

—Short Communications—

Standards for the Evaluation of Hospital Infection
Control Policies and Procedures

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Activities to evaluate and improve quality in health-care institutions in Japan began in 1985. That year, a joint committee was established between the Japan Medical Association and the Ministry of Health and Welfare to develop a self-evaluation manual for quality of healthcare institutions by 1989¹. Although convenient, self-evaluation of the quality of medical care lacks objectiveness and, therefore, the need for third-party evaluation was pointed out.

In response, the Japan Society for Quality in Health Care (JSQua) was established in 1990 as a non-profit organization through the coordination of academic researchers and hospital administrators in order to implement third-party evaluation of healthcare institutions in Japan. JSQua developed a manual of standards for evaluation of hospitals and implemented third-party evaluation by surveyors. The first version of this standards manual was developed in 1991 and revisions were made periodically. The latest version of this manual is version 5.5, developed in 1997. The Japanese Council for Quality Health Care (JCQHC), which is an independent organization, was established in 1995 to execute third-party evaluation of healthcare institutions². After a pilot study was completed,

JCQHC began a regular nation-wide survey.

After the start of regular surveys by JCQHC, JSQua decided to begin a new evaluation project focusing on special functions within hospitals. At first, the Society selected "evaluation of the quality of hospital infection control policies and procedures" as their focus.

1. Process of developing standards

We began discussions in 1996 to develop standards for evaluating hospital-infection-control policies and procedures. First, we organized a professional advisory committee, the members of which were elected from both our society and external organizations. The prototype of the standards for evaluation was developed through their discussions, and the first version was completed in 1998 after discussion by an assembly which included all members.

The principles of the standards were: (1) to identify the incidence of hospital infection and to minimize the risks of hospital infection; (2) to include patients, healthcare personnel, volunteers and students in the survey; and (3) the policy of minimizing risks of hospital infection applies not only to the department

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which provides direct care of patients, but also to facility management, culinary departments, etc., in order to minimize the risk of infection through water, food, etc.

2. Synopsis of standards

“Standards for the evaluation of hospital infection control policies and procedures version 1.0” consists of the three first-tier standards:

(1) hospital-wide program for infection control is established; (2) surveillance is performed; (3) infection control programs are executed in the various hospital departments.

Each first-tier (expressed as x.) standard consists of several second-tier standards (expressed as x. x), and each second-tier standard consists of some third-tier standards (expressed as x. x.x). Actually, we evaluate the quality of the hospital using the third-tier standards, which are scored by a three-point scale according to criteria outlined in “scoring guidelines.” Second-tier standard scores are determined by averaging the scores of the third-tier standards under each second-tier standard; again, scoring employs a three-point scale. To arrive at a score for each first-tier standard, the second-tier scores beneath the respective first-tier standard are averaged and expressed by a three-point scale. Thereafter, the final score for the hospital is obtained by averaging the scores of the three first-tier standards using the same three-point scale as described above. But criteria on how to determine the scores of the second- and first-tier standards have not yet been precisely defined. The contents of the standards are described below, but without scoring guidelines.

3. Content of the standards

(1) Hospital-wide program for infection control is established

(1.1) An infection control committee decides on infection control policies: (1.1.1) An infection control committee includes physician (s), nurse (s), laboratory staff, pharmacist(s), dietitian (s), housekeeping staff, office clerk (s), infection control team staff and administrator (s). (1.1.2) Infection control committee minutes are recorded and filed.

(1.2) An infection control team implements the in-

fection control policies on a daily basis: (1.2.1) An infection control team includes a competent physician (s). (1.2.2) An infection control team includes a competent nurse (s). (1.2.3) Activities of the infection control team are recorded and filed.

(1.3) The administration supports the activities of the infection control system, (with personnel, materials, finance, and authority): (1.3.1) The administration has a budget for operating the infection control system. (1.3.2) The administration authorizes the infection control team to implement the infection control policies.

The infection control committee is a decision- and policy-making organization and is composed of representatives of various departments. The infection control team is an organization which implements the infection control policy on a daily basis³. Infection control physicians and nurses are essential to implement policies, and the Study on the Efficacy of Nosocomial Infection Control (SENIC), which was initiated by the CDC in 1974, recommended one full-time nurse for every 250 occupied hospital beds⁴. Support from the administration is also essential for the execution of infection control policies.

(2) Surveillance is performed

(2.1) Nosocomial infections are identified: (2.1.1) Nosocomial infections (colonizations are excluded) due to specific pathogens are identified in order to recognize the prevalence of nosocomial infections. (2.1.2) Nosocomial infection rates, focusing on surgical site infections, blood stream infections, catheter-related infections, nosocomial pneumonias, and nosocomial urinary tract infections, are identified and reported. (2.1.3) Nosocomial infection rates, focusing on departments or divisions within the institution, including the intensive care unit, are identified and reported. (2.1.4) The method of collecting data for surveillance is established.

(2.2) Results of surveillance are reported back so improvements can be implemented. (2.2.1) Surveillance results are reported to the departments or the personnel which were found to require improvement. (2.2.2) Improvements are actually done in the departments or by the personnel.

Surveillance is essential for performing an effective infection control program⁴. Because of the importance

of surveillance, JCAHO included surveillance as a condition for hospital accreditation⁵.

(3) Infection control programs are executed in the various hospital departments

(3.1) A manual on the prevention of nosocomial infections is prepared: (3.1.1) The manual is prepared and updated. (3.1.2) Contents provide sufficient information for preventing nosocomial infections. (3.1.3) The manual is distributed to every department where guidelines are necessary.

(3.2) Adequate and concrete measures for decreasing the risks of nosocomial infections are carried out: (3.2.1) Soap and water are available in each room for hand washing. (3.2.2) Private rooms or ward rooms are available for isolation or cohortation in each nursing unit. (3.2.3) Measures for isolation are adequate. (3.2.4) Intravenous preparations are aseptically prepared in the pharmaceutical department. (3.2.5) Informed consent is obtained before the implementation of infection control measures in a patient. (3.2.6) Patients with nosocomial infections and their family, have easy access to consultation. (3.2.7) Measures based on the hospital epidemiological survey can be implemented whenever an outbreak occurs.

(3.3) Infection control programs are implemented in clean and semi-clean rooms. (operating room, clean room, invasive radiology room, etc.): (3.3.1) Clean areas are designated and personnel must comply with the designation. (3.3.2) Rules exist to keep clean and semi-clean rooms from contamination upon patients' entering and leaving. (3.3.3) Surgeries are scheduled according to patient's infectivity, or scheduled on the principle that every patient is infective. (3.3.4) Regular inspection of air-filters is scheduled. (3.3.5) Regular inspection of air-conditioners is scheduled. (3.3.6) Rules for cleaning clean areas exist.

(3.4) The microbiology laboratory is functioning efficiently: (3.4.1) The microbiology laboratory regularly reports to all floors and departments regarding clinical isolates. (3.4.2) Susceptibility patterns of clinical isolates are reported regularly. (3.4.3) Gram-stain results are promptly conveyed to physicians.

(3.5) Usage of antibiotics is supervised: (3.5.1) Guidelines for the appropriate usage of antibiotics are published. (3.5.2) Adoption of antibiotics and distribution to the wards is decided via a committee. (3.5.

3) Replies to queries requesting information on drugs are appropriate. (3.5.4) Investigations on and reports of usage of antibiotics are made regularly.

(3.6) Infection control measures are performed by hospital housekeeping and other departments: (3.6.1) Disinfection policies are followed at central supply. (3.6.2) Clean materials and contaminated ones are handled separately. (3.6.3) A department for managing hospital sanitation is established and the hospital environment is kept neat and clean. (3.6.4) Measures for keeping beds and rooms clean after patient discharge are implemented. (3.6.5) Safety of water supply, including that for the showers and baths, is established. (3.6.6) Clean linen is supplied. (3.6.7) Sanitation policies for meal service are appropriate. (3.6.8) Health maintenance for food-handling personnel is appropriate.

(3.7) Education of healthcare personnel about infection control is appropriate: (3.7.1) Education about infection control is provided to all healthcare personnel at the time of employment and is given repeatedly to personnel with high risk of infection. (3.7.2) Information about infection control is collected appropriately. (3.7.3) Information about infection control is delivered to the departments requiring such information.

(3.8) Prevention of work-related infections of healthcare personnel is carried out: (3.8.1) The incidence of work-related infections is collected and reported. (3.8.2) The cause of work-related infections is investigated and preventive measures are established. (3.8.3) A safe container is used for health hazard wastes. (3.8.4) An efficient 24-hour service is available to healthcare personnel when they are exposed to work-related infections. (3.8.5) Tuberculin skin tests are implemented for healthcare personnel at risk of infection with tuberculosis and results of the skin test are kept on file at the hospital.

In evaluating various aspects of infection control policies and procedures in hospitals, the majority of items are included in this (3.X.X) area, which covers infection control programs within various hospital departments. Among the 52 items for evaluation included in the entire standards, 38 items are related to infection control activities within hospital departments. Some are based on established guidelines, for example Guidelines for hand washing and hospital en-

vironment control⁶, and Guidelines for isolation precaution in hospitals⁷.

Using these standards, we have been evaluating hospital infection control policies and procedures. The results of these activities will be reported separately.

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