
Camp For All Connection: a community health information outreach project*

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Purpose: The purpose of the Camp For All Connection project is to facilitate access to electronic health information resources at the Camp For All facility.

Setting/Participants/Resources: Camp For All is a barrier-free camp working in partnership with organizations to enrich the lives of children and adults with chronic illnesses and disabilities and their families by providing camping and retreat experiences. The camp facility is located on 206 acres in Burton, Texas. The project partners are Texas Woman's University, Houston Academy of Medicine-Texas Medical Center Library, and Camp For All.

Brief Description: The Camp For All Connection project placed Internet-connected workstations at the camp's health center in the main lodge and provided training in the use of electronic health information resources. A train-the-trainer approach was used to provide training to Camp For All staff.

Results/Outcome: Project workstations are being used by health care providers and camp staff for communication purposes and to make better informed health care decisions for Camp For All campers.

Evaluation Method: A post-training evaluation was administered at the end of the train-the-trainer session. In addition, a series of site visits and interviews was conducted with camp staff members involved in the project. The site visits and interviews allowed for ongoing dialog between project staff and project participants.

INTRODUCTION

Camp For All Connection is a collaborative endeavor involving Texas Woman's University, Houston Acade-

my of Medicine-Texas Medical Center Library, and Camp For All. The overall goal of this project is to facilitate access to electronic health information for care providers and camp staff at the Camp For All (CFA) facility. Specific objectives of the project include: (1) create an Internet-connected health information resource at CFA with academic support from Texas Woman's University and the Houston Academy of

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Medicine-Texas Medical Center Library and (2) train CFA staff in the use of electronic health information resources.

CFA is a barrier-free camp working in partnership with organizations to enrich the lives of children and adults with chronic illnesses or disabilities and their families by providing camping and retreat experiences throughout the year. The appendix provides more information about Camp For All. Each camp session is staffed by health care providers as well as CFA staff members, which is a common staffing model for special needs camps.

Medical staff members serve the health and medical needs of campers during the twelve weeks of summer camps (each camp group lasts one week during the summer, with multiple camps running simultaneously) and weekend family groups in fall and spring. Physicians and nurses volunteer to be part of camp groups or serve as affiliates of the sponsoring agency of the camp group. A minimum of one doctor and one nurse serves as medical staff for camps, but there are usually three to four in the health center in any given week (for an average of 36 to 48 during the summer, plus those who support family weekend groups conducted in spring and fall). In addition to full-time camp staff members, CFA employs twenty-two to twenty-five summer staff members to support the daily activities of summer campers. Medical staff members are responsible for diagnosing and treating conditions as they arise. Summer staff members are required to have basic knowledge of CFA's goal to enrich the lives of its campers by providing camping and retreat experiences outdoors, so a certain amount of health education is a requisite component of the experience given the nature of the special needs populations CFA serves.

Prior to Camp For All Connection, CFA only supported Internet-connected workstations for administrative staff in the administrative offices, located in the main lodge. No workstations were available for medical staff; no workstations were available for summer staff.

BACKGROUND

Significant challenges often accompany the normal human growth, development, and maturation process. However, children and adults with chronic illnesses or disabilities face additional challenges. Individuals with chronic illnesses or disabilities are at increased risk for developing psychosocial difficulties such as withdrawal, poor self-concept, and behavior problems [1-3].

Summer camps, like those hosted by Camp For All, are a popular means of addressing the psychosocial needs of children and adults with chronic illnesses or disabilities. Summer camps are increasingly included as components of therapeutic approaches [4]. Typically, these camps are designed to meet campers' special needs while providing a "normal" and rewarding camp experience [5]. Although the fundamental programmatic and philosophical tenets underlying these

camps vary, most aim to help campers view their conditions in a more positive light by providing a variety of educational and recreational activities [6-8]. "The informal recreation-centered atmosphere of summer camp provides an attractive setting in which to introduce individuals with a chronic disease or handicapping condition to one another and to provide instruction about the disease and ways to cope with it" [9]. In general, participating in special needs camps has been shown to provide positive informational, peer-support, and recreational experiences for campers.

Operating special needs camps requires extensive planning. The ability to provide appropriate medical care is essential given the nature of the population [10]. Common medical problems experienced by campers include abrasions, exposure, headaches, vomiting, pharyngitis, seizures, adverse drug reactions, hypoglycemic reactions, and anaphylactic reactions to bee stings [11]. Additional issues often arise as health care providers are identified and recruited to staff the health center. Nurses affiliated with community agencies or institutions often perceive camp nursing as potentially stressful due to the isolated setting and may find the need to access specialized information in such settings challenging [12]. Strategies to mediate the perceived isolation and lack of information resources may ultimately increase voluntary staffing for such camp experiences. In addition to having knowledgeable health and medical staff, many camp facilities employ summer staff (typically college-age individuals), who receive instruction regarding common medical conditions and emergencies. While these individuals do not provide health care for campers, they support the daily activities carried out at camp and require a basic understanding of the chronic illnesses and disabilities affecting campers. In general, information and education are becoming increasingly important as the demand for trained staff grows and as camp facilities broaden their missions to accommodate year-round activities [13].

PROJECT DESIGN

The specific objectives of this health information outreach project include: (1) create an Internet-connected health information resource at CFA with academic support from Texas Woman's University and the Houston Academy of Medicine-Texas Medical Center Library and (2) train CFA staff in the use of electronic health information resources. For the project's first objective, three standardized workstations and a networked printer have been purchased and installed in the health center in the camp's main lodge. Workstations are equipped with basic software applications and a Web browser. Internet service is supplied by a third-party commercial vendor, using a dedicated satellite connection.

A project Web page was created for Camp For All Connection to facilitate access to information resources. The page is not Internet protocol (IP) restricted or password protected, so it is generally accessible to

health care providers and camp staff whether they are at the camp facility or not. Camp For All Connection's Web page includes a description of the project, a core set of links to various Internet resources, links to the National Library of Medicine's (NLM's) Web-based resources (i.e., PubMed and MedlinePlus), a feedback section, and an interactive component whereby users may pose questions to project staff. Internet resources are chosen for the project Web page based on their coverage of common chronic illnesses and disabilities experienced by CFA campers as well as conditions associated with those chronic illnesses and disabilities.

For the project's second objective, Camp For All Connection employed a train-the-trainer approach to accommodate as many individuals at the camp facility as possible. The camp's director selected two full-time senior camp staff members and two senior summer staff members to be trained. The two CFA senior staff members were trained to serve as trainers for medical staff, and the two senior summer staff members were trained to serve as trainers for the remaining summer staff. Senior camp staff members were selected as trainers for the sake of consistency, rather than medical staff, because medical staff members change with each camp session. The two senior camp staff members interact with medical staff on a regular basis as part of their job duties, irrespective of the camp session. The two senior summer staff members were selected because they had worked previous summers at the camp.

Prior to beginning training, project staff conducted a site visit at the camp facility. During this visit, project staff met with senior CFA staff to go over project objectives and discuss upcoming training sessions. This pre-training evaluation assisted with planning for training senior staff members and senior summer staff members.

The training module developed for Camp For All Connection provided an in-depth overview of resources on the project's Web page. Training sessions were conducted by a health sciences librarian onsite at the camp facility, using project workstations. Training was flexible enough to allow for adjustment based on session participants' existing knowledge. Each session was conducted in a hands-on format. The two senior staff members were treated as a group with the two senior summer staff members treated as a separate group. Each training session was approximately one hour in length. In addition to the formal portion of training, session participants were provided the opportunity to work with project staff in locating information relevant to their own topics of interest. Each session concluded with a post-training evaluation that was conducted using structured interviews. The post-training evaluation was used to gauge the effectiveness of training sessions and identify potential areas for additional training. Individual follow up training sessions were available, although no one took advantage of these.

The purpose of the training was to equip the trainers with the knowledge and skills necessary to act as resource persons regarding health information sources

on the project Web page. The goal was not to have them conduct training sessions of their own. The two senior camp staff members and two senior summer staff members were trained to be able to answer basic questions about the project and the resources on the project Web page. Their initial target audience included approximately forty-two medical staff members, who rotated through the camp during the twelve-week summer camp season, and the remaining twenty-three summer staff members, who were hired to assist with the daily summer camp operation.

Approximately one month after training, a post-training, follow-up site visit was conducted. The site visit served two functions: (1) it allowed project staff to assess whether or not session participants were using resources after having attended training, and (2) it allowed project staff to remain in contact with session participants and determine if they had additional information needs that had not been met.

In addition, a series of meetings was conducted over the course of the project. A site visit was conducted in midsummer to continue dialog with trainers and determine additional training needs. A meeting was conducted at the end of summer with senior summer staff to evaluate the effectiveness of training senior summer staff to serve as trainers for the remaining summer staff. A meeting was conducted with senior CFA staff at the end of the fourth quarter of the project to initiate dialog concerning the overall effectiveness of Camp For All Connection.

RESULTS

Training

Structured interviews were conducted with participants after each training session. Camp staff comments after the training sessions included their eagerness to use the resources linked from the Web page. Although two staff members were familiar with the names of the sites, they reported no experience actually accessing information before the training session. All staff members reported surprise at the ease of access and the quality of information available via the project Web page.

Use of project resources

CFA staff observed health care providers and camp staff using project workstations throughout the course of the project. The most popular use was for communication purposes. Health care providers used the workstations to email colleagues rather than tie up long-distance telephone lines, thus reducing the cost of long-distance telephone calls for Camp For All.

In addition, CFA staff observed health care providers using project workstations for reference purposes. For example, a contract nurse who was hired to support regularly with muscular dystrophy patients used the Dictionary in MedlinePlus to look up terms related to the condition. Physicians consulted dermatology images for conditions not typically presented in the hos-

pital setting, such as bee stings. Pharmacists used the workstations to verify drug levels and drug interactions for patients with phenylketonuria and epilepsy.

Nurses working in the health center found that access to the resources supported their efforts to care for campers and work with specialists who sometimes used terms unfamiliar to them. One nurse reported her surprise at the ease of access, reporting she had very little time to use online resources in her normal workday. She shared that she had taken the opportunity while at camp to familiarize herself with the latest guidelines from the Centers for Disease Control and Prevention site and to explore the resources on the Healthfinder site. Both sites contained information she felt would support her practice after the camp experience. Although she had heard of both, she had never used either site.

When project staff met with senior summer staff at the end of summer, the major identified issue related not to training but to the location of project workstations. In reality, access to the health center area for summer staff is fairly restricted. Summer staff members have access to the health center area at night once campers are asleep and on Sundays when campers have departed and new campers have yet to arrive. So their use of project workstations was limited. Summer staff members said they were eager to learn more about various campers' conditions that were unfamiliar to them and requested alternative access to the project computers after finding the health center not ideal for their use. They felt that the initial training had been adequate if they had less restricted access to project workstations and could explore Websites as time permitted.

DISCUSSION

Access to electronic information resources at Camp For All is a logical complement to existing resources at the camp facility. As a result of Camp For All Connection, project staff members were invited to be included in the agenda for the summer camp season's orientation in spring. Representatives from each summer camp group attend this orientation. The spring orientation allowed project staff to describe the project's resources firsthand, so that health care providers were aware of it before they arrived at the camp facility. The response from the agency directors was very positive, who reported the project might increase the effectiveness of volunteer providers.

To ensure access for summer staff, project staff members are expanding the project to include Internet-connected workstations and a networked printer in the club house, a facility dedicated for use by summer staff. Workstations are being placed in each of the four camp staff cabins to facilitate access to electronic information resources. In addition, the project expansion includes an additional router in the club house for summer staff who bring laptops as well as a second router in the health center for health care providers who bring laptops with them.

Although CFA's ultimate mission is to provide barrier-free camp experiences for children and adults with chronic illnesses or disabilities, a future goal of Camp For All Connection is to add an educational facility to the camp site to assist families, including individuals experiencing chronic illnesses or disabilities, in gaining a better understanding of their particular health conditions. This educational facility will include computer workstations—some equipped with assistive technology—that will allow staff members to capitalize on the wealth of information available in electronic format. Ideally, programming will be a collaboration conducted by health care providers, health educators, and health information professionals.

Partnering with organizations like Camp For All provides the opportunity to support the information needs of health care providers and other individuals working with special needs populations outside of the traditional medical center environment. As the provision of care and support continues to move away from the hospital setting, these opportunities are becoming increasingly important. Moreover, community-based organizations often have established ties to patient populations and their care providers that health sciences libraries lack. Capitalizing on these existing relationships affords additional venues for health sciences librarians to reach out beyond library walls.

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APPENDIX

Camp For All

Camp For All (CFA) was established as a nonprofit organization in 1993. CFA is a community-based organization that serves other community-based organizations, agencies, associations, and institutions to meet its stated mission. The camp facility was planned in collaboration with nineteen health organizations interested in special needs camping. These groups now use the camp and continue to partner with CFA in equal sharing of costs and responsibilities.

Camp For All is located on a 206-acre property in Burton, Texas (approximately 80 miles from Houston or Austin). The property includes a 7-acre lake with fishing pier and canoe dock, as well as 100,000 square feet of building space. Buildings include a main lodge with health center, dining hall, kitchen, gathering hall, and administrative offices; 18 cabins; staff and retreat center; gymnasium; lakeside gazebo; nature learning

center; and arts and crafts barn. Additional outdoor facilities include swimming and therapy pools, a horse riding ring and trails, amphitheater/chapel, challenge (ROPES) course, archery range, athletic field, and nature trails. All buildings and facilities are wheelchair accessible and barrier free.

Camp For All is open year-round and serves some 7,000 people annually. Groups serving people with HIV/AIDS, burns, muscular dystrophy, epilepsy, cerebral palsy, multiple sclerosis, childhood cancer, spina bifida, asthma, kidney disease, developmental and learning disabilities, hemophilia, lupus, phenylketonuria (PKU), neurofibromatosis, hearing and sight impairments, gastrointestinal disorders, cardiovascular diseases, spinal cord and brain injuries, juvenile arthritis, rehabilitative needs, and hospice needs currently attend CFA. Organizations or institutions sponsoring camps include the Epilepsy Association, American Cancer Society, University of Texas-Houston Health Science Center, Multiple Sclerosis Society, Arc of Greater Houston, Candlelighters, Hope Therapy Moody Gardens, AIDS Foundation Houston, Memorial Hermann Hospital, Texas Children's Hospital, United Cerebral Palsy, M. D. Anderson Cancer Center, Briarwood School, Texas Commission for the Blind, Spina Bifida Association, Scott & White Hospital, Hospice at Texas Medical Center, Muscular Dystrophy Association, National Kidney Foundation, University of Texas Medical Branch, AIDS Services of Austin, Gulf State Hemophilia Center, The Institute for Rehabilitation and Research, and St. David's Hospital.