Cross-Border Medical Care and Telemedicine

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ABSTRACT

Globalization is making cross-border medical care a reality. Cross-border medical care has three aspects: information, patients, and practitioners. The outsourcing of diagnostic imaging via communication lines has begun, and information on treatment poised to cross borders. However, the latter possibility raises issues concerning legal medical qualifications. Japanese legislation bans medical practice by persons not licensed by the Minister of Health, Labour and Welfare. The Ministry of Health, Labour and Welfare recently issued a bulletin regarding the medical activities of foreign licensed physicians and an interpretation of Article 17 of the Medical Practitioner's Act, permitting foreign licensed physicians to provide medical care in the event of disasters. European countries have established a system for mutual recognition of national medical licenses, and cross-border medical care has achieved a solid foothold there. Based on these societal factors, Japan must revise its legal systems or conclude bilateral medical license recognition agreements. This paper describes the various difficulties and obstacles confronting Japan as it modifies its legal systems to achieve cross-border remote medical care and medical tourism and proposes some concrete solutions.

Keywords: Cross-Border Medical Care, Globalization, Medical Practitioner's Act, Medical Tourism, Outsourcing

1. PURPOSE

The author surveyed the status of cross-border medical care (information, patients, practitioners) in Asia and Europe and looked into special provisions in Japan concerning the acceptance of foreign licensed physicians in the event of major disasters (e.g., bulletins from the Ministry of Health, Labour and Welfare). Based on this research, the author believes cross-border medical care (information, patients, practitioners) will begin in Japan in the near future. This paper analyzes and reports on issues related to remote medical care and the current Medical Practitioner's Act.

2. BACKGROUND

With widespread use of the Internet, it is no longer rare for patients to check which physician at which hospital in the world is skilled in what treatment and to travel overseas to obtain care from more skilled physicians or cheaper treatment, a phenomenon known as medical tourism. Like it or not, the development of transportation and information networks will facilitate human movement around the world, eliminate national-level restrictions and time constraints in medical care, and make global standard services available around the clock.

At a preliminary meeting of the ATA (American Telemedicine Association) in September 1994, I overheard conversations that

suggest at least some believe remote medical care will someday be a reality: physicians in the United States would diagnose pathological images taken in Japan, while physicians in India would diagnose radiological images inspected in the U.S. at midnight, Indian time, using the time difference to their advantage. After more than ten years, radiological image diagnosis via the Internet at many medical institutions has become an area of medical practice subject to medical outsourcing. In the meantime, medical treatment cannot cross national borders (or state borders in the U.S.) unless and until numerous issues related to consistency between national legal and medical systems are resolved.

For countries outside the EU, these are the challenges that must be overcome in the near future (Mäkinen & Forsström, 2006; Pak & Nancy, 2008; Mäkinen & Rautava, 2011; Ministerial Declaration on Digital Europe, 2010; European Coordination Committee of the Radiological Electromedical and Healthcare IT Industry, 2010; Boehm, 2010).

To date, the WHO (World Health Organization) has provided preventive health care for communicable diseases across national borders, while leaving clinical care for individual patients to the sovereign power of each country and refraining from active involvement. However, remarkable advances in information and telecommunication technologies and the worldwide development of air transportation is making cross-border clinical care a reality. The WHO, the ITU, and the UNESCAP are thus preparing to incorporate cross-border clinical care into the WTO GATS (General Agreement on Trade in Services).

2.1. Definition of Cross-Border Medical Care

In this paper, cross-border medical care (Figure 1) is defined as medical services involving the movement of information, patients, and health care providers across national borders. These three elements—information, patients, and health care providers—are intertwined.

2.2. Types of Cross-Border Telemedicine

Roughly speaking, remote medical services that involve the cross-border movement of medical information and control signals can be divided into three categories, including outsourcing.

1. Outsourcing
2. Second opinion
3. Tele-treatment

The first category means that a medical institution in an advanced country asks a medical specialist in a country where medical costs are cheap to read radiological and pathological images. For example, an Indian radiologist might spend his or her off-duty hours viewing radiological images taken in the U.S.; write a report in English; and send it to the U.S. hospital via the Internet, taking advantage of the time difference. With such cheap help, the U.S. hospital would be able to explain the images to the patient on the day they were captured. This is a recently established business for emerging countries.

The second category involves the seeking out of second opinions from highly skilled medical practitioners. For example, a wealthy individual in a developing country suspected to have cancer might transmit a pathological image to a physician in an advanced country with abundant clinical experience, seeking a second opinion.

The third category involves making high-level medical techniques (e.g., control signals for surgery machines and prescriptions) available remotely for actual treatment. For example, a robotics surgery specialist using da Vinci equipment could view an endoscope image at a remote location and transmit control signals to the equipment to emit a laser beam within the patient's body for hemostasis, resection, or other treatments. Or a patient could seek advice from a psychiatrist remotely via videophone; have a prescription issued via the Internet or fax; and pick up the medicine at a nearby pharmacy. In order for conditions falling into the

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