

The differences in health outcomes between Web-based and paper-based implementation of a clinical pathway for radical nephrectomy.

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Abstract

OBJECTIVE: To evaluate the effects of a web-based clinical pathway (WCP) for radical nephrectomy on patient care, and to compare the effects with those of a paper-based clinical pathway (PCP). **PATIENTS AND METHODS:** Patients with renal cell carcinoma and who underwent radical nephrectomy were enrolled into the study. The results of using the WCP for radical nephrectomy from July 2000 to August 2001 were compared with those using the PCP between May 1999 and June 2000. The mean hospital stay, average admission charges, six quality indicators, and the advantages of the WCP were determined. **RESULTS:** Using a WCP for radical nephrectomy reduced the hospital stay and admission charges by as much as the PCP. A similar number of patients had variances from the WCP as with the PCP ($P = 0.407$), but the number of undetected variances and the variance detection time in the WCP were significantly less ($P = 0.0193$ and 0.0162). Implementing a WCP also improved the quality of care by as much as a PCP. **CONCLUSIONS:** Using a WCP for radical nephrectomy can improve health outcomes by reducing the hospital stay and admission charges, and by improving the quality of care by as much as a PCP. Furthermore, the WCP was more accurate and faster than the PCP in detecting variances.