Results: Introduction of these programs was associated with a reduction in all-cause 30-day readmission from 39.3% to 22.9%, and a reduction in 30-day readmission for patients on-treatment from 24.6% to 15.6% (p< 0.01 for both). No difference was seen in hospital LOS (8 days in each cohort). In a subgroup analysis (Fig 2), OID patients in the post-OPAT cohort saw a median reduction of 2 days (7 days to 5 days, p=0.002) in time from final OR visit to discharge. Use of optimal treatments for MSSA increased in the post-OPAT cohort compared to pre-OPAT (65.2% to 80.9%; p=0.06). The 90-day hospital readmission rate were higher in the post-OPAT cohort among patients who lived in metro-area zip codes (p=0.03). Having an established primary care physician was associated with lower 90-day hospital readmission in both the pre- and post-OPAT cohorts (p=0.05 and 0.01, respectively).

Conclusion: Thirty-day readmission rates among patients discharged on OPAT significantly lowered following initiation of a combination of both a pharmacist-led OPAT program and OID consult service. OPAT and OID programs accrue additional efficiencies and clinical benefits to both patients and hospitals, which can be further evaluated and used to justify such service additions.

Disclosures: **All Authors**: No reported disclosures

127. walking to the Virtual Era. Analysis of the Telehealth Experience in the Infectious Diseases Clinic During the COVID Pandemic

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Session: O-24. Hot Issues in Clinical Practice

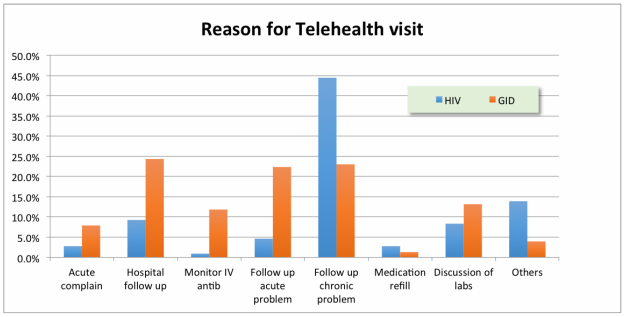
Background: The COVID pandemic has changed and will continue changing the way we practice medicine. We sought to investigate the impact of telehealth (TH) in the delivery of healthcare in the general infectious diseases (GID), and HIV clinic during the COVID pandemic.

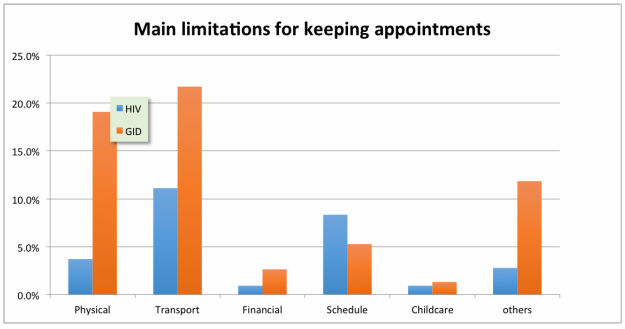
The University of Rochester Medical Center is a major tertiary care and referral center for ID in upstate New York. From March through May of 2020, the clinics were closed, and nearly all visits were conducted by TH.

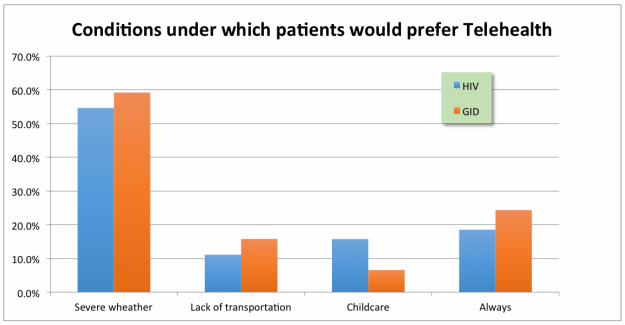
Methods: We surveyed (either by telephone or online) a total of 260 patients who participated in TH visits, with a mean age of 56 years in the HIV group and 59 years in the GID group. With a predominance of 62.8 of males v/s 37.2 of females.

We collected information regarding the reason for the TH visits, access to technology, patient satisfaction, and preferences over in-person visits. We obtained the volume and no-show rate from prior years through EPIC. We evaluated compliance between in-person and TH visits using statistical analysis.

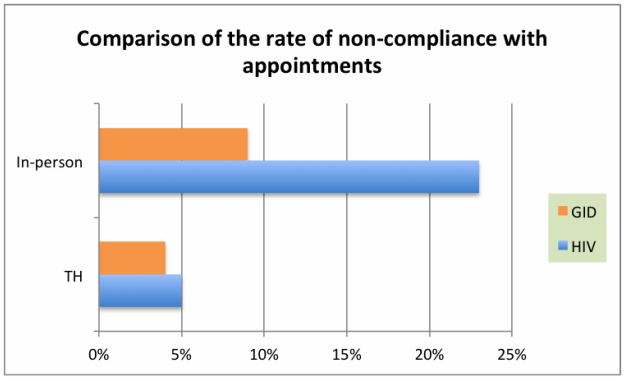
Results: We found 93.4% of GID and 84.3% of HIV patients surveyed, either strongly agreed or somewhat agreed that their TH visit was as satisfactory as a clinic visit. 67.5% of GID and 63% of HIV patients agreed that the option of TH would increase their compliance rate in the future. The no-show rate during the TH period in the HIV group decreased from 23% to 5% compared to the previous year, while the no-show rate in GID decreased from 9% to 4%. These results were statistically significant with a P-value < 0.005 in both groups.







Conclusion: GID patients were more likely to have TH for hospital follow-up, follow-up of acute problems, and outpatient antibiotic therapy, compared to HIV patients, who more often had TH for chronic problems. GID patients were more likely to have the capability for televideo visits when compared to the HIV group, although this was not statistically significant. TH was statistically significant in improving patient compliance with appointments in both the HIV and ID clinics. Patients were overall highly satisfied with their TH experience and many patients also reported that continued availability of telemedicine would improve their compliance with appointments.



Disclosures: **All Authors**: No reported disclosures

128. Characteristics and Outcomes of Pregnant Women Hospitalized with Influenza in the United States, Flusurv-net, 2010–2019

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Session: O-25. Hot Topics in Bacteria and Viral Infections

Background: Pregnant women are at high-risk for influenza-associated hospitalization. We used data from the U.S. Influenza Hospitalization Surveillance Network (FluSurv-NET) to characterize pregnant women hospitalized with influenza.

Methods: We included pregnant women (15–44 years) residing within a FluSurv-NET catchment area and hospitalized with laboratory-confirmed influenza between October 1 and April 30, during the 2010–19 influenza seasons. Clinical data were obtained on cases through medical chart abstraction. We examined trends in vaccination coverage and antiviral treatment using the Cochran-Armitage test for trend and characterized maternal interventions and maternal and fetal outcomes during hospitalization.

Results: Of 9,652 women aged 15–44 years hospitalized with influenza, 2,697 (28%) were pregnant. Median maternal age was 28 years and median gestational age was 32 weeks; 36% were non-Hispanic white, 29% non-Hispanic black, and 20%

Hispanic. Underlying conditions were present in 35% (n=931), with asthma (n=613; 22.7%) and chronic metabolic disease (n=204; 7.6%) as the most common; 12% (n=299) were current smokers. Vaccination coverage and antiviral receipt varied by season and age [Figures 1 and 2]. Overall, 31% (n=846) were vaccinated and 89% (n=2,408) received antivirals. Five percent (n=132) had intensive care unit admission, 2% (n=52) required mechanical ventilation, 6% (n=165) developed pneumonia and 0.3% (n=9) died; median length of hospital stay was 2 days (IQR 1–3). The most common symptoms at admission included cough (68%) and fever (66%) [Figure 3]. At discharge, most women (70%; n=1865) were still pregnant while 28% (n=758) were no longer pregnant and 2% (n=44) had unknown pregnancy status. Among women who were no longer pregnant at discharge, 96% (n=726) had pregnancies resulting in live births, 3% (n=25) had pregnancies resulting in loss of the fetus or neonate, and 1.0% (n=7) had unknown birth outcome.

Figure 1. Vaccination coverage among pregnant women hospitalized with laboratory-confirmed influenza by season and by age group, FluSurv-NET 2010–2019

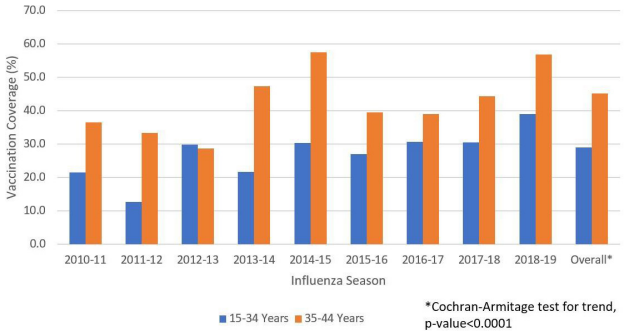


Figure 2. Antiviral treatment among pregnant women hospitalized with laboratory-confirmed influenza by season and by age group, FluSurv-NET 2010–2019

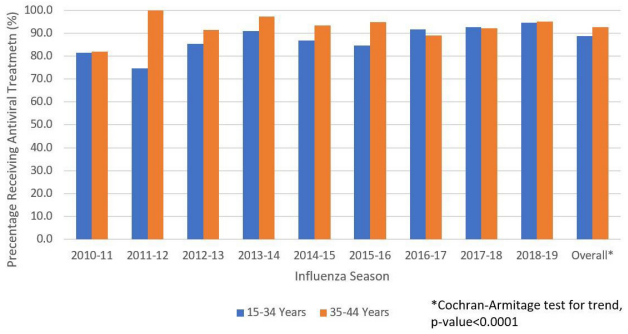
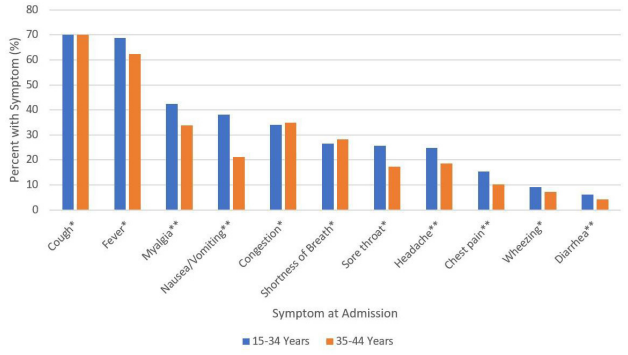


Figure 3. Symptoms at admission among pregnant women hospitalized with laboratory-confirmed influenza by age group, FluSurv-NET 2010–2019



*Data collected for all but 2010-11 through 2013-14 seasons (n=1,794)
**Data collected for all but 2010-11 through 2014-15 and 2018-19 seasons (n=1,405)

Conclusion: Over 9 influenza seasons, nearly one-third of women aged 15–44 years and hospitalized with influenza were pregnant. Severe maternal and fetal outcomes were rare. While most women received antivirals, fewer than one-third received current season influenza vaccine.

Disclosures: Sue Kim, MPH, Council of State and Territorial Epidemiologists (CSTE) (Grant/Research Support) Melissa Sutton, MD, MPH, CDC funding (Emerging Infections Program) (Grant/Research Support)

129. Beta-lactam vs Fluoroquinolone Monotherapy for pseudomonas Aeruginosa infection: A Systematic Review and Meta-analysis

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Session: O-25. Hot Topics in Bacteria and Viral Infections

Background: *Pseudomonas aeruginosa* (PA) is a leading cause of healthcare-associated infections, including pneumonia, bloodstream infections, and surgical site infections around the world. A variety of antibiotic classes are used in the treatment of PA infections, including beta-lactams (BLs) and fluoroquinolones (FQs), given either together in combination therapy or alone in monotherapy. Here, we report a systematic review and meta-analysis to evaluate the therapeutic efficacy of BL agents versus FQ agents as active, definitive monotherapy in PA infections in adults.

Methods: Comprehensive literature searches of Medline and Scopus electronic databases, alongside hand searches of the Cochrane Database of Systematic Reviews, PubMed, and Google Scholar, were performed in April 2019 without time restriction to identify studies published in English comparing BL and FQ agents given as monotherapy for PA infection in hospitalized adults for which mortality, bacteriological eradication, or clinical response was evaluated. One reviewer screened search results based on pre-defined selection criteria. Two reviewers independently assessed included studies for methodological quality using NIH assessment tools. Two fixed-effects meta-analyses were performed (Figure 1).

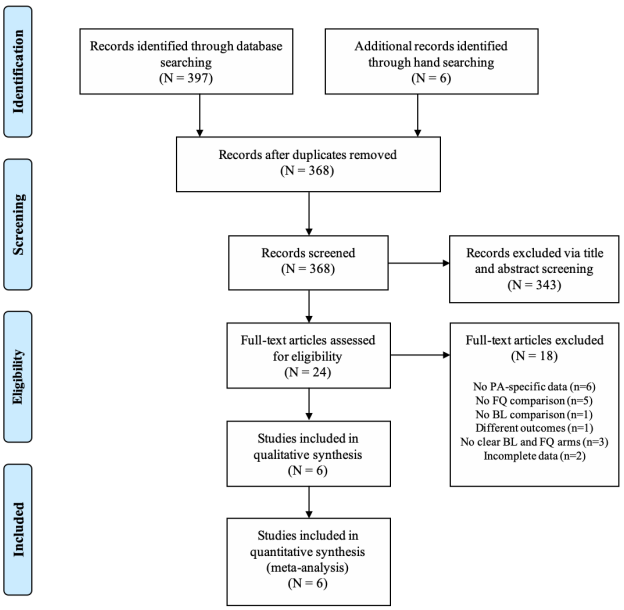

Figure 1. Flow diagram of study selection process.

Results: A total of 368 articles were screened, and 6 studies were included in the meta-analysis. Upon evaluation of methodological quality, 2 studies were rated good, 3 fair, and 1 poor (Table 1). A meta-analysis of 3 cohort studies demonstrates FQ monotherapy for PA bacteremia is associated with increased survival compared to BL monotherapy (OR, 3.65; 95% CI, 1.27–10.44; p=.02; Figure 2). A meta-analysis of 3 randomized control studies demonstrates FQ monotherapy for PA pneumonia and skin and soft tissue infection is not significantly associated with increased bacteriological eradication compared to BL monotherapy (RD, 0.07; 95% CI, -0.09 to 0.24; p=.39; Figure 3).

Table 1. Characteristics of selected studies.

Study, Year	Study Design; Record Years	Study Location; Setting	Quality Rating	Infection Type; Mode of Acquisition	Outcomes	Patient Demographics[a]	BL Arm: # of Patients; Drugs	FQ Arm: # of Patients; Drugs	Polymicrobial Infections	Pertinent definitions[c]
Kuikka et al, 1998	Cohort, retro; 1978-1982 & 1992-1996	Finland; Hospital (inpatients)	Fair	Bacteremia w/ sepsis; nosocomial (90%) & community acquired	30d mortality	83% male, 46% >60 y/o, 34% hematologic malignancy, 16% nonhematologic malignancy, 30% ICU; 37% systemic corticosteroid therapy, 35% cytotoxic therapy	21; carbenicillin, piperacillin (+aztreonam), ceftazidime, imipenem, meropenem	11; ciprofloxacin	N (for bacteremia), 24% other infection	Definitive therapy = 7 d or until death
Tan et al, 2014	Cohort, retro; 2007-2008	Singapore; Hospital (inpatients)	Fair	Bacteremia; nosocomial (45%), healthcare-associated (32%), community acquired (23%)	30d mortality	59% male, 65 median age, 30 median SAPS II 71; ceftazidime, score, 1 median Pitt bacteremia score, 18% piperacillin-tazobactam, ICU, 64% active empirical therapy, 19% carbapenems, piperacillin, cancer; 9% HIV/AIDS aztreonam	3; ciprofloxacin	Y, 19% of patients receiving monotherapy	Definitive therapy = 2 d after culture results
Wu et al, 2018	Cohort, retro; 2013-2014	Taiwan; Hospital (inpatients)	Good	Bacteremia; nosocomial (66%), healthcare-associated (24%), community acquired (8%)	28d mortality	71% male, 66 mean age, 64% malignancy, 21 mean APACHE II score, 43% septic shock, 3 mean Pitt bacteremia score; 30% chemotherapy, 17% steroid use, 16% neutropenia, 79% appropriate empirical therapy	78 : piperacillin-tazobactam, ceftazidime, cefepime, imipenem-cilastatin, meropenem, doripenem	27 ; ciprofloxacin, levofloxacin IV or PO	N	Definitive therapy = >3d & for >50% of treatment time
Fink et al, 1994	Randomized control, DB; 1990- 1992	USA; Hospital (inpatients)	Good	Severe pneumonia; nosocomial (78%) & community acquired	Bacteriological eradication	70% male, 59 mean age, 79% ICU, 17.6 mean APACHE II score, 15% bacteremia	32*; imipenem-cilastatin*	38*; ciprofloxacin*[,+]	Y, 50% of non-ITT population	Bacteriological eradication = eradication + presumed eradication
Torres et al, 2000	Randomized control, OL; NR	Spain; Hospital (inpatients)	Fair	Severe pneumonia; nosocomial	Bacteriological eradication, clinical response	74% male, 62 mean age, 13.8 mean APACHE II score	12; imipenem-cilastatin	14; ciprofloxacin	Y, 24% of microbiologically and clinically evaluable population	Bacteriological eradication = eradication + presumed eradication; Clinical success = cure + improvement
Siami et al, 2001	Randomized control, IB; NR	USA & Canada; Hospital (inpatients*)	Poor	Severe SSTI (includes spontaneous, wound, and diabetic foot); NR	Bacteriological eradication	71% male, 53 median age, 41% spontaneous, 38% wound, 18% diabetic foot	16; piperacillin-tazobactam[*] w/ PO option (amoxicillin-clavulanate) after 3 d	15; clinafloxacin w/ PO option after 3 d	Y, 55%	Bacteriological eradication = eradication + presumed eradication

DB = double-blinded, OL = open label, IB = investigator-blinded, NR = not reported, SSTI = skin and soft tissue infection
[a] = patients were later discharged and evaluated in an outpatient setting
[b] = For Kuikka et al, represents population with PA bacteremia data (n=132); for Tan et al, represents population with PA bacteremia receiving monotherapy data (n=77); for Wu et al, represents population with PA bacteremia data (n=105); for Fisk et al, represents ITT population data (n=402); for Torres et al, represents non-ITT, study population data (n=75); for Siami et al, ITT population data (n=409). For randomized control studies, data represent calculated averages of the two treatments arms, rounded down.
[c] = ITT population, [+] = option for vancomycin, [*] = option for metronidazole
[d] = For randomized control studies, definitions of eradication and presumed eradication differ.