms, use of over-the-counter or self medication, previous medical history, relevant risk factors, relevant comorbidities)

examination as needed to establish diagnosis. Address patients' or parents'/carers' concerns and expectations when agreeing the use of the three antibiotic strategies (no prescribing, delayed prescribing and immediate prescribing) Agree a no antibiotic or delayed antibiotic prescribing strategy for patients However, also consider an immediate prescribing The patient is at risk of developing complications. with acute otitis media, acute sore throat/pharyngitis/acute tonsillitis. strategy for the following subgroups, depending on common cold, acute rhinosinusitis or acute cough/acute bronchitis. the severity of the RTI. No antibiotic prescribing Delayed antibiotic prescribing No antibiotic, delayed antibiotic or immediate Immediate antibiotic prescribing or further investigation and/ or Offer patients: antibiotic prescribing Offer patients: management Depending on clinical assessment of severity, also Offer immediate antibiotics or further investigation/management for patients reassurance that reassurance that antibiotics are not consider an immediate prescribing strategy for: who: needed immediately because they antibiotics are not will make little difference to children younger than 2 years with bilateral needed immediately are systemically very unwell because they will make symptoms and may have side acute otitis media have symptoms and signs suggestive of serious illness and/or children with otorrhoea who have acute otitis little difference to effects, for example, diarrhoea, complications (particularly pneumonia, mastoiditis, peritonsillar abscess, symptoms and may vomiting and rash peritonsillar cellulitis, intraorbital or intracranial complications) have side effects, for advice about using the delayed are at high risk of serious complications because of pre-existing patients with acute sore throat/acute tonsillitis example, diarrhoea, prescription if symptoms do not comorbidity. This includes patients with significant heart, lung, renal. when three or more Centor criteria are present. vomiting and rash. settle or get significantly worse liver or neuromuscular disease, immunosuppression, cystic fibrosis, and a clinical review if the advice about re-consulting if Centor criteria are: presence of tonsillar exudate. young children who were born prematurely. RTI worsens or symptoms get significantly worse tender anterior cervical lymphadenopathy or are older than 65 years with acute cough and two or more of the becomes prolonged. despite using the delayed lymphadenitis, history of fever and an absence of following, or older than 80 years with acute cough and one or more of prescription. cough. the following: The delayed prescription with instructions hospitalisation in previous year can either be given to the patient or type 1 or type 2 diabetes collected at a later date. history of congestive heart failure current use of oral glucocorticoids.

### Offer all patients:

- advice about the usual natural history of the illness and average total illness length:
  - acute otitis media: 4 days
  - acute sore throat/acute pharvngitis/acute tonsillitis: 1 week
  - common cold: 1½ weeks
  - acute rhinosinusitis: 2½ weeks
  - acute cough/acute bronchitis: 3 weeks
- advice about managing symptoms including fever (particularly analgesics and antipyretics). For information about fever in children younger than 5 years, refer to 'Feverish illness in children' (NICE clinical guideline 47).

### XXXX: 'Home treatment is the best treatment' campaign

At XXXX we are starting a campaign to make sure people are aware that they can treat themselves and their children effectively and safely for most of the coughs, colds, sore throats and earaches they get and that they do not need antibiotics.

### Why are we doing this?

Most of you will be aware that antibiotics don't work for most coughs, colds, sore throats and earaches and there has been a big story about this in the news recently. Despite this, people still come in regularly expecting treatment when there is nothing we can do. What is worse giving unnecessary antibiotics increases the risk of bacteria developing that are resistant to them so they won't work when they are really needed. This campaign is intended to empower patients to treat themselves for conditions that get better anyway and that we can't treat any better than they can.

One surgery had around 300 appointments for these conditions in October 2012. Of these, 100 received antibiotics. The other 200 did not need to attend and it is unlikely that many of the 100 had any great benefit from the antibiotics and were at risk of side effects from them.

### What will we be doing?

We will be encouraging all patients who attend with what we call 'respiratory tract infections' to treat themselves and their children rather than coming to see us, although we will not be turning patients away, and we won't be calling these 'minor' illnesses as they don't feel minor!

We have prepared a laminated sheet for doctors and nurses giving a brief summary of the evidence and short messages to give. We have also used the information given in the national Self Care Forum's leaflets to prepare single advice sheets on Coughs and Sore Throats and prepared one on Ear infections which we will be giving to patients.

### Delayed prescriptions

Some of our patients have come to believe they need an antibiotic. Most are quite happy not to have them, but for the small number who become distressed when told an antibiotic is not required, we will be giving a 'delayed' antibiotic. A prescription will be given and the patient told they do not need it but that if the patient's condition becomes more severe, they can take it. We know that only a third will then be taken. Once patients are aware that there is nothing we can do, they are less likely to come back next time for another fruitless visit.

Dr Pete Smith prepared a talk for the Self Care Forum on this subject. You can see The PowerPoint presentation and copies of the advice sheets and laminated sheets on XXXX.

Our patients are usually very sensible and we have had very few who have complained, but views about antibiotics can be surprisingly strongly held, particularly when their previous doctor gave a prescription rather than explaining that they are not necessary. Please speak to XXXX if you want to know more.

### Sore Throat

This fact sheet helps you to know what's 'normal' and what you can espect to happen if you develop a sale throat. It also bells you when you should become concerned and well medical advice from a health professional.

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four eural kidy to need any tests, such as a throat swate.

| What can I do myself to get bett   | er – new and in the futi   |
|--|--|
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### When should I seek medical help?

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|---|---|
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| Elandatar Swor Thus we asset through that the art get below – or that get wome – after 4 to 5 one; other any suggest grandular level; Broad through   | Effect on day to day life. You symptoms se so had it and present you from function.   |
| Table Taking that is beside it, and your invast telefficients<br>disking a<br>breaking and available king<br>factor and against in infalliation available<br>Secretic<br>factor in the server will also not begand to put this e- | HIVWBS or other causes<br>if years for their assert the<br>besture, for the mole, year<br>medication (such as divinol<br>medifying and incurrants of<br>should best medical polyte. |

Where can I find and regret Cheft and the M.S.Chaires we had a highly managing at conditions and a othics. Remonitors that your placemation can also help you with assessing your symptoms. Projunctly the Self-Employment permanent and musings. Last revised on 7 Dec 2017. Percentral data Hoyali blevisebaron og attrommers a sigeston.

This fact sheet helps you to know what's normal and what you can expect to happen if you develop a when you should become concerned and seek advice from a health professional.

| Usefu   | d facts   |
|---|---|
| Types al caugh  | What causes caught?                                 |
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| protective of speciam (philegra).                                     |   |
| Fragence  | Chronic roughing consonertimes a                    |

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### What can I do myself to get better - now and in the future?

When should I say

Hear cough \$275 for mole than there to four weeks.

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-heartwares lesing weight forms apparent water over a presid of

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(Your voice becomes house:

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|--|---|
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| Home ierredies   | There is the colornor to say when   |
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### What can I consect to karmon?

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fice may easily suffer a dry cough for 3 to 4 weeks after an infertion has settled. Managed for Investigations You don't normally need any investigations if you suffer from acute.

crack.

Found terror svelings anywherein the neckor above your collationes.

Far Infection This fact sheet helps you to know what's increase and what you can expect to happen if you or your child develops an earinfection. If also belts you when you should be come concerned and seek medical advice from a health professional.

### Useful facts

How common are ear infection? The equation of different three half letters the directly the age of 1, maz commonly between 3, 18 months. They extur in the newton and in sider children but are less common after the age of 3. What causes ear infections?

A respiratory infection such as a colid or size throat can block the father assistance.

the Butachian tupe (daining the sage) fitte middle saff tekind the eardrum. Or broats tables are narrower so block more castly. Ruid builds to caseing pain and deathest as the condraw is provented from moving. If the fluid gats infected, the paintin severy and the cordinan can sometimes repture leading to a

### What can I expect to happen?

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When are artible to recommended?

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### Detayed preinfallon

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### What can I do myself to get me or my child better - now and in the future!

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| House remedy   | Use of duranty  |

have people with first applying a years that we had been below. Intrarageresi

Resting may help the body fight the infection.

Warning symptoms and signs include:

Although using a dummy increases the likelihood of earinfections it may decrease the illustrated of conditional flusted at the child is going off to sleep.

### When should treek medical help?

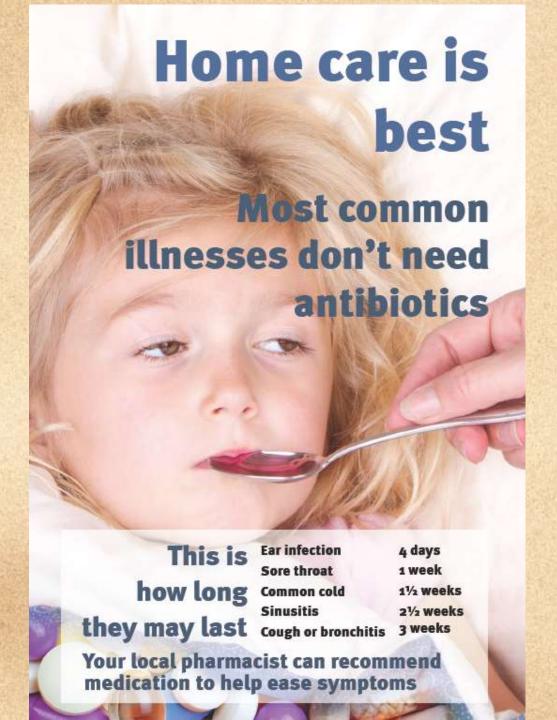
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| MCEP experience that you call a professional according to any child. |
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| year condition a temperature for over 5 days you record associated.  |
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frequently the 5dt Careforum (www.adts.neforum.org). Last method on 2 the 2012. Hence on text billing Wildelson 800 1425 5118 or small liaboundative discharaterancing with commercial a president.

















## RESULTS

# Stats pre-campaign

| October 2012    | Antibiotics<br>Given | Antibiotics<br>Not Given | Total                    | Percentage<br>given<br>antibiotic |  |
|-----------------|----------------------|--------------------------|--------------------------|-----------------------------------|--|
| Cough           | 78                   | 65                       | 143                      | 54.5                              |  |
| URTI            | 60                   | 124                      | 184<br>0<br>8<br>13<br>1 | 32.6                              |  |
| OM              | 0                    | 0                        |                          | 0.0                               |  |
| Otalgia         | 3                    | 5                        |                          | 37.5                              |  |
| Temp symp       | 7                    | 6                        |                          | 53.8<br>0.0<br>0.0                |  |
| Sore throat     | 0                    | 1                        |                          |                                   |  |
| Viral infection | 0                    | 6                        |                          |                                   |  |
|                 | 148                  | 207                      | 355                      | 41.7                              |  |
| Tonsillitis     | 27                   | U                        | 21                       | 100                               |  |

# Stats post-campaign

| January 2013    | Antibiotics<br>Given | Antibiotics<br>Not Given | Total    | Percentage<br>given<br>antibietic |  |
|-----------------|----------------------|--------------------------|----------|-----------------------------------|--|
| Cough           | 55                   | 91                       | 146      | 37.7                              |  |
| URTI            | 40                   | 163                      | 203<br>0 | 19.7                              |  |
| ОМ              | 0                    | 0                        |          | 0                                 |  |
| Otalgia         | 4                    | 16                       | 20       | 20.0                              |  |
| Temp symp       | 2                    | 15                       | 17<br>4  | 11.8                              |  |
| Sore throat     | 1                    | 3                        |          | 25.0                              |  |
| Viral infection | 2                    | 9                        | 11       | 18.2                              |  |
|                 | 116                  | 322                      | 438      | 26.5                              |  |
| Tonsillitis     | 35                   | 0                        | 35       | 100                               |  |

# Results – per month

|            | Pre  | Post | %age<br>reduction | recei<br>unne | bers not<br>iving<br>ecessary<br>piotics |  |
|------------|------|------|-------------------|---------------|--|--|
| Cough      | 54.5 | 37.7 | 16.9              |               | 25                                       |  |
| URTI       | 32.6 | 19.7 | 12.9              |               | 26                                       |  |
| TOTAL URTI | 355  | 438  | 15.2%             |               | 67                                       |  |

## So what?

### Results - per month

15.2% reduction in use of antibiotics

67 people per month avoided antibiotics

per year avoid unnecessary antibiotics

50/1,000 pts on practice list will benefit

## All on the SCF website

http://www.selfcareforum .org/resources/casestudies/ Noetcuse't!