Curriculum Development Centers Program

Awardee of The Office of the National Coordinator for Health Information Technology

Working in Teams, Unit 9a

**Expanding Value:
Tools for Collaboration Across
Time and Space in HIT-Related Activities**

This material was developed by Johns Hopkins University, funded by the Department of Health and Human Services, Office of the National Coordinator for Health Information Technology under Award Number IU24OC000013.

Objectives:

At the end of this unit, the participant will be able to:

- Select appropriate communication tools available for global and diverse team collaboration.
- Predict future tools that could be used in the healthcare arena to collaborate and connect health professionals.
- Foresee the future face of the healthcare field where team collaboration and patient-centeredness is a fundamental practice.

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Introduction

Communication tools for global and diverse team collaboration	Future tools used in healthcare arenas to collaborate and connect healthcare professionals	Future face of the healthcare field and team collaboration
• Skype • Google Talk • Telemedicine • Global Conferencing	• Robotics • Performance Dashboards for Healthcare • Videocasts	• Future healthcare teams and the use of technology

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Activity

Break the class into small groups for 10 minutes and have the learners brainstorm about what communication tools are available today for individuals working in teams to communicate and disseminate information to meet their work goals.

At the end of ten minutes, write all the tools on a board or flip chart.

Have each small group take on ownership for one of the communication tools and present a one-page report on the tool at the next class.

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Communication Tools for Global and Diverse Team Collaboration

Skype

Google Talk

Telemedicine

Global Conferencing

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Skype

Skype is a software application that allows users to make voice and video calls over the Internet. Skype also provides additional features which include video conferencing, instant messaging, and file transfer. *(Wikipedia)*

Image: http://www.skype.com

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Advantages of Using Skype

The Skype service is world-wide. Calls can be initiated and received from anywhere on the Internet.

Skype provides two-way voice calling, and supports audio conferencing with up to 25 participants.

Skype voice calls can be initiated from a PC to a phone, and vice versa.

Skype's text chat allows group chats, storing chat history, and editing of previous messages.

Skype supports two-way video and video conferencing with up to five participants.

Google Talk

Google Talk (GTalk) is a no-charge Windows web-based application for instant messaging and voice over internet protocol (VOIP) offered by Google Inc. The **Google Talk** application is only available for Microsoft Windows (2000, XP, Server 2003, Vista and Windows 7), but **Google Chat** (voice and video chat) is available for PCs and newer Intel-based Macs. *(Wikipedia)*

Image: http://www.google.com/talk

Advantages of Using Google Talk

Unlike Skype, Google Talk, is free to use. The only requirement is that the user must have an established Gmail (Google Mail) account to sign in.

Google Talk is designed to support a wide range of PCs, and mobile devices.

Google Talk integrates with other instant messaging programs, such as AOL Instant Messenger.

With Google Talk, users can send and receive voicemails.

Users report that Google Talk is easy to set up and is very user friendly.

Telemedicine

Telemedicine, or tele-health, is another emerging tool being used for team collaboration, particularly in healthcare settings where the healthcare team can assess a patient in a remote area.

Telemedicine is a rapidly developing application of clinical medicine where medical information is transferred through interactive audiovisual media for the purpose of consulting, and sometimes remote medical procedures or examinations.

Types of Telemedicine

Telemedicine can be broken into three main categories:

- Store-and-Forward
- Remote Monitoring
- Interactive Services

Store-and-forward Telemedicine

Store-and-forward telemedicine involves acquiring medical data (like medical images, biosignals etc.) and then transmitting this data to a doctor or medical specialist at a convenient time for assessment offline. It does not require the presence of both parties at the same time.

Image: http://susiecookhc.files.wordpress.com/2011/03/telemedicine1.jpg

Remote Monitoring

Remote monitoring, also known as self-monitoring/testing, enables medical professionals to monitor a patient remotely using various technological devices.

Image: http://healthystate.org/archives/8136/img_5517

Interactive Telemedicine

Interactive telemedicine services provide real-time interactions between patient and provider, to include phone conversations, online communication and home visits.

Image: http://newsroom.cisco.com

Benefits and Uses of Telemedicine

Communication to remote areas that need healthcare expertise

Useful communication tool from general practitioner to specialist at a remote location

Monitoring a patient at home on telemedicine device to monitor patients

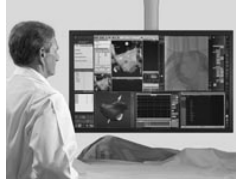Primary remote diagnostic consultations to monitor and manage disease

Telecardiology

Telecardiology is the transmission of electrocardiogram (ECG) data from one location to another by telephone, or digitally via the Internet.

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Telecardiology

Electronic stethoscopes can be used as recording devices, which is helpful for purposes of telecardiology.

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Teleradiology

Teleradiology is the ability to send radiographic images (x-rays, CT, MR, PET/CT, SPECT/CT, MG, US...) from one location to another. For this process to be implemented, three essential components are required: (1) an image sending station, (2) a transmission network, and (3) a receiving / image review station.

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Activity

Visit a healthcare institution health IT department to obtain an example of a telehealth or telemedicine application that is currently being used by a department. Please describe the following in this assignment:

- The type of institution that you visited,
- The application that you will provide as an example of telehealth or telemedicine,
- Your reflection of what you learned from the assignment and 3 take-away points from the activity.
- The assignment will be a 3-5 page paper.