

Cure4Kids - Building Online Learning and Collaboration Networks

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Purpose:

The International Outreach Program of St. Jude Children' Research Hospital has been developing programs to help countries with limited resources develop treatment centers to treat children with catastrophic diseases such as pediatric cancer and AIDS. Cure4Kids (www.cure4kids.org) is the Internet learning network that delivers medical education to doctors and nurses on pediatric cancer and AIDS. The objective of Cure4Kids is not only education, but also to provide tools for communications and collaborations among individuals.

Methods:

The Cure4Kids web site contains online lectures and seminars available as video streaming and powerpoints with audio. Any doctor, nurse or health care professional can access Cure4Kids free of charge. Lectures are available in multiple languages. Cure4Kids also has online conferencing tools that are used for delivering live lectures with powerpoint slides, images, collaborative whiteboarding. The system also has audio conferencing for group discussions using just the Internet, and a computer with speakers and microphone.

Results:

The Cure4Kids network has grown to over 500 users in the first six months of operation. The users are mainly from international countries (75%) but domestic usage is also increasing rapidly. Although 89% of users know how to read and speak in English, over 45% use Spanish as their main language. Often international nurses do not speak English. We have put an increasing

focus on developing content in multiple languages. We have also been assisting partner hospitals get Internet networking and computing infrastructure.

The use of the online conferencing tools has extended beyond lectures to discussions of clinical cases and referrals, and the discussion of clinical protocols. The number of online collaborations and group discussions has increased significantly. Despite the fact that our Internet audio conferencing is not full duplex and only allows one person to speak at time, users have been very excited about hearing each other's voice. Most users prefer the Internet audio conferencing over text only conferencing. We suspect there is a very significant value to the human touch that an audio conversation has over text-based web-conferencing. We are observing the development relationships among people and sites that would not have developed with just on-demand learning.

Future:

Our current plan is to expand the online collaboration tools to add face-to-face video conferencing and better tools for data sharing and group collaborations online. Large pathology images can be 50 megabytes in size or larger and currently can not be efficiently shared without disrupting the flow of audio conversations, due to bandwidth limitations. An Internet2 architecture is being explored for this new system.