infection. We use environmental clean project to improve healthcare-associated infection in the hospital.

**Methods:** The infection rate of critical patients is relatively higher because of their poor immunity and invasive procedures of treatment. In 2012, 2 of top 5ward with high resistant area are MICU and RICU. Therefore, we choose these two units to join this project-"Introduction of disposable cleaning wipers". We collected the sample at the time of before introduction and after introduction of disposable cleaning wipers; comparing ATP and Bacterial culture (Qualitative) results.

**Results:** The ideal rate of ATP pretest is increasing from 27.5% to 39.5%, the result shows the environment cleanness level improved even before wiping; Re-education to housekeeping staff and introducing disposable cleaning wipers, 8 weeks later, ATP ideal rate improved from 55% to 65.8%.

**Conclusions:** It showed the cleaning wipers work is effectively in decreasing strains colonization and causing infection.

### PS 1-072

# DELAYED VERSUS IMMEDIATE INOCULATION OF SPUTUM MEDIA FOR DIAGNOSIS OF PNEUMONIA

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**Purpose:** Proper collection of specimens is important to maximize the outcome of laboratory test for the diagnosis of infectious disease. For urinalysis and culture and sensitivity testing, CLSI guideline recommends testing within two hours of collection. In this study, we will discuss the impact of the delayed inoculation.

Methods: A total of 40 consecutively collected midstream and/or cathetercatch urine samples from patients were cultured in medium. The samples were inoculated immediately, one hour, two hours and 4 hours separately. Results: The culture result yields that the difference between the immediate cultures and delayed inoculations were influenced by the period of delaying. Conclusion: Direct sample inoculation into selective growth medium may improve the likelihood of detecting real pathogen.

#### Table 1 (PS 1-075)

## PS 1-075

ANTIMICROBIAL SUSCEPTIBILITY AMONG HOME CARE CASES WHO WERE HOSPITALIZED DUE TO URINARY TRACT INFECTION AT A TERTIARY CARE HOSPITAL

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**Purpose:** The surveillance of antimicrobial resistant pathogens among the home care group was rare discussed in past literature. This study was designed to evaluate antimicrobial resistant pathogens among home care cases who were hospitalized due to urinary tract infection at a tertiary care hospital.

**Methods:** We prospectively collected the bacterial isolates from home care cases who had been hospitalized due to UTI at a tertiary care hospital during 2013/1/1 ~ 2014/9/30. Only first episode of UTI during study period would be enrolled. The distributions of bacterial isolates and their antimicrobial resistance were analyzed. Rates of susceptibility to imipenem, ceftriaxone, ceftazidime, levofloxacin, trimethoprim/sulfamethoxazole and amikacin were measured using 2014-CLSI breakpoints.

**Results:** Total 85 isolates were collected from 59 cases who had been hospitalized at least once due to UTI. Gram negative bacilli (75.3%) were dominant pathogens. The ranking top six of grain negative bacilli and their susceptibility data were listed in table1. As for gram positive bacteria, *Enterococcus spp* occupied 47.6% and one isolate was vancomycin-resistant enterococcus. Two isolates of oxacillin- resistant *S. aureus* were also noted.

**Conclusion:** The dominant pathogens of UTI in home-care cases were *E. coli, P. aeruginosa, K. pneumonia* and *Enterococcus spp.* High rations of MDR Enterobacteriaceae (53.8%) were noted in our study. Only imipenem and amikacin were active against > 90 % GNB isolates. Ratio of ampicillin resistant enterococcus (10%) was low, and only one VRE was noted. Thus, when facing UTI issue from home-care cases, it is important to early identify the isolates by gram stain in order to choose appropriate antimicrobial agents.

	Pathogens	Total Number (%)	CRO	CAZ	LVX	SXT	AN	IPM	#MDR ratio
1	E. coli	18(28.1)	10(55.6%)	х	6(33.3%)	8(44.4%)	18(100%)	18(100%)	61.1%
2.	P. aeruginosa	11(17.2)	Х	10(90.9%)	8(72.7%)	X	10(90.9%)	9(81.8%)	18.2%
3	K. pneumoniae	10(15.6)	4(40%)	x	6(60%)	4(40%)	10(100%)	10(100%)	60.0%
4	C. koseri	6(9.4)	4(66.6%)	Х	3(50%)	4(66.6%)	4(66.6%)	6(100%)	50.0%
5	P. mirabilis	5(7.8)	4(80%)	Х	4(80%)	4(80%)	4(80%)	5(100%)	20.0%
6	A. baumannii	4(6.3)	X	3(75%)	1(25%)	1(25%)	3(75%)	4(100%)	75.0%

# MDR: multidrug resistant; non-susceptible to  $\geq$  1 agents in  $\geq$  3 antimircobial categories

CRO: Ceftriaxone, CAZ: Ceftazidime; LVX: Levofloxacin, SXT: Trimethoprim/sulfamethoxazole, AN: Amikacin, IPM: Imipenem

### PS 1-074

# THE EVALUATION OF THE ANTIMICROBIAL SUSCEPTIBILITY OF THE CLINICAL ISOLATES WITH THE AUTOMATED SYSTEM

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**Purpose:** The VITEK 2 is a new version of the automated system for organism identification and susceptibility testing. It's very powerful to

Methods: Case control study. Case: Vitek 2 automated machine.

Control group: True MIC: Sigma standard powder for MIC test.

**Results:** The sensitivity rate of Proteus showed major difference in Imipenem result. False negative rate is about 20%.

**Conclusion:** Our data suggest that disk diffusion, especially with meropenem disks, may be used to confirm a carbapenem nonsusceptible result in *K. pneumoniae* isolates, which would warrant further testing. If treatment failure with carbapenems is observed for isolates of *K. pneumoniae* that were previously reported as suscep- tible to carbapenems, repeat testing with a nonautomated method, such as disk diffusion, may be warranted.

## PS 1-076

#### CLINICAL AND MICROBIOLOGICAL ANALYSIS OF ACINETOBACTER BAUMANNII BACTEREMIA IN NEONATAL INTENSIVE CARE UNITS

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**Objective:** Acinetobacter baumannii is one of the most common bacterial pathogens to cause nosocomial infections, pneumonia and bacteremia in particular, in patients admitted in intensive care units. There have been few studies on *A. baumannii* infection in neonates. The study aimed to characterize the clinical manifestations and outcomes of patients with *A. baumannii* bacteremia in the neonatal intensive care units (NICUs). Molecular epidemiological analysis on the *A. baumannii* isolates derived from the neonatal patients was also carried out.

Methods: All patients with A. baumannii bacteremia in NICUs of a medical center from 2004 to 2014 were reviewed. We analyzed the clinical manifestations,