Methods. MCD data from the National Center for Health Statistics (NCHS) for the years 1990–2015 were analyzed. Mortality rates and 95% confidence intervals (CI) were calculated for age, sex, race/ethnicity, year, and state. Poisson regression models were used to examine temporal trends. Logistic regression was used to determine whether selected comorbid conditions were associated with salmonellosis-related deaths. Over a 2-year period at a University Hospital, 1,987 salmonellosis-related deaths (3.17%) were identified, as an underlying and/or associated cause of death. The average annual age-adjusted mortality rate was 0.027 per 100,000 person-years. Salmonellosis mortality rates were higher among males with an age-adjusted rate ratio (RR) of 1.89 (95% CI, 1.79–2.01) compared with females. Mortality rates were higher among non-Hispanic Blacks in the Asian/Pacific Islanders with an age-adjusted RR of 2.46 (95% CI, 2.19–2.77) and 2.06 (95% CI, 1.67–2.55) compared with Whites, respectively. The highest number of salmonellosis deaths were reported among the 75–84 age group (n = 467, 24% of all cases). A significant increase in trend was observed in age-adjusted salmonellosis mortality rates from 1990 to 2015. Since 2006, a significant increase of 66% in mortality rates was observed. Among selected comorbid conditions, HIV, acute renal failure, cancers affecting bone marrow, and diseases of the digestive system were associated with salmonellosis deaths. Mortality odds ratios of patients with C. difficile were 1.31 (95% CI, 1.21–1.42), 1.59 (95% CI, 1.50–2.19), and 2.53 (95% CI, 1.52–4.25) compared with patients without C. difficile.

Conclusion. Salmonellosis is an underlying and/or associated cause of death, especially among those with immune senescence and suppression. Despite a substantial decline in mortality rates, since 2006 rates have increased, a concerning trend. If rates continue to increase, an evaluation of Salmonella prevention efforts will be warranted.

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1488. Effects of Clostridium difficile Infection in Hospitalized Patients with Inflammatory Bowel Disease, National Inpatient Sample Study 2016

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Background. Inflammatory bowel disease (IBD) including ulcerative colitis (UC) and Crohn’s disease (CD) have been shown to have increased Clostridium difficile infection (CDI) rates. In this study, we aimed to determine the effects of concurrent CDI in the outcomes of hospitalized patients with IBD.

Methods. In this retrospective cohort study, we analyzed the 2016 National Inpatient Sample (NIS) database of hospitalized patients with a first or secondary diagnosis of IBD and CDI using their respective ICD-10 codes. Primary outcomes of interest were all-cause mortality, hospital length of stay, total cost for hospital stay, and rate of colectomy. Multivariable regression was used to adjust for age, gender, race, hospital bed size, and Charlson comorbidity index. We used STATA 14 for analysis.

Results. There were a total of 3,306 patients admitted with IBD and CDI of which 1,864 had a diagnosis of UC and 1,460 had a diagnosis of CD. 58.02% of the cases were female and the mean age was 52.5 years old. The mean age of patients in the CD group (48.97 [47.79–50.15]) was lower than the UC group (55.16 [54.01–56.31]). The results of in-hospital outcomes are shown in Tables 1 and 2.

Conclusion. We observed a significant increase in all-cause mortality, hospital length of stay, and total cost for hospital stay in IBD patients with concurrent CDI. There was a statistically non-significant increase in all-cause mortality in the CD group and a statistically significant increase in all-cause mortality in the UC group. Thus, in our study, IBD patients, especially UC patients, with concurrent CDI had a worse prognosis but they did not have more colectomies.

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1489. Vancomycin 125 mg vs. 250 mg for the Treatment of Non-Severe and Severe Clostridium difficile Infections

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Background. Infections Diseases Society of America (IDSA) guidelines recommend oral vancomycin 125 mg four times daily for 10 to 14 days for both non-severe and severe C. difficile infection (CDI). Although 125 mg achieves sufficient fecal concentrations, doses of 250 mg are still commonly used in practice. There is limited data available comparing vancomycin 125 mg to higher doses. To the best of our knowledge, there are no studies comparing the effectiveness of vancomycin 125 mg vs. 250 mg in the treatment of CDI.

Methods. Single-center, retrospective cohort analysis of oral vancomycin 125 mg vs. 250 mg for the treatment of CDI between June 2018 and February 2019. Diagnosis of CDI involved symptomatic patients with positive Clostridium difficile toxin by either polymerase chain reaction or toxin enzyme immunoassay. We used IDSA guideline criteria of severe and non-severe to evaluate those who received a 10- or 14-day course of oral vancomycin. We excluded patients with concomitant metronidazole or fidaxomicin use, history of CDI in the past 8 weeks, fulminant CDI, or mortality prior to completion of therapy. The primary outcome was resolution of clinically significant diarrhea. Secondary outcomes included duration of loose stools, relapse of CDI within 30 days of diagnosis, and 30-day all-cause mortality.

Results. A total of 93 patients were included in the study, with 71 patients (76.3%) in the 125 mg group and 22 patients (23.7%) in the 250 mg group. Both groups were well matched with no significant differences at baseline or during treatment. Results showed no statistical difference in clinical resolution between the 125 mg and 250 mg groups, with 70 patients (98.6%) and 22 patients (100%) achieving clinical resolution, respectively (P = 1.00). Secondary outcomes revealed no statistical difference in duration of symptoms, relapse, or 30-day all-cause mortality.

Conclusion. There was no difference in clinical resolution of CDI between the vancomycin 125 mg and 250 mg groups. Furthermore, the dose of vancomycin did not have a significant effect on duration of symptoms, relapse, or 30-day all-cause mortality. Using the lower, guideline-recommended dose of vancomycin could potentially reduce patient exposure and provide cost-savings benefits without sacrificing efficacy.

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1489. Clinical Utility and Patterns of the use of the Gastrointestinal PCR Panel Over a 2-Year Period at a University Hospital

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Background. Up to 80% of cases of acute infectious gastroenteritis do not have an identifiable etiologic agent. Molecular syndromic diagnostic panels, such as the Biofire® Filmtray® gastrointestinal (GI) panel, can improve pathogen detection, including frequent causes of community-onset diarrhea. There are little data about the real-world use and test characteristics of the GI panel in the clinical setting. The objective of this study was to evaluate the patterns of use and clinical utility of the GI panel.

Methods. We conducted a retrospective cohort study of adults (age >18 years) admitted to the University of Colorado Hospital from October 1, 2015 to August 31, 2017. Primary outcomes included patient demographics and co-morbidities, time since admission to test order, and cumulative test results. Descriptive statistics were utilized to summarize the frequencies of the primary outcome measures.

Results. 16,984 panels were ordered throughout the study period compared with 1379 stand-alone C. difficile PCRs. Seventeen of the 22 components of the panel had been validated by our lab prior to the study period; therefore, results were only available for these pathogens. Most GI panels (78%) were ordered in the first 48 hours of admission, with 6% ordered between 48 and 72 hours after admission, and 16% >72 hours after admission. The GI panel yielded an organism 34% of the time. The most frequently identified organism was C. difficile (18.5%) followed by Norovirus (5.2%) and Enteroaggregative E. coli (5.1%).

Conclusion. Over a 2-year period at a University hospital, the GI panel only had a positive result 7% of the time. Although most tests ordered were tested in the first 48 hours after admission, 22% were ordered after 48 hours, after which etiologies of hospital-onset diarrhea are expected to be more common. Among all GI Panel tests ordered, C. difficile was the most common organism identified, followed by Norovirus. Each of these organisms has an accurate and less costly alternative test. Stand-alone testing for C. difficile and Norovirus should be considered prior to the GI Panel for patients admitted to the hospital, particularly when admitted >48 hours.

Disclosures. All authors: No reported disclosures.
**Primary and Secondary Outcomes**

| Characteristic | Cancer | Non cancer | p-value |
|----------------|--------|------------|---------|
| N (%)          | 10 (44.4) | 15 (65.8) | 0.36 |
| Age [mean ± 1 SD] years | 63.7 ± 11.1 | 64.9 ± 13.1 | 0.87 |
| CAAC vs. CFAC | 68 (30.9) | 100 (43.6) | 0.00 |
| History of supra-erosive surgery | 49 (45.5) | 33 (0.00) | 0.18 |
| Active cancer | 101 (100) | 0 (0) | NA |
| Fever | 41 (69.5) | 0 (0) | 0.28 |
| Bacteremia | 33 (53.7) | 0 (0) | 1.0 |
| History of bacteria vs other | 81 (39.0) | 49 (0.0) | 0.38 |
| Body temperature [°C] | 38.95 (4.47) | 38.69 (5.67) | 0.47 |

**Background.** Acute cholangitis is one of the leading causes of infant morbidity and mortality. Argentina introduced massive rotavirus vaccination in 2015. In several countries, this introduction has changed the distribution of enteropathogens. The decrease in the prevalence of rotavirus has been described at the expense of an increase in Norovirus (NoV) activity worldwide. The aim of this study was to analyze the role of NoV in acute cholangitis in children under 5 years of age and their epidemiological profile.

**Methods.** A prospective and cross-sectional study in <5 years old patients attended for acute cholangitis in Children’s Hospital “Dr. Ricardo Gutierrez” in Buenos Aires, Argentina, from July 2017 and March 2019 was conducted. Acute epidemiological surveillance was performed with a specific case reporting form. Stool samples were tested for NoV (RT-qPCR). Clinical and epidemiological data were recorded.

**Results.** A total of 252 patients were enrolled and 235 stools samples were tested. Median of age was 22.3 months (IQR: 11–30), 58.7% were male. The most frequent symptoms were fever and vomiting in 63.1% and 53%, respectively; 52% had watery diarrhea, 45.2% had moderate diarrhea according to Vesikari Scale, 95.6% were not hydrated and 22% had a household member with diarrhea. There were no immunocompromised patients. A 72% had received rotavirus vaccine, 86% of them with full scheme. From samples tested, 27% (n = 63) were NoV positive. NoV was found throughout the year and the frequency of detection was higher in January and June (summer and winter in Argentina). Regarding genetic diversity the most frequent genogroup was GII (65%; 41/63) and genotype GII.P16-GII.4 Sydney (48%; 20/41).

**Conclusion.** NoV was detected at high frequency (27%) in children presenting moderate acute cholangitis, mainly in those who received rotavirus vaccine. Regarding sporadic acute cholangitis cases in children, it is important to consider NoV as a frequent aetiological agent.

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

1491. Active Norovirus Surveillance in Children Under 5 Years with Diarrhea after Rotavirus Vaccine Introduction in Argentina (2017–2019)

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**Background.** Acute diarrhea is one of the leading causes of infant morbidity and mortality. Argentina introduced massive rotavirus vaccination in 2015. In several countries, this introduction has changed the distribution of enteropathogens. The decrease in the prevalence of rotavirus has been described at the expense of an increase in Norovirus (NoV) activity worldwide. The aim of this study was to analyze the role of NoV in acute cholangitis cases in outpatient children under 5 years of age and their epidemiological profile.

**Methods.** A prospective and cross-sectional study in <5 years old patients attended for acute cholangitis in Children’s Hospital “Dr. Ricardo Gutierrez” in Buenos Aires, Argentina, from July 2017 and March 2019 was conducted. Acute epidemiological surveillance was performed with a specific case reporting form. Stool samples were tested for NoV (RT-qPCR). Clinical and epidemiological data were recorded.

**Results.** A total of 252 patients were enrolled and 235 stools samples were tested. Median of age was 22.3 months (IQR: 11–30), 58.7% were male. The most frequent symptoms were fever and vomiting in 63.1% and 53%, respectively; 52% had watery diarrhea, 45.2% had moderate diarrhea according to Vesikari Scale, 95.6% were not hydrated and 22% had a household member with diarrhea. There were no immunocompromised patients. A 72% had received rotavirus vaccine, 86% of them with full scheme. From samples tested, 27% (n = 63) were NoV positive. NoV was found throughout the year and the frequency of detection was higher in January and June (summer and winter in Argentina). Regarding genetic diversity the most frequent genogroup was GII (65%; 41/63) and genotype GII.P16-GII.4 Sydney (48%; 20/41).

**Conclusion.** NoV was detected at high frequency (27%) in children presenting moderate acute cholangitis, mainly in those who received rotavirus vaccine. Regarding sporadic acute cholangitis cases in children, it is important to consider NoV as a frequent aetiological agent.

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

1492. Comparison of Acute Cholangitis in Patients With or Without Cancer

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**Background.** Cancer-associated acute cholangitis (CAAC) are becoming more frequent and their characteristics may be changing with the evolution of cancer management. Our aim was to compare clinical, microbiological and outcome characteristics of CAAC to those of cancer-free acute cholangitis (CFAC). We included all consecutive cases of acute cholangitis (AC) from November 2015 to March 2017 we collected retrospectively in a single tertiary care hospital in Clichy, France, specialized in gastroenterology. Hospital stays referred as AC by coding were included. Comparison was made using Fisher or Student’s t-test. P < 0.05 was considered as significant.

**Results.** 156 episodes of AC in 130 patients were analyzed. 101 had CAAC and 55 had CFAC. Age and sex did not differ (table 1), but CAAC had a higher Charlon’s comorbidity index (4.4 vs. 1.7, P < 0.0001). Despite similar clinical presentation, CAAC had more pronounced cholestasis (Gram GT 659 vs. 391UI/L; Alkaline phosphatas 526 vs. 309 UI/L, P = 0.0001 for both) and C-reactive protein level (133 vs. 97mg/L, P = 0.008, Table 2). E. coli was more common in CAAC (74.4% vs. 54% of positive blood cultures, P = 0.004). In bile cultures, Enterococci and multi-drug-resistant Gram negatives tended to be more frequent in CAAC than in CFAC (63 vs. 17%, P = 0.07 and 9.1% vs. 4.1%, P = 0.33, Table 2), respectively. CAAC more frequently required drainage (86.1% vs. cases vs. 43.6% in CFAC (P < 0.0001), including radiological drainage (42.5% vs. 12.5%, P = 0.008) and with multiple sessions (28.7% vs. 8.3%, P < 0.0001, Table 3). Antibiotherapy duration did not differ between the two groups. Despite similar initial severity, only 51.5% of patients with CAAC were alive, without febrile reoccurrence or other biliary drainage at day 28, vs. 85.5% of patients with CFAC (P < 0.0001, Table 3).

**Conclusion.** Despite comparable initial clinical presentation, management is more complex and outcome less favorable in CAAC vs. CFAC.

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