SIU Sustainability Council Project Final Report

Project Title: SIUC Dental Hygiene Electronic Medical/Dental Records Sustainability Proposal

Project I.D.#: 41304

Award Date: May 2, 2013

Completion Date: May 1, 2014

Project Overview:
The SIUC Dental Hygiene Program has been providing quality dental hygiene care for thousands of Southern Illinoisans since 1961. We offer our students a strong public health emphasis including dental cleanings and cavity preventing sealants to area school children; oral cancer exams and oral health education. Without our Dental Hygiene clinic, hundreds of adults would have negligible access to dental hygiene care.

As a result of the very generous Green Grant received in May, the Dental Hygiene Program has made rapid progress moving from a completely paper-based medical/dental record system to a paperless electronic record system with integrated digital radiography (x-rays). Once all aspects of the clinic computers and digital radiology are completely integrated fall 2014, the DH clinic will be digitalized saving an estimated 240,000 sheets of copied paper per semester as well as the elimination of the x-ray film packets contains silver coated plastic, lead foil, and developing & fixer solutions.

A collaborative effort between faculty, staff and students enabled this project to become a reality as there was an enormous amount of work to take a complex concept like this to fruition. Dr. Andrey Soares, the dental hygiene faculty and staff and CASA staff worked diligently over the last year to research, purchase, install, learn and integrate the digital records and radiograph systems. As the attached accounting indicates, we purchased: 20 computers & carts, specialized dental software, 5 laptops & digital radiograph sensors and security hardware required to protect patient records.

Best thing produced from this project:
The Green Grant provided the resources to purchase equipment and software which allowed the DH program to eliminate the need for a paper records system and hard copy dental radiographs. Medical health histories, dental records and digital radiographs are now collected electronically thus removing the heavy use of paper, copying resources and integrating the use of a digital x-ray system. This project will reduce the use of precious resources and eliminate the waste stream of toxic developing chemicals now and many years to come – therefore
sustainable. In addition, this electronic medical record system will provide patient involvement in their care by providing a portal for patients to view their dental record and communicate with the dental hygiene student. This will provide students valuable feedback and give patients a sense of ownership and participation in their healthcare.

**My definition of sustainability:**
Sustainability includes not only the physical reduction of waste but actively creating systems where minimal resources are used in an environmentally friendly way while being socially responsible.

**Has this changed over the course of the project?**
If anything, this project has reinforced my commitment to the principle of sustainability!

**Next phase of the project:**
The next phase of this project is to 1) fully integrate all of the soft and hardware into the clinic flow and 2) revise our curriculum to maximize these exciting innovations.

*I cannot over emphasize how much the Green Grant has improved our dental hygiene program, the learning experience for our students and opportunity to better serve our patients who seek dental hygiene care. Thank you!*