Conclusions The success of treatment for PA eradication is similar to those reported in cystic fibrosis and current treatment does not adversely impact on lung function.

P243 DURATION AND CHOICE OF ANTIBIOTICS IN HOSPITAL ADMITTED COMMUNITY ACQUIRED PNEUMONIA PATIENTS OVER A PERIOD OF 5 YEARS IN NHS SOUTH EAST OF SCOTLAND

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Introduction *Clostridium difficile* infection is associated with class of antibiotics as well as the duration of treatment. The aim of this study was to ascertain if the rate of hospital related *Clostridium difficile* varied with the duration and choice of antibiotics in those admitted to hospital with Community Acquired Pneumonia (CAP) over a period of 5 years (2005–2009).

Methods As a part of a prospective observational study of CAP in NHS Lothian, we investigated the duration and choice of antibiotics in hospital admitted CAP and the rate of *Clostridium difficile* infection in these patients over a period of 5 years (2005–2009). For multiple comparisons, we used the Kruskal–Wallis test for numerical data and Chi squared test for the categorical data.

Results The duration and choice of antibiotics are tabulated in the Abstract P243 Table 1. The length of antibiotics used for severe CAP was therefore, longer than mild CAP. The duration of antibiotics for all severity of CAP, has not changed between 2005 and 2009. There has been a reducing usage of cephalosporins and macrolides with rising use of co-amoxiclav. The contribution of CAP as a cause for *Clostridium difficile*, however, remains unchanged.

Conclusion In conclusion our study shows that the proportion of *Clostridium difficile* cases due to CAP has not changed in NHS Lothian between 2005 and 2009, despite significant reduction of cephalosporins and macrolide use. Randomised controlled trials are needed to assess whether reducing the length of treatment will influence *Clostridium difficile* rates.

P244 ADHERENCE WITH DEPARTMENT OF HEALTH GUIDELINES FOR THE MANAGEMENT OF PANDEMIC H1N1 INFLUENZA IN SECONDARY CARE

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Background Prior to the 2009 swine flu pandemic, there was uncertainty about the expected incidence, morbidity and mortality from the disease. The Department of Health (DoH) compiled guidelines for assessment and management of children and adults admitted to hospital with suspected H1N1 infection.

Objectives We evaluated whether adults with suspected H1N1 infection were appropriately diagnosed, investigated and managed within an NHS Foundation Trust during a period of maximal incidence when DoH guidance was accessible, with the aim of improving care for patients during future pandemic flu outbreaks and utilising hospital resources efficiently.

Methods Patient notes of suspected cases of adult H1N1 infection between July and December 2009 were retrospectively reviewed to identify how many met the diagnostic criteria, underwent relevant investigations and were prescribed a neuraminidase inhibitor as compared with DoH guidelines. The relationship between the initial consultant's diagnosis and the final diagnosis was also considered.

Results Seventy cases of suspected swine flu were identified, and full documentation was available for review in 61 of these. All patients were tested for swine flu and overall 26% of patients were H1N1 positive, including 6% of those patients who did not fulfil the diagnostic criteria. Of patients clinically suspected of having swine flu 34 (56%) did not fulfil the diagnostic criteria, although two of those. were found to be H1N1 positive. Minimum recommended investigations were performed as follows; routine bloods and chest x-ray in 85%; blood cultures in 33%; sputum cultures in 15%; and urinary pneumococcal antigen testing in 3%. Antiviral medication was not prescribed in 31%of patients suspected of having swine flu. In 74% of the cases, the initial consultant's diagnosis matched the final diagnosis; this was true for 70% of the patients who were H1N1 positive.

Conclusions Increased awareness of the available guidelines is required to optimise diagnosis and management, and minimise the likelihood of potentially unsafe, incorrect diagnoses. This requires education of healthcare staff of available guidance, and further audit following the next outbreak of pandemic flu with the aim of safely and efficiently guiding clinical practice.

P245 ASSESSMENT OF ACUTE ILLNESS SEVERITY AND RADIOLOGICAL EXTENT IDENTIFY PATIENTS AT HEIGHTENED RISK OF DEVELOPING MAJOR PNEUMONIC PROGRESSION IN INFLUENZA A H1N1/2009 INFECTION

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Introduction In 2009, high transmissibility of a novel influenza A H1N1 virus produced a global outbreak of febrile pneumonic illness. Clinical criteria for its' diagnosis suffered from low sensitivity and specificity. We evaluated clinical, laboratory and radiological abnormalities in virologically proven H1N1/2009 infection to identify risk factors associated with severe pulmonary involvement.

Abstract P243 Table 1 Change in components of the NHP and LCQ

Year	Duration of antibiotics (days) Mean ± SD			p-Value (year wise)	Choice of antibiotics			Proportion of *C. difficile* cases due to CAP (%)
	Mild CAP	Moderate CAP	Severe CAP		Cephalosprins (%)	Macrolides (%)	Coamoxiclav	
2005	7.89±3.68	9.61±4 .32	9.71±2.94	<0.0001	24.8	65.9	50.8	10.4
2006	8.33±2.37	8.55±2.06	10.57±3.36	<0.0001	29.2	75.5	35.9	9.2
2007	8.67±3.46	9.51±4.3	9.87±3.01	<0.0001	19.7	74	61.1	9.9
2008	9.08±4.05	9.79±4.43	9.93±3.00	<0.0001	15.1	61.8	59.2	10.8
2009	8.24±3.66	10.26±5.83	9.78±3.51	<0.0001	7.9	54.6	71.3	8.9
p-Value (in each subgroup of CAP)	0.1	0.06	0.2	p-Value (in each antibiotic subgroup)	<0.0001	<0.0001	<0.0001	