

One-stop service for patients from the first diagnosis for vascular disease

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Objectives:

To reduce diagnosis time and the frequency of hospital visitation, and to increase the quality of medical care and patient satisfaction through a one-stop service.

Methods:

This study was carried out at vascular surgery clinic in Samsung Medical center, which is tertiary-care university hospital in Seoul, Korea, from March 2005 to August 2005.

For the patients who visited the vascular surgery clinic as their first diagnostic visit and who finished their first diagnosis within 90 minutes from the opening of the clinic and who also underwent only non-invasive vascular examination other than such examinations that required prior reservation (such as CT, MRI etc.), we established a one-stop service process that enabled patients to receive first diagnosis, laboratory examination and re-diagnosis on the same day.

We collected information on the waiting period for laboratory examination, the waiting period for re-diagnosis, the number of hospital visitations, the hospital cost, the transportation cost, and the level of satisfaction from the test groups and the control group. We also investigated the difference in the number of patients before and after conducting the one-stop service, and on the difference in the profit from the vascular surgery clinic.

Results:

The number of patients that received one-stop service increased by 45% after March 2005, and it continues to increase.

The control group recorded 9.7 days of a waiting period for laboratory examination, 14.3 days of a waiting period for re-diagnosis, and 2.5 times for the frequency of hospital visitation, while the test group recorded a reduced waiting period (1 day) for examination and re-diagnosis, and a visitation frequency of 1 time.

The patient satisfaction level questionnaire consisted of Likert's 5 point scale, where a higher score indicated greater satisfaction. 3.9 was recorded as the satisfaction level for the test group, and the control group recorded 4.1; this didn't show a statistically significant difference and both groups showed relatively high satisfaction.

In aspect of total cost spent by the patient, hospital cost per patient was reduced to 14.87\$ (43%), and transportation cost per patient was reduced to 20.73\$ (45%).

In aspect of hospital profit, the rate of the first patient visit to the vascular surgery clinic increased by more than 35% after the initiation of one-stop service, which gradually increased per month. Accordingly, the clinic profit showed a higher average amount after initiation of the one-stop service.

Conclusions:

One-stop service could raised concerns of losing hospital profit due to the reduction in the number of patient receiving re-diagnosis, but the service would expand opportunities to the patients taking their first medical examinations, while the rapid and accurate diagnosis and treatment would improve the quality and satisfaction for the medical care. This, in turn, would result in greater achievement.

The study produced good results for time, cost and the level of satisfaction through the one-stop service, but it produced a greater workload in the clinic and laboratory and also unexpected waiting time for examination and re-diagnosis, which produced complaints from the patients. Thus, further study should be done to solve these problems, and we recommend carrying out one-stop service at other departments.