# Diffusion of High Cost Medical Equipments in Nepal: Implication to Utilization and Access

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**Background**

The government policy on health is favoring investment of private sectors in health services and the service of private sector is focused on high cost services. Also, the investment in these services is increasing and still no regulatory frame is developed. So, it is of great need to measure the implications of diffusion of high cost medical devices and provide ground on evidence-based policy recommendation.

**Methods**

This was a cross-sectional study conducted in both public and private hospitals where the Computerized Tomography Scanners and Magnetic Resonance Imaging services were available. Eight consumers were taken for interview and 10 in-depth interviews with the service owners, physicians, radiologists and policy makers at the concerned authorities were made. Data were documented and managed systematically in the database created in Microsoft Access and imported into Statistical Package for Social Sciences 11.5 for Windows for analysis. The information of health facility was prepared in the spreadsheet of Microsoft Excel and analyzed. A more straightforward general inductive approach for analysis of qualitative data was adopted.

**Results**

MRI service is found concentrated only in capital city while it was about 60% of Computerized Tomography scanning devices of public and private sector installed in Kathmandu valley only. Computerized Tomography scanning service was started by private sector from Blue Cross in 1993. And the gradual increase in diffusion was observed till 2001 with the sharp increment in the trend of Computerized Tomography diffusion observed after 2001. The diffusion was dominated by private ownership as expected (72% of total 20). Magnetic Resonance Imaging service has the same pattern and trend of diffusion as that of Computerized Tomography scanner but in a bit slower pace. These services were found to be diffused with concentration in small and medium sized health facilities in private sector, while it was observed the trend to be engulfed in the bigger sized hospitals in the public sector.

**Conclusions**

There is no any formal process of technology assessment in Nepal so no effective mechanisms to control kick-backs and irrational use of medical devices from both ethical and economic background.

**Keywords:** Computerized Tomography scanners; diffusion; medical technology; Magnetic Resonance Imaging services; private sector; public sector.