



**PROPOSED REVIEW OF SIGN GUIDELINE
CONSULTATION FORM**

Title of guideline	SIGN 59: Community management of lower respiratory tract infection in adults
Date of publication	June 2002
SIGN scoping search – sources	MeSH headings for the condition specified and any common variations as free text, plus terms for the interventions and care processes discussed in the guideline Sources: Guidelines: NICE; National Library for Health guidelines finder; National Guidelines Clearinghouse; GIN Web site. Technology appraisals: NICE; UK HTA database (Southampton); INAHTA database. Cochrane reviews: Cochrane Library. Other good quality systematic reviews: UK HTA database (Southampton); DARE. RCTs: MEDLINE
SIGN scoping search - summary	Guidelines – 21 HTAs – 5 Cochrane reviews – 31 Other good quality systematic reviews – 19 RCTs - 491
Other guidelines/HTAs	Braman SS. Braman SS. Chronic cough due to acute bronchitis: ACCP evidence-based clinical practice guidelines. Chest 2006 Jan;129(1 Suppl):95S-103S British Thoracic Society. BTS guidelines for the management of community acquired pneumonia in adults. London; The Society:2004. Mandell LA, Bartlett JG, Dowell SF, File TM Jr, Musher DM, Whitney C. Update of practice guidelines for the management of community-acquired pneumonia in immunocompetent adults. Clin Infect Dis 2003 Dec 1;37(11):1405-33. British Thoracic Society. Recommendations for the management of cough in adults. 2006 European Respiratory Society. Guidelines for the management of adult lower respiratory tract infections. 2005 Mandell LA, Wunderink RG, Anzueto A, Bartlett JG, Campbell GD, Dean NC, Dowell SF, File TM Jr, Musher DM, Niederman MS, Torres A, Whitney CG. Infectious Diseases Society of America/American Thoracic Society. Consensus guidelines on the management of community-acquired pneumonia in adults. Clin Infect Dis 2007 Mar 1;44 Suppl 2:S27-72. National Institute for Health and Clinical Excellence. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care. London; NICE: 2008. Deonandan R, Mensinkai S, Hodgson A. Effectiveness of neuraminidase inhibitors for prevention of influenza. Ottawa: Canadian Agency for Drugs and Technologies in Health (CADTH) 2007: 26 Aims: to investigate the evidence about the use of two neuraminidase inhibitors (NIs), zanamivir (Relenza) and oseltamivir (Tamiflu), for the prophylaxis of influenza. National Institute for Clinical Excellence. Oseltamivir, amantadine (review)

File name : SIGN59_LRTI_review	Version 0.1	16/01/2012
Produced by: Roberta James	Page 1 of 5	Review date: November 2012

and zanamivir for the prophylaxis of influenza (Includes a review of NICE technology appraisal guidance 67) London;NICE:2008.

National Institute for Clinical Excellence. Amantadine, oseltamivir and zanamivir for the treatment of influenza. (Review of NICE technology appraisal guidance 58) London;NICE:2009.

Nazarian DJ, Eddy OL, Lukens TW, Weingart SD, Decker WW, **American College of Emergency Physicians.** Clinical policy: critical issues in the management of adult patients presenting to the emergency department with community-acquired pneumonia. *Ann Emerg Med* 2009 Nov; 54(5):704-31.

Ramsdell J, Narsavage GL, Fink JB. Management of community acquired pneumonia at home: an **American College of Chest Physicians** Clinical Position Statement. *Chest* 2005; 127: 1752-1763.

Finnish Medical Society Duodecim. Chronic obstructive pulmonary disease (COPD). In: *EBM Guidelines. Evidence-Based Medicine* [Internet]. Helsinki, Finland: Wiley Interscience. John Wiley & Sons; 2007.

Institute for Clinical Systems Improvement (ICSI). Diagnosis and management of chronic obstructive pulmonary disease (COPD). Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2009.

University of Michigan Health System. Chronic obstructive pulmonary disease. Ann Arbor (MI): University of Michigan Health System; 2010.

Ministry of Health, Malaysia. Management of chronic obstructive pulmonary disease; MOH/P/PAK/197.09(GU). 2nd ed. 2009. Available online: <http://www.moh.gov.my/attachments/4749>

National Institute for Health and Clinical Excellence. Management of chronic obstructive pulmonary disease in adults in primary and secondary care (partial update) (CG101). 2010.

Work Loss Data Institute. COPD - Chronic obstructive pulmonary disease. In: *Pulmonary (acute & chronic)*. San Diego (CA): Work Loss Data Institute; 2009. p. 18-28.

Michigan Quality Improvement Consortium. Management of uncomplicated acute bronchitis in adults. Southfield (MI): Michigan Quality Improvement Consortium; 2010.

Fiore AE, Uyeki TM, Broder K, Finelli L, Euler GL, Singleton JA, Iskander JK, Wortley PM, Shay DK, Shay DK, Bresee JS, Cox NJ, Cox NJ, **Centers for Disease Control and Prevention (CDC).** Prevention and control of influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices (ACIP), 2010 [published errata: *MMWR Morb Mortal Wkly Rep* 2010 Sep 10;59(35):1147]. *MMWR Recomm Rep* 2010 Aug 6;59(RR-8):1-62.

Infectious Diseases Society of America. Seasonal Influenza in Adults and Children—Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management: Clinical Practice Guidelines of the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2009; 48:1003–1032.

Tappenden P, Jackson R, Cooper K, Rees A, Simpson E, Read R, et al. Amantadine, oseltamivir and zanamivir for the prophylaxis of influenza (including a review of existing guidance no. 67): a systematic review and economic evaluation. *Health Technology Assessment* 2009; 13(11): 1-268

Main conclusions from new evidence

- Not enough evidence from trials on the comparative effects of different antibiotics for community-acquired pneumonia. *The guideline states that early administration of antibiotics in patients with pneumonia is essential. (D) but does not comment on the use of specific antibiotics.*
- There is no current evidence supporting the routine use of G-CSF in the treatment of pneumonia. *Not covered in the guideline.*

- There is not enough evidence to recommend universal vaccination against influenza in healthy adults. Available evidence is of poor quality and provides no guidance regarding the safety, efficacy or effectiveness of influenza vaccines for people aged 65 years or older. *The guideline only recommends influenza vaccination for those aged > =65 years and for people of any age with underlying chronic disease or living in long-stay residential care, and for health and social care workers (B).*
- A second Cochrane review concludes that in long-term care facilities, where influenza vaccination is most effective against complications, prevention is successful, at least in part. However, according to reliable evidence the usefulness of vaccines in the community is modest. *As above, the guideline recommends influenza vaccination for those aged > =65 years and for those in long-stay residential care (B).*
- Antibiotics appear to have a modest beneficial effect in patients with acute bronchitis. The magnitude of this benefit, however, needs to be considered in the broader context of potential side effects, medicalisation for a self-limiting condition, increased resistance to respiratory pathogens and cost of antibiotic treatment. *The guideline recommends that antibiotics should not normally be prescribed for previously well patients who do not have signs in the chest or features of severity (A).*
- A Cochrane review supports antibiotics for patients with COPD exacerbations with increased cough and sputum purulence who are moderately or severely ill. Short courses of antibiotic therapy (five days or less) are as effective as conventional courses in the treatment of mild to moderate acute exacerbations of chronic obstructive pulmonary disease and chronic bronchitis. *The guideline recommends (B) Patients with significant airway obstruction who have an increase in breathlessness and sputum purulence should be treated with an antibiotic.*
- Vaccinating patients with recurrent acute exacerbations of chronic bronchitis in the autumn may reduce the number and severity of exacerbations over the following winter. *Not discussed in the guideline.*
- Amantadine and rimantadine have comparable efficacy and effectiveness in relieving or treating symptoms of influenza A in healthy adults. A subsequent Cochrane review states that due to the small number of available studies it was not possible to reach a definitive conclusion on the safety of amantadine or the effectiveness of rimantadine in preventing influenza in children and the elderly. *Not discussed in the guideline*
- Some evidence to suggest that neuraminidase inhibitors should not be used in routine seasonal influenza control. A subsequent HTA states that there is enough evidence to conclude that the antiviral drugs zanamivir and oseltamivir are effective in preventing the acquisition of common LCI, and are well tolerated by healthy humans and those whose health is compromised (the elderly and those living in LTCF. *Not discussed in the guideline*
- Inactivated vaccine may reduce exacerbations in COPD patients. The size of effect was similar to that seen in large observational studies, and was due to a reduction in exacerbations occurring three or more weeks after vaccination, and due to influenza. *Guideline recommends antibiotics for treatment of exacerbations of COPD (B).*
- PPV provides a reasonable degree of protection in the general elderly population against invasive disease and a moderate effect in the high-risk population. The vaccine appears to have little or no effect on pneumonia. *The guideline recommends that PPV should be given to all those aged two years or older in whom pneumococcal infection is likely to be more common or more serious in terms of increased morbidity and mortality (those with chronic lung disease, underlying medical conditions or severely immunocompromised) (B) and also that PPV should be given to all people over the age of 65 years, on a one-off basis (B).*

	<ul style="list-style-type: none"> ▪ No single estimation of sensitivity and specificity can be made regarding the sputum Gram's stain in CAPP. The test characteristics vary dramatically depending on several factors. Thus, the sputum Gram's stain may be misleading and its use may even be hazardous, especially if its interpreter is not well trained. <i>The guideline does not make a recommendation in this area but does state that if sputum is available and the patient has not had prior antibiotic treatment then a Gram stain is a good indicator of the causative organisms.</i> ▪ There is insufficient evidence to decide whether over the counter medications for cough associated with acute pneumonia are beneficial. Mucolytics may be effective, but there is insufficient evidence to recommend them as an adjunctive treatment of acute pneumonia. <i>Guideline recommends the early administration of antibiotics in patients with pneumonia is essential (B). It does not look at the role of over the counter medicines.</i> ▪ Two systematic reviews suggest that Pelargonium sidoides herbal treatment may be effective in relieving symptoms in acute bronchitis. There is insufficient quality data to recommend the routine use of Chinese herbs for acute bronchitis. <i>Guideline does not make a recommendation for specific treatment for acute bronchitis.</i> 	
New areas that could be added to the guideline	<ul style="list-style-type: none"> ▪ Vaccination for patients with recurrent acute exacerbations of chronic bronchitis. ▪ Role of amantadine and rimantadine in treating symptoms of influenza A. ▪ Use of inactivated vaccine to reduce exacerbations in COPD patients ▪ Pelargonium sidoides for acute bronchitis. 	
Summary of the recommendations that could be updated	Section:	
	It may be possible to strengthen the recommendation and be more specific about treatment regimen (B) <i>Patients with significant airway obstruction who have an increase in breathlessness and sputum purulence should be treated with an antibiotic.</i>	4.2
	Role of sputum Gram stain in CAP.	5.11
	It may be possible to strengthen the D grade recommendation to use antibiotics for community acquired pneumonia.	5.2
	Treatment of patients with acute bronchitis, including antibiotics.	6.2
	<ul style="list-style-type: none"> ▪ The evidence defining the target audience for influenza vaccination should be reviewed. ▪ The evidence defining the target audience for PPV vaccination should be reviewed. 	9.1 9.2

Please answer the following questions as fully as possible:

Name, designation, organisation:	Respiratory medicine (2), Microbiology (1), Nursing (1), General Practice (1)
----------------------------------	---

1(a)	Is there still a requirement for an evidence-based guideline on this topic?	
	Yes	
1(b)	If no, should the guideline be withdrawn?	
2(a)	Based on the information given above, and your own clinical judgement, does the guideline require revision in the light of new evidence? <i>Please give details.</i>	
	Section 4.2: Agree section 4.2 should reflect more recent evidence. Section 5.0: Recommendations could be brought in line with BTS CAP guidelines especially with regard to gram staining and antibiotic administration. Section 5.2: Grade of recommendation can be strengthened. Section 9: Evidence on use of inactivated vaccines could be included.	
2(b)	If no, is there a need to scope for new evidence on a yearly basis?	
	No. Very little change in the past nine years – suggest every two to three years.	
2(c)	Do you agree with the assessment of the impact of the new evidence and its likely effect on recommendations?	
	Yes, generally	
2(d)	If yes, please suggest clinical questions that could be addressed in the revision?	
	Do inactivated vaccines have a role in COPD. What is the role of antivirals. Using CRB-65 Revision and lay review of the patient information leaflet.	
3(a)	Please list any additions to the remit of the guideline that you think would be beneficial	
	A statement on the use of oral penicillin for treatment on pneumonia in primary care. This would be a better agent than amoxicillin in most circumstances.	
3(b)	Please list any sections of the guideline that are no longer required	
4	Please tick your preferred option for reviewing this guideline	
	a. there is no new evidence that will affect existing recommendations and the guideline should not be reviewed at this time	✓
	b. some recommendations will change in the light of the new evidence and elements of the guideline should be reviewed	✓

5 SIGN COUNCIL			Date: 11/11/2011
Revalidate	Refresh	Revise	Remove
✓			