Telemedicine for gastrointestinal endoscopy: The Endoscopic Club E-conference in the Asia Pacific Region

ABSTRACT
Background and study aims An Endoscopic Club E-conference (ECE) was set up in May 2014 to cater to increased demand for gastrointestinal endoscopy-related teleconferences in the Asia-Pacific region which were traditionally organized by the medical working group (MWG) of Asia-Pacific Advanced Network. This study describes how the ECE meeting was run, examines the group dynamics, outlines feedback and analyzes factors affecting the enthusiasm of participants. It is hoped that the findings here can serve as guidance for future development of other teleconference groups.

Methods The preparation, running of and feedback on the ECE teleconference were evaluated and described. The country’s economic situation, time zone differences, connectivity with a research and education network (REN) and engineering cooperation of each member were recorded and analyzed with regard to their association with participant enthusiasm, which was taken as participation in at least 50% of the meetings since joining. Associations were calculated using 2-way table with chi-square test to generate odds ratio and P value.

Results To date, ECE members have increased from 7 to 29 (increment of 314%). Feedback received indicated a high level of satisfaction with program content, audiovisual transmission and ease of technical preparation. Upper gastrointestinal luminal endoscopy-related topics were the most favored program content. Those topics were presented mainly via case studies with a focus on management challenges. Time zone differences of more than 6 hours and poor engineering cooperation were independently associated with inactive participation (P values of 0.04 and 0.001 respectively).

Conclusions Good program content and high-quality audiovisual transmission are keys to the success of an endoscopic medical teleconference. In our analysis, poor engineering cooperation and discordant time zones contributed to inactive participation while connectivity with REN and a country’s economic situation were not significantly associated with participant enthusiasm.

Introduction
Unbelievably, football has also kick-started many a beautiful thing. What was left from the 2002 Korea-Japan World Cup Tournament was not merely the memory of sportsmanship and friendship but something more solid that will continue to foster friendship and collaboration among the regional nations. Permanent large underwater fiber-optic cables that were laid during the tournament enabled high-speed internet connection between and beyond these 2 countries [1]. Barely a year after the tournament, multinational medical teleconferences in the Asia-Pacific region were initiated. The establishment of research and education networks (REN) in each country and the subsequent development of a digital video transport system (DVTS) led to initiation and booming of medical teleconferences among the regional countries. In the early years, medical teleconferences, organized through the Telemedicine Development Center (TEMDEC) of Kyushu University, were mainly surgery-related [1]. Gastrointestinal endoscopy-related activities were not as common. However, in recent years, gastrointestinal endoscopy-related teleconferences have become one of the most popular activities [2].

Traditionally, gastrointestinal endoscopy-related teleconferences were held twice yearly in conjunction with the biannual Asia Pacific Advanced Network (APAN) medical working group meeting which was initiated more than 10 years ago. However,