born between 1945 and 1965 (the Baby Boomer "birth-cohort"). Limited data exists addressing testing strategies in primary care settings. This study aims to describe the experience of universal hepatitis C testing in the birth-cohort in six large primary care setting clinics.

***Methods.*** We performed a cross sectional study of universal hepatitis C testing in the birth-cohort in six primary care clinics from 2007 to 2016. Patients who were seen at least once in 2016 and had hepatitis C antibody testing were analyzed. We describe demographics, prevalence and duplicate testing rates.

***Results.*** Among 6615 patients seen, 4421 (69%) patients had hepatitis C antibody testing on six different primary care sites. Of those who had at least one hepatitis C test, 61.8% were male and 58.7% were African American. Of those tested 322 (7.2%) had a positive antibody result. One-third of patients (1452, 32.8%) had more than one hepatitis C antibody test. Duplicated testing was found to be more common in male than female patients (37.6% vs. 29.9%, $P$ <0.001) and more common in White than Black or Asian patients (40.8% vs. 27.5%, 24.7%, $P$ < 0.001). Among those receiving duplicate testing, only 8 (0.5%) were newly diagnosed with infection. 58 (4%) patients had an unnecessary test as defined as the patient already having received a positive hepatitis C antibody result.

***Conclusion.*** We screened more than two-thirds of the birth-cohort for hepatitis C antibody at six primary care sites. High seroprevalence in the birth cohort validates current CDC recommendations for hepatitis C screening. However duplicate testing was not uncommon and, of those receiving duplicate testing, the serocoversion rate was low. This confirms one-time screening as an adequate strategy in the birth-cohort. With the availability of new and effective oral hepatitis C treatment regimens, one-time universal screening will be an important, economical component of linking hepatitis C patients with the care they need.

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**2096. Impact of Clinical Pathway and Rapid Direct Influenza Polymerase Chain Reaction Test Introduction on Readmissions Among Non-hospitalized Children with Influenza-Like Illness**

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***Background.*** Diagnosing influenza is challenging in children as influenza-like illness (ILI) symptoms are nonspecific. A clinical pathway was introduced in the emergency department (ED) of a large pediatric hospital to screen and treat patients at high risk of influenza-related complications. A new highly accurate, rapid polymerase chain reaction (PCR) influenza test was introduced the next year to provide more timely results. We aimed to measure the impact of the pathway and new PCR test on rates of all-cause ED readmissions and subsequent hospital admissions in all children with ILI discharged from the ED.

***Methods.*** We conducted a retrospective cohort study of non-hospitalized children≤18 years presenting to the ED with ILI over 3 winter seasons. ILI cases were identified using syndromic surveillance definitions. Outcomes included any return ED encounter or hospital admission within 2 weeks of initial ED visit. We compared difference in outcomes between the years before pathway introduction, after pathway introduction, and after rapid PCR test introduction. Multivariate logistic regression adjusted for pertinent sociodemographic and clinical covariates.

***Results.*** Among 10799 children with ILI, 6.1% had an ED readmission and 2.5% had a hospital admission within 2 weeks of an initial ED visit. Overall rates of ED readmission or hospitalization did not differ significantly by study year (5.7% vs 6.5% vs 6.1%, $P$ = 0.41, and 2.9% vs 2.4% vs 2.3%, $P$ = 0.36). In multivariate analysis, pathway introduction alone was not associated with likelihood of ED readmission or hospitalizations. However, rapid PCR test introduction with the pathway was associated with lower odds of hospitalization (aOR 0.70, 95% CI 0.51–0.97). High-risk status was associated with higher odds of ED readmission (aOR 1.42, 95% CI 1.21–1.68). High-risk status and severity of illness at the initial ED visit were associated with higher odds of hospitalization (aOR 1.51, 95% CI 1.13–2.03; aOR 10.66, 95% CI 6.05–18.79).

***Conclusion.*** Clinical pathway and rapid PCR test introduction does not decrease all-cause ED readmissions but does decrease all-cause hospital admissions in children with ILI. Clinical factors such as severity of illness and high-risk status play a large role in determining outcomes.

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

**2097. Performance of Routine Rapid Antigen Diagnostic Testing and Bacterial Culture Compared with PCR Testing for the Detection of Group A Strep**

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***Background.*** Rapid antigen detection tests (RADT) and bacterial culture are the current standard of care for diagnosing Group A Strep in pediatric patients. Polymerase Chain Reaction (PCR) tests offer improved turn-around-times at the point-of-care (POC) or in the laboratory. PCR has demonstrated improved sensitivity over reference culture in previous studies.

***Methods.*** The performance of the QuickVue Strep A test (RADT) and bacterial culture for detection of group A Strep was evaluated during the fall and winter seasons of 2016/17 at a pediatric primary care clinic. Concordant PCR results from the **cobas**® Liat® Strep A test (a POC PCR assay (POC PCR)), Solana GAS Assay (a lab based PCR assay (Lab PCR)) were used as the reference method. Two hundred and sixty-eight throat samples from children < 18 years of age were prospectively collected. RADT and POC PCR were conducted in the physician office, culture was conducted in the laboratory and Lab PCR was conducted on banked specimens. Final performance analysis of RADT, POC PCR, culture and LAB PCR included 246 patients.

***Results.*** The prevalence of Strep A in this population was 40.2% (99/246). RADT demonstrated sensitivity of 88.9% (88/99) and specificity of 89.8% (132/147) compared with PCR. Of 11 RADT false-negative samples 2 were positive by culture. The 15 RADT false-positives were all negative by culture. Culture demonstrated a sensitivity of 77.8% (77/99) and specificity of 100% (147/147) compared with PCR with a median turn-around-time of 2 days. Of 22 false-negative culture results, 13 were RADT positive. Twenty-two subjects were excluded from the analysis due to discordant PCR results. A statistically significant relationship was found between Ct values for POC PCR positive samples and discordant results. The average Ct value of PCR and culture concordant positive results was 21.5, PCR and culture discordant results 27.6 and PCR discordant results 30.6.

***Conclusion.*** In this population false-positive RADT results were higher than expected and most false-negative RADT results would not be identified through routine diagnostic culture. Following current guidelines, these results would likely result in miss-diagnosis. PCR can offer simplification of testing and provide sensitive and specific results at the point-of-care.

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**2098. Optimizing Test Ordering Language to Minimize Group A *Streptococcus* Reflex Culture for Adults**

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**Session:** 238. Diagnostics - Pharyngitis
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***Background.*** Group A *Streptococcus* (GAS) is a predominant bacterial cause of acute upper respiratory tract infections, with the greatest incidence of pharyngitis and possible development of acute rheumatic fever occurring in children. According to guidelines from the Infectious Diseases Society of America, negative results from rapid antigen detection testing (RADT) for GAS should be followed with reflex to pharyngeal culture for children but not generally for adults. At our institution, several departments were found to routinely order reflex culture in adults (>17 yo). 86% of RADT-negative reflex cultures were negative for GAS, as well as Groups C/G, which supports the notion that these backup cultures are unnecessary for adults.

***Methods.*** In November 2016, a change in ordering language was implemented in the emergency department (ED), which was found to have the highest number of reflex culture orders for adults. To differentiate the two testing routes for children and adults, the word "peds" was added for RADT with reflex culture orders, and the word "adult" was added for RADT without reflex culture. At the commencement of the intervention, a brief education on the change in ordering language was provided to physicians by one of the ED providers. From November 2016 to April 2017, the number of GAS reflex culture orders for adult patients in the ED was tracked. These were compared with data from the 1-year period prior.

***Results.*** Pre-intervention, the average number of GAS reflex cultures per month was 66, which fell to 34 following the change to ordering language. The percentage of total RADT tests that underwent reflex culture changed from 99.5% to 49.0% before and after the intervention. Conversely, the number of RADT tests with no reflex culture ordered showed a proportional increase. To ensure that GAS cultures were not being ordered through a different route, the number of add-on culture orders was also tracked, with no marked increase in these orders during the intervention period.

***Conclusion.*** While this notable decrease in reflex culture ordering following negative RADT is promising, there is ongoing room for improvement, which could be addressed by additional reminders to physicians within the ED. If successful, similar interventions will be implemented in other departments.

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