

Medical Equipment Safety Provided by Grid Management

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Background

The accuracy and safety of medical equipment are directly related to the therapeutic effect. The development of medical science and technology requires the assistance of advanced medical equipment. Therefore, medical equipment management and its adaptation to hospital development is an important issue for hospital administrators. Our hospital has established a long-term mechanism to ensure the safety of medical equipment through grid management and service inspections.

Methods and Activities

Medical Equipment Department consists of 28 professional clinical engineers. All the clinical engineers have been divided into 5 teams based on their specialty and expertise. We have established a grid management system that conducted equipment service inspections, and finally formed a long-term preventive equipment support mode for annual examination, quarterly maintenance, monthly and daily inspections. We guarantee efficient service through WeChat group and 24-hour hotline.

Teams of clinical engineers formulate annual service inspection and preventive maintenance work schedule at the beginning of the year and performed well. We have established a three-level quality control management system including clinical departments, management department and equipment manufacturers. Furthermore, variety of quality management tools such as quality control circle (QCC) and FOCUS-PDCA have been used in the management.

5 equipment maintenance teams

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| East team leader | Zhang Bingfeng, Wang Zhen, Guo Kai, Chen Chaopeng, Guo Pandeng |
| Northwest team leader | Guo Changcheng, Liu Liya, Yang Chenglong, Lv Wenqi |
| North team leader | Xu Bo, Wang Ming, Liu Shuo, Zhang Xudong |
| Surgical equipment maintenance team leader | Zhao Dongsheng, Zheng Honghao, Wang Xinmin, Li Jiyin, Huang Daoxue, Jing Aoya |
| Emergency deployment team leader | Li Zhiqiang, Bao Tianlong, Shen Hanqi, Li Zhiyong, Zhang Xujie, Zheng Lu, Sun Xinmin, He Lian, Zhang Jianhua |

Communication methods

Implementation plan

Education & Training

Two quality control circles

Results

After applying the grid management system, our team finished medical equipment preventive maintenance inspection 488 times, organized 70 special training sessions and trained 1714 professionals. Moreover, the annual repair volume decreased by 21.7%, and we saved over 1.5 million Yuan on repair costs. Those continuous improvement projects guided by quality improvement team have also achieved remarkable results.

Equipment support capacity improvement

Self-designed operation specification guide card

Cold chain 24-hour real-time monitoring

Conclusion

With the development of modern hospital management, the tasks and responsibilities of the medical equipment department in our hospital have evolved from plain repairwork into quality control and management. After the application of grid management, the service support work of our medical equipment department has been highly praised by the clinical departments.

Achievements and praise from medical staff