studies. Patients with MDRAB had longer length of stay than control groups across all studies, though findings were not always statistically significant. Within ICU settings, however, the differences were significant in two of three studies. Mean costs tended to be higher for MDRAB patients, but methods varied across studies. Trends in mortality rates were mixed, with many studies reporting higher mortality rates associated with MDRAB versus controls, though few reported statistically significant differences. Receipt of appropriate therapy was associated with lower mortality, though not statistically significantly different. Few studies included detail on treatments provided. **CONCLUSIONS:** Across the limited available literature, there is a consistent trend towards worse outcomes (higher mortality, longer LOS, higher costs) among patients with MDRAB versus controls. However, given the variety of study types and settings as well as the lack of multivariate analyses in most studies, there is considerable need for future analysis.

PIN100

INCIDENCE AND COST OF SKIN AND SOFT TISSUE INFECTIONS IN THE UNITED STATES

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OBJECTIVES: The objective of this study was to characterize U.S. national trends of the incidence and cost of skin and soft tissue infections (SSTIs) in 2000 and 2012. **METHODS:** We performed an analysis of nationally representative data from the Medical Expenditure Panel Surveys (MEPS) from 2000 and 2012. SSTIs were defined by Clinical Classification Software code 197. Expenditures in MEPS were defined as payments from all sources for hospital inpatient care, ambulatory care provided in offices and hospital outpatient facilities, care provided in emergency departments, and the retail purchase of prescribed medications. Expenditure data for 2000 were adjusted to 2012 dollars using the Consumer Price Index. **RESULTS:** The overall incidence of SSTIs increased 40% from 2.4 million in 2000 to 3.3 million in 2012. From 2000 to 2012, the incidence of patients with at least one hospital visit for SSTI increased 38%, ambulatory visits increased 46%, and emergency department visits increased 56%. The total spent on the treatment of SSTIs tripled, from $4.4 billion in 2000 to $13.8 billion in 2012. This was largely attributed to an 8-fold increase in ambulatory expenditures for SSTIs, from $975 million in 2000 to $7.9 billion in 2012. From 2000 to 2012, emergency department care expenditures increased 130%, inpatient hospitalization expenditures increased 56%, and retail prescription purchases increased 18%. The average expenditures for ambulatory visits increased 5-fold from $253 [standard error (SE) + $33] to $1,336 (SE + $240) per person, and average hospital expenditures increased 10% from $20,135 (SE + $3,997) to $22,706 (SE + $5,234) per person, between 2000 and 2012. **CONCLUSIONS:** The clinical and economic burden of SSTIs has significantly increased in the U.S., largely driven by a dramatic increase in the number and costs of SSTIs managed in the ambulatory setting.

PIN101

HIV ANTIRETROVIRAL DRUG UTILIZATION AND EXPENDITURES IN MEDICAID 1991-2014

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OBJECTIVES: Medicaid is the largest payer of HIV antiretrovirals (ARVs) in the US. To assess the trends in Medicaid utilization of ARVs and expenditures in the period 1991-2014, and to compare the utilization and reimbursement rates of generic and brand ARVs in the study period. **METHODS:** ARVs data were gathered from the Food and Drug Administration website. Utilization and expenditure data were collected from the Center for Medicare and Medicaid Services website. The unit of analysis was the defined daily dose (DDD). Descriptive analyses were performed to assess the Medicaid ARVs utilization, reimbursement rate, and average reimbursement per 30 DDD. **RESULTS:** Utilization of HIV ARVs in Medicaid increased over the study period from 21,000 30 DDD in Q1-1991 to 930,000 30 DDD in Q2-2014. Further, utilization of generic ARVs in Medicaid increased from 58 30 DDD in Q4 2004 to 93,000 30 DDD in Q2 2014. Likewise, Medicaid annual expenditures on ARVs increased from $5.2 million in Q1 1991 to $702 million in Q2 2014. During the study period, 7 ARVs out of 35 ARV products had generic competition in Medicaid program. The market share of generic ARVs increased from 8.2% in the first quarter of their launch to 89.5% by the end of the 3rd year after the generic entry into the market. The average Medicaid reimbursement rate for generics was 81% of the brand reimbursement rate at the first quarter of the generic launch, and decreased to 76% by the end of the 3rdyear after generic market entry. **CONCLUSIONS:** Several factors may explain Medicaid ARVs utilization and expenditures during the study period including the number and type (i.e. generics and brands) of FDA ARV approvals, the Medicaid generic drug utilization rate, changes in therapeutic guidelines, and states' policies and regulations regarding Medicaid ARVs coverage and reimbursement mechanisms.

PIN102

ECONOMIC BURDEN OF PERTUSSIS OUTBREAK IS HIGHLY DEPENDENT ON SETTING

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OBJECTIVES: Pertussis (whooping cough) is an upper respiratory infection, causing uncontrollable and severe coughing. Pertussis outbreaks are associated to a substantial increase in resource use that may vary depending on the setting. This study aims at better understanding the economic burden of pertussis outbreaks, by setting. **METHODS:** A systematic review of literature on pertussis outbreaks was conducted, including references published between 2011 and 2014, using Medline, Embase, the Cochrane library and relevant websites as potential sources. All population-based studies reporting information about epidemiology, burden or costs of pertussis outbreaks were included, without geographical restriction. **RESULTS:** Thirty eight observational studies from 14 countries were included. Classification of outbreaks by setting was straightforward: 29 outbreaks occurred over a territory (country, region, city, etc.), 4 outbreaks in a school, 2 outbreaks at hospital, 2 in an isolated community and 1 at university. Costs included in this study were costs incurred in controlling the outbreak. Treatments with antibiotics or prophylaxis were reported in 10 references covering all settings. GP or specialist visits were reported in 3 articles (2 outbreaks over a territory and 1 outbreak in a school). Finally 22 references reported information on hospitalisations: hospitalisation rates ranged from 0% to 8.8% for cases of pertussis (in 2 references, no hospitalisation occurred in the population exposed to the outbreak). Length of stay was reported in 2 references: 8.9 days in hospital and 13 days in paediatric intensive care unit considering an outbreak at hospital, and 4 days (1 to 48 days) over a territory. **CONCLUSIONS:** The extent and the management of outbreaks differed by setting, and the economic burden of pertussis outbreaks was not always comparable. Nevertheless this review shows that the burden may be substantial.

PIN103

A LARGE-SCALE CROSS-SECTIONAL STUDY OF HIV INFECTION AMONG MALE CLIENTS OVER 50 YEARS OLD IN LOW-COST COMMERCIAL SEX VENUES OF GUANGXI,CHINA

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OBJECTIVES: Heterosexual transmission has become the major HIV transmission route in Guangxi China. Studies in this region reveal new cases of males newly infected with HIV that were both heterosexual and elderly. This study aims to understand the association of unsafe sex behaviors with HIV infection among the male clients who purchase commercial sex in in low-cost sex venues of Guangxi. **METHODS:** A cross-sectional survey study was conduct in 13 regions of Guangxi, among male commercial sex clients who were over 50 years old in low-cost sex venues during October to December of 2012. Participants were interviewed with structured questionnaire, and had blood drawn for HIV testing. Univariate and multiple logistic regression models were used for data analysis. **RESULTS:** 3485 participants were recruited with all blood samples tested for HIV infection. The prevalence of HIV in this sample was 2.96%. The risk factors associated with HIV infection included: being single/divorced/separated/widower (AOR:1.77, 95%CI: 1.17-2.67, P<0.05); aphrodisiac use (AOR:1.71, 95%CI: 1.14-2.58, P<0.05); non-condom use during commercial purchased sex (AOR: 1.83, 95%CI: 1.21-2.76, P<0.05). Also, the time line of last purchase of commercial is correlated to HIV infection, and the significant risk factor was within the last 7 days (1 week) (AOR: 1.83, 95%CI: 1.21-2.76, P<0.05). The health history of a chronic diseases was found to be a protective factor (AOR: 0.59, 95%CI: 0.37-0.94, P<0.05). **CONCLUSIONS:** Given that the high prevalence of HIV infection among the study group, more political policy interventions should be a consideration of focus with the subpopulation (middle-aged, elderly men, aphrodisiacs and non-condom use) in rural areas of this region.

PIN104

CAN HEPATITIS C TREATMENT BE SAFELY DELAYED?: EVIDENCE FROM THE VETERANS ADMINISTRATION HEALTHCARE SYSTEM

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OBJECTIVES: The cost of new HCV treatments leads payers and insurance providers to question if delaying treatment for low risk patients can be accomplished without adversely impacting their clinical outcome. Retrospective cohort data from the Veterans Administration [VA] were used to estimate the impact on patient risk of initiating treatment before versus after the patient's FIB4 levels became elevated. **METHODS:** Essentially all VA HCV patients with one or more reported FIB-4 values during the study period were included in the analysis. Primary outcome measures were: time to death, and time to the first occurrence of a composite of liver-related clinical events. The impact of treatment initiation relative to three different definitions of an elevated FIB4 level was estimated using a time-dependent Cox proportional hazards models. **RESULTS:** 187,860 patients met study requirements. Initiating treatment before FIB4> 1.00 reduced morbidity by 41% and death by 36%. Initiating treatment after FIB4>1.00 remained effective but diminished the morbidity risk reduction achieved to 30%. However, outcomes were worse if treatment initiation was delayed until after FIB4>3.25. The risk reductions associated with treatment initiated before FIB4>3.25 were 34% for the composite event and 45% for death, but if initiated after FIB4>3.25 were only 11% and 25%, respectively. The corresponding number needed to treat [NNT] to prevent one death, is 142 for treatment before FIB4>1.00 and 180 if treatment is initiated before FIB4>3.25. The estimated NNT is 128 if treated after FIB4>1.00 but increases to 325 if treated after FIB4>3.25. These detrimental effects of delaying treatment until FIB4>3.25 were due to a reduction in the likelihood that treated patients would achieve viral load suppression as well as a reduced impact of viral load suppression on morbidity and mortality. **CONCLUSIONS:** Delaying treatment until after a patient's FIB4 level exceeds 3.25 had a clear detrimental effect on treatment effectiveness.

PIN105

PNEUMOCOCCAL VACCINATION COVERAGE IN ADULTS WITH HIGH-RISK CONDITIONS: MISSED OPPORTUNITIES CONTINUE

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OBJECTIVES: The U.S. Advisory Committee on Immunization Practices (ACIP) recommends pneumococcal vaccination for adults younger than 65 years with conditions at increased risk of pneumococcal disease. Yet there are limited real-world vaccination coverage data in these high-risk adults. This study aimed to examine