HOSPITALISED COMMUNITY-ACQUIRED PNEUMONIA (CAP) IN SINGAPORE: OUTCOME AND COST OF TREATING LOW-RISK CAP IN HOSPITAL

KH Lee, M da Costa, A Stebbings, NK Chin, WC Tan, TK Lim.
Department of Medicine, National University Hospital, Singapore.

Aims: To determine the percentage of low-risk community-acquired pneumonia (CAP) in hospitalised CAP, and describe their outcome and the cost of treating them in hospital.
Methods: Prospective observational study over 1 year (April 1997 to March 1998) at a University Hospital. Patients were defined as low risk based on Fine's criteria (N Engl J Med 1997; 336:243-50): ≤ 50 years; no neoplastic disease, congestive heart failure, cerebrovascular disease, renal disease, or liver disease; physical examination - no altered mental status, pulse < 125/minute, respiratory rate < 30/minute, systolic blood pressure ≥ 90 mmHg, temperature ≥ 35°C or < 40°C. Hospital outcome, hospital length of stay and hospitalisation charges were determined. Data is presented as mean (± standard deviation).
Results: We had 226 patients with an overall mortality of 13.7%. Median age was 64 years old with a range from 12 to 96 years. Severe CAP requiring ICU admission was 16.8%. The median hospital length of stay was 6 days, and the median hospitalisation charges was S$2,520. Comparing the low-risk group with the rest:

	No (%)	Age (yrs)	Hospital length of stay (days)	Hospital charges (S$)	Death	Positive blood culture
Low-risk	47 (21)	33 ± 10	6.4 ± 5.2	2,160 ± 1,940	0	1 (2%)
Others	179 (79)	65 ± 19	10 ± 11.5*	5,770 ± 8,000*	31 (11%)	16 (9%)

p < 0.005, unpaired t-test

Conclusions: Low-risk CAP form one-fifth of our entire hospitalised CAP. There is no hospital mortality in this group and they stay significantly shorter in hospital and have significantly lower hospital charges. The low-risk CAP form 9% of total hospitalisation charges for CAP. If these patients can be manages as outpatients, this may represent significant cost-savings and reduction in the consumption of hospital resources.