no uniform agreement on the best timing for FOB, and its impact on microbiological diagnostic rate and clinical outcome has not been established.

Methods. Retrospective study (October 2017–December 2017, July 2018–January 2019) at MD Anderson Cancer Center. The medical records of adult patients with AML, MDS or ALL who developed pneumonia (CAP, HCAP, HAP excluding VAP) and underwent FOB were reviewed. By definition, patients who underwent FOB within 48 hours after the diagnosis of pneumonia were categorized as early FOB group. We compared demographic, clinical, microbiological data, and outcomes between two groups. Data were analyzed via χ^2, Fisher's exact and Wilcoxon rank-sum test and logistic regression.

Results. Of 140 patients included, 33 patients (24%) had early FOB and 107 patients (76%) had late FOB. There was no significant difference between two groups in demographic features, radiological findings, ANC and pneumonia severity index. Microbiological diagnostic rate of FOB did not differ between early FOB and late FOB: identification of pathogenic microorganisms (33.3% vs. 36.5%, p = 0.837), bacteria (6.1% vs. 13.1%, $P = 0.36$), fungi (18.2% vs. 12.2%, $P = 0.39$) and respiratory virus (12.1% vs. 16.8%, $P = 0.6$), respectively (Figures 1 and 2). On univariate analysis, the duration of intravenous antibacterial therapy was shorter in early FOB, with a median duration of 8.5 days (IQR 6.5–12) in early FOB and 11 days (IQR 8–18) in late FOB ($P = 0.0047$) (Figure 3). Multivariable logistic regression analysis showed that late FOB (OR 3.26, 95% CI 1.41 to 7.53, $P = 0.0057$) and negative bacterial culture on FOB (OR 3.06, 95% CI 1.01 to 9.22, $P = 0.048$) were significantly associated with longer duration of intravenous antibacterial therapy (≥10 days). There was no significant difference in ICU admission, 30-day and 60-day mortality and re-admission rate.

Conclusion. Early FOB was associated with shorter duration of intravenous antibacterial therapy for pneumonia in acute leukemia patients, which has an important impact on both optimization of antimicrobial therapy for patients and improvement of antimicrobial stewardship.

Fig. 1 Total number of Fiberoptic Bronchoscopy (FOB) and Diagnostic Rate
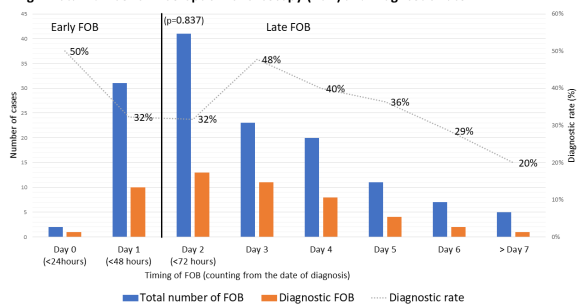

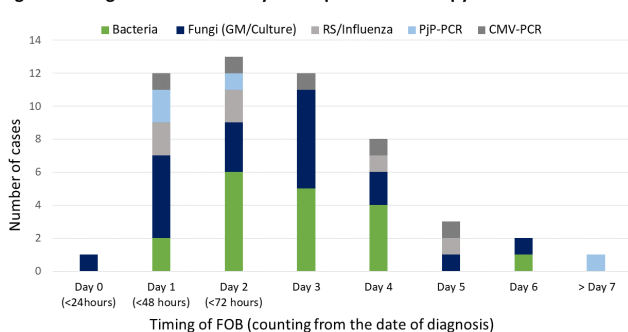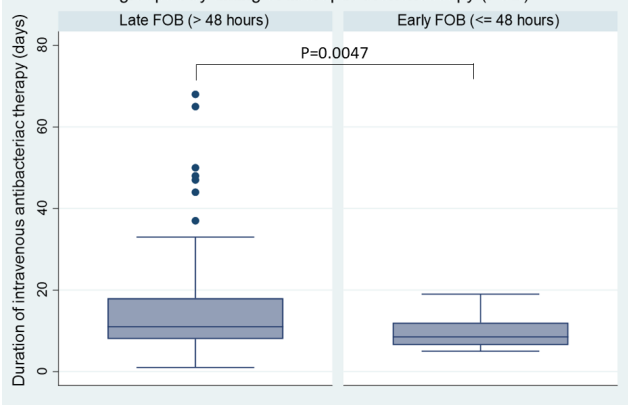**Fig.2 Microorganisms detected by Fiberoptic Bronchoscopy**

Fig.3 Duration of intravenous antibacterial therapy, grouped by timing of fiberoptic bronchoscopy (FOB)

Disclosures. **All authors:** No reported disclosures.

2212. Burden of Community-Acquired Pneumonia Attributable to Co-morbid Conditions in Adults

Melissa A. Rolfes, PhD, MPH[1]; Seema Jain, MD[2]; Anna Bramley, MPH[1]; Wesley Self, MD, MPH[3]; Richard G. Wunderink, MD[4]; Evan J. Anderson, MD[5]; Carlos G. Grijalva, MD, MPH[3]; Sherene Fakhran, MD[6]; Robert Balk, MD[7]; Yuwei Zhu, MS, MD[3]; Derek Williams, MD, MPH[3]; Kathryn Edwards, MD[8]; Carrie Reed, DSc, MPH[1]; [1]Centers for Disease Control and Prevention, Atlanta, Georgia; [2]California Department of Public Health, Richmond, California; [3]Vanderbilt University Medical Center, Nashville, Tennessee; [4]Northwestern University Feinberg School of Medicine, Northwestern Memorial Hospital, Chicago, Illinois; [5]Emory University School of Medicine, Atlanta, Georgia; [6]John H. Stroger, Jr. Hospital of Cook County, Chicago, Illinois; [7]Rush University School of Medicine, Chicago, Illinois; [8]Vanderbilt University School of Medicine, Nashville, Tennessee

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Background. Few studies have quantified the risk of community-acquired pneumonia (CAP) among adults with co-morbidities. Combining data from the population-based, prospective Etiology of Pneumonia in the Community study (EPIC) and the nationwide health-related Behavioral Risk Factor Surveillance System (BRFSS) telephone-survey, we estimated the annual risk of hospitalization for CAP among adults with co-morbidities.

Methods. We identified adults hospitalized with radiographic and clinical CAP at hospitals in Chicago, IL and Nashville, TN from July 2010 to June 2012. Using 2011 BRFSS data, we estimated the prevalence of the population with selected co-morbidities (chronic lung disease [CLD], cardiovascular disease [CVD], chronic kidney disease [CKD], or diabetes) in the EPIC study catchment counties, as well as the population without co-morbidities. We estimated the incidence of hospitalized CAP, age-adjusted relative risk (RR) using Poisson regression, and population attributable fraction for each co-morbidity.

Results. Among 2,061 adult patients enrolled in EPIC, 1,428 (69%) had at least one selected co-morbidity, most commonly CLD (42%) and CVD (35%). Among the adult population in the EPIC catchment area, 17% had ≥1 selected co-morbidity. The overall incidence of hospitalized CAP was 24.8/10,000, 118.7/10,000 among adults with ≥1 co-morbidity, and 11.2/10,000 among adults without a co-morbidity. Compared with patients without co-morbidities, the incidence of hospitalization for CAP was higher among patients with CLD (aRR: 20.7 [95% confidence interval [CI]: 20.0–21.5]), CKD (aRR: 14.5 [CI: 13.8–15.1]), CVD (aRR: 14.0 [CI: 13.5–14.6]), and diabetes (aRR: 6.2 [CI: 5.9–6.4]). While CLD and CVD accounted for high proportions of the incidence of CAP hospitalizations in the study population, the contribution of the selected co-morbidities varied by age groups (figure).

Conclusion. There is an increased risk of hospitalization for CAP among adults with co-morbidities, particularly chronic lung and cardiovascular disease. As a large portion of CAP is attributable to these co-morbidities, targeted public health interventions, such as vaccination and risk communication, need to be reinforced among these high-risk groups.
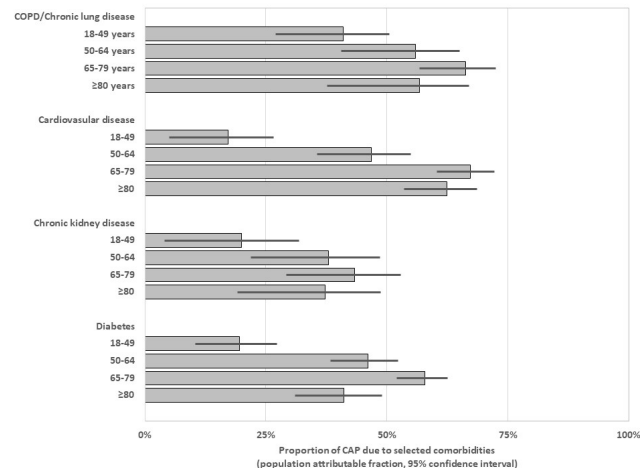
Disclosures. **All authors:** No reported disclosures.

2213. Etiology of Community-Acquired Pneumonia (CAP) in Hospitalized Native American Adults

Laura Hammitt, MD[1]; Amanda Driscoll, PhD[1]; Robert Weatherholtz, BS[1]; Raymond Reid, MD MPH[2]; Janene Colelay[1]; Lindsay Grant, PhD MPH[3]; Daniel VanDeRiet, MD[1]; Ronika Alexander-Parrish, RN, MAEd[4]; Michael W. Pride, PhD[5]; John M. McLaughlin, PhD[4]; Bradford D. Gessner, MD, MPH[6]; Raul E. Isturiz, MD[4]; Mathuram Santosham, MD MPH[2]; Katherine O'Brien, MD MPH[1]; [1]Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland; [2]Johns Hopkins Bloomberg School of Public Health, Baltim, Shiprock, New Mexico; [3]Johns Hopkins Bloomberg School of Public Health/Center