

## Evaluating the Outcome of Post-Intensive Care Associated with Hospitalists

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**Background/Aims:** Due to lack of medical personnel, hospitalists were employed in Korean hospitals to provide high-quality medical care. Whether hospitalist care can improve patient outcomes remains unclear. In our hospital, hospitalists have cared for post-intensive care unit (ICU) patients since last year. We aim to analyze the outcome of post-intensive care in critically ill patients associated with hospitalists. **Methods:** A retrospective review selected 192 patients cared by intensivists from February 2018 to January 2019 in our institute. We excluded 21 post-ICU patients cared by two or more physicians and 9 patients with “do not resuscitate” orders at ICU. Seven patients who discharged from ICU not transferred to GW were also excluded. Finally, 155 patients were hospitalized after ICU care, including 54 patients cared by hospitalists (HG) and 101 patients cared by non-hospitalists (NHG). We compared the length of post-ICU stay (LOPS), post-ICU mortality, and readmission rate. **Results:** LOPS of HG group was significantly lower than NHG groups (median, interquartile range [IQR], 9 [5-17] vs 14 [7-24],  $P=0.048$ ). Length of ICU between HG and NHG groups was not significantly different (median [IQR], 6 [4-11] vs 5 [3-11] day,  $P=0.619$ ). No significant differences were found in 30 days in-hospital mortality (HG vs NHG, 7.4 vs 7.9 %,  $P=0.909$ ) and readmission rate (HG vs NHG, 27.8 vs 28.7 %,  $P=0.902$ ). On multiple regression analysis, hospitalists care (odd ratio[OR]: 0.42, 95% confidence interval [CI], 0.21-0.87) and Clostridium difficile infection (OR: 3.11, 95%CI, 1.14-8.44) were the risk factors significantly associated with an LOPS longer than 14 days. **Conclusions:** Hospitalists may improve the LOPS of critically ill patient. Collaboration between intensivists and hospitalists may improve patient outcomes as a multidisciplinary approach. Further large and long-term follow-up studies will be needed.

Table 1. Risk Factors for Length of Post ICU (LOPS) stay  $\geq$  14 days

Variable	LOPS $\geq$ 14 days n/total (%)	Univariate analysis		Multivariable analysis	
		Odd ratio (95% CI)	P-value	Odd ratio (95% CI)	P-value
Sepsis	24/40 (60.0)	2.61 (1.25-5.46)	0.01	1.76 (0.79-3.92)	0.17
Acute kidney injury	18/28 (64.3)	2.96 (1.26-6.95)	0.01	2.44 (0.97-6.10)	0.06
C.difficile infection	18/25 (72)	4.39 (1.71-11.28)	<0.01	3.11 (1.14-8.44)	0.03
Hospitalists	16/54 (29.6)	0.43 (0.21-0.87)	0.02	0.42 (0.20-0.89)	0.02

\*Age, sex, diagnosis, co-morbidities, APACH2 score components and hospitalists were analyzed for risk factor of LOPS.