44. Solution: C

If k is the number of days of hospitalization, then the insurance payment $g(k)$ is

$$g(k) = \begin{cases} 100k & \text{for } k = 1, 2, 3 \\ 300 + 50(k-3) & \text{for } k = 4, 5. \end{cases}$$

Thus, the expected payment is $\sum_{k=1}^{5} g(k)\, p_k = 100\,p_1 + 200\,p_2 + 300\,p_3 + 350\,p_4 + 400\,p_5 =$

$$\frac{1}{15}\left(100\times 5 + 200\times 4 + 300\times 3 + 350\times 2 + 400\times 1\right) = 220$$