Computers for Homebound and Isolated Persons (CHIPS) Program, Knoxville, Tennessee

a. Program description

Program objectives. The Computers for Homebound and Isolated Persons (CHIPS) program provides computers, free Internet access, extensive training and support to homebound people including people with disabilities, seniors, and their caregivers in Knox County, East Tennessee. The key to the program are volunteer mentors who teach homebound people computer and Internet skills. The program intends to lessen social exclusion and isolation by connecting program participants with their communities using computer and Internet technology. The Office on Aging, the primary social services agency for seniors in Knox County, is a major program partner. In addition to referring seniors to the CHIPS program, Office staff are responsible for meeting the needs of qualifying seniors while CHIPS staff focus on the technology aspect and the mentor training.

In addition to reducing social isolation, program staff have been working toward raising seniors' awareness of the various online government services including Social Security and Medicare health insurance. Seniors have used the skills they have gained through the program (e.g., using e-mail, discussion e-mail lists, and the Internet) to communicate with friends and family and make new friends, and also to access information and resources on the Internet, including e-government websites, and contact organizations that support their conditions.

Program history and philosophy. Staff from the Office on Aging and Covenant Health jointly developed the CHIPS program in 1997. The Office on Aging is a program of the Knoxville-Knox County Community Action Committee. Covenant Health is a non-profit hospital and medical resources organization in East Tennessee. The idea of providing older persons who are homebound and isolated with home access to computer and Internet as well as training emerged out of many years of staff experiences serving this population. In addition to the elderly, staff also recognized the need to include caregivers in this effort since they are homebound by virtue of taking care of someone who is homebound. “So this program was a way to provide clients some way to reach out to the world and for the world to reach them” said one program staff member.

From 1998 to 2002, CHIPS was operating under a grant from the U.S. Department for Commerce Technology Opportunities Program (TOP), placing new computers into homes of adults, aged 21 or older, who were homebound and isolated. With the expiration of the grant in 2002, CHIPS program staff had to rethink their approach. The Knox County Government provided funding to revamp the program. Rather than focusing on all adults, the new version of the program specifically targeted homebound seniors and their caregivers. This decision was in part based on the fact that the Office on Aging was the primary program partner. Instead of placing new and expensive computers into participants' homes, program staff developed a process whereby they would solicit computer donations and then refurbish those computers for use by seniors. Staff mentioned that the new version of the program is now much more geared toward program sustainability.
Program users. The program is targeted at older people, aged 60 or more, who are homebound and isolated due to a long-term illness, infirmity or disability. Determining whether or not a person is homebound, the program said, is a judgment call. Also eligible are persons, aged 21 or over, who are homebound because they are living with and providing constant care to homebound seniors. Seniors and caregivers interested in participating in the program complete an application form that is mailed to them (the application is also available on the project website). Program participants are asked to provide their own mentor (a family member, a neighbor, a fellow church member) if possible. CHIPS staff assist those seniors who have difficulty identifying a mentor. The program target is to serve at least 40 seniors per year.

Moreover, the program receives the majority of its clients through referral by the Office on Aging, which has trained its staff to identify potential program users. Other strategies that CHIPS staff use to market their program and recruit potential participants include the program website, brochures, information booths and fairs for seniors, and public announcements on the radio.

Program staff and partners. The program is currently staffed with a paid half-time director, twelve volunteers, and staff at partnering agencies. The director’s background is in communications. The program primarily relies on volunteers who teach CHIPS participants computer and Internet skills (mentor positions), who provide technical assistance to CHIPS participants (field technician positions), or who reconfigure and load software on donated computers.

Partners of the CHIPS program include: the Knox County Government which provides funding and computer donations (50 computers in 2006); the Office on Aging, which conducts the initial home assessment of CHIPS applicants and provides an array of social services to CHIPS participants who qualify for those services; the University of Tennessee, which provides free dial-up Internet access accounts for use by CHIPS participants during their training period (125 accounts in 2006); and the East Tennessee Technology Access Center (ETTAC), which provides assessments of CHIPS applicants and participants who may need assistive technology (extra hardware or software) to help them use a computer. ETTAC also trains mentors on identifying assistive technology needs. In addition, CHIPS partners with a local security firm which provides free background checks on program volunteers.

Program activities.

- Computer donation, peer mentorship, and mentor support.

Prior to joining the CHIPS program, seniors participate in an assessment that is conducted at their homes by a staff member of the Office on Aging. The purpose of this assessment is to confirm eligibility and identify any special needs for using a computer. If no assistive technology is needed, a CHIPS field technician will visit the senior’s home and install a computer and Internet access. If a client needs assistive technology, he or she will be assessed by ETTAC staff, who will determine the level and type of supports needed. Low-level assistive devices such as special keyboards or optical mice are provided by CHIPS to a certain extent. If ETTAC is unable to provide higher-level, more expensive assistive devices, CHIPS staff can assist the client in exploring other avenues for covering those expenses prior to entering the CHIPS program. The program provides free dial-up Internet access for a minimum of 6 months (duration of the training). In addition, CHIPS volunteers provide technical support on an as-needed, as-available basis.
The key to the program is the volunteer mentor, who meets once each week for one or two hours with the CHIPS participant for a period of at least four months, teaching him/her computer and Internet skills. The goal of the instruction is to build participants’ ability to e-mail relatives and friends, meet other homebound and isolated persons through the CHIPS discussion e-mail list, and use the Internet to research personal interests and needs (such as medications or health concerns). Ultimately, the goal is to have seniors gain a set of communication and research skills within a six-month period. A graduation ceremony is held for seniors who successfully complete the program. In addition, CHIPS staff also support mentors by providing them with information, resources, and training materials.

b. Strategies used for encouraging use of the Internet and e-government services

Making computer and Internet training relevant to seniors’ needs, interests, and goals. “What we try to do is to encourage people to ask a client what are your interests? What do you want to know about? […] We try to whet their appetite and make it clear to them very early on, what the possibilities are for getting them outside of the confines of their own bedroom or their own home. […] And if they catch that bug, then the other issue is to work with them so that they don’t get discouraged when they don’t understand how to perform specific operations,” said CHIPS staff. In addition to exploring seniors’ interests, program staff highlighted the importance of using simple terminology when teaching older persons how to use computer and Internet technology.

Using mentors to create a supportive and comfortable learning environment for program users. CHIPS participants interviewed in this research talked about their initial fears and anxieties of using computers and the Internet. Many of them thought that they would not be capable of using this technology before participating in the program. Matching CHIPS participants with mentors (family members, relatives, or acquaintances) to teach them computer and Internet skills was a strategy that the CHIPS program used to help seniors overcome the initial fears and concerns. The mentor relationship created a supportive and comfortable learning environment in which mentors could customize the training to the individual needs, interests, and goals of the CHIPS participant.

The CHIPS mentorship agreement. By having both the CHIPS participant and his/her mentor sign an agreement, the program intends to clarify expectations/obligations on the part of all parties while also encouraging both the client and the mentor to achieve the learning goals. Goals include: to operate a computer, to send and receive e-mail messages, to participate in a discussion e-mail list, to search for and validate the authenticity of information, to visit websites on subjects of interest to the client. As part of the mentorship, mentors must agree to attend an orientation session, and to schedule regular visits in the senior’s home for computer training. Among other things, CHIPS participants agree to spend time learning how to use the computer and the Internet, to send progress reports to CHIPS staff, and to keep appointments (whenever possible) with his/her mentor. Program staff meet with the CHIPS participant and his/her mentor individually to go over the mentorship agreement. The progress reports that CHIPS participants submit to the program help staff evaluate seniors’ progress and also measure program success.

Using discussion e-mail lists to raise awareness about e-government services. “The one area that we have attempted to broaden a little bit is actually access to government
services. Because Knox County is one of our partners and because Knox County is moving rapidly toward e-government we’ve been wanting our clients to be aware of what’s out there. Through our discussion e-mail list we’ve encouraged CHIPS users to utilize what’s online on the county government site, and on the federal government sites, and so forth,” said CHIPS staff. Interviews with CHIPS users and their mentors provided evidence that they had visited e-government websites (primarily Social Security and Medicaid, and the Internal Revenue Service) and had also actively used the CHIPS group e-mail list (and other online contacts) to share information and resources and to talk about their experiences of navigating these websites.

c. **Funding and sustainability**

As mentioned earlier, the CHIPS program was a recipient of TOP grant funding from the U.S. Department for Commerce (1998-2002). The expiration of the grant forced CHIPS program staff to focus on organizational restructuring and programmatic development (2002-2006). During that period, CHIPS staff did not take on any new clients. However, the program continued to provide technical assistance to former CHIPS clients and maintained the CHIPS discussion e-mail list. In addition, CHIPS staff assisted the Office on Aging set up similar programs for grandparents who raise grandchildren and for caregivers of people with Alzheimer’s respectively—both initiatives used the CHIPS program model. In fiscal year 2006/07, the program received a community grant ($10,000 per year) from the Knox County Government to revive the program. Program staff also said that using refurbished systems and volunteers for the technical support and the training was really what made the program sustainable.

d. **Achievements**

The fact that the program has made a difference in the lives of seniors who were homebound and isolated living in East Tennessee is illustrated in many success stories that program staff have collected and that are posted on the program website [http://www.discoveret.org/chips/chipsters.html](http://www.discoveret.org/chips/chipsters.html). The majority of seniors have continued participating in the program after completing the initial six-month training. Some of them took on the task of monitoring the CHIPS discussion e-mail list.

Program staff said: “All of a sudden this technology is opening up worlds to you that you had no idea existed or that you once knew and have been cut off from, or that you are able to e-mail friends that you haven’t seen in ten years, or you’re able to correspond much more regularly with your children, or you’re able to get your grandson’s picture from some project in college. I mean, there’s just an incredible amount of opportunities. You can’t say that that virtual community doesn’t exist, because it does. We’ve seen it over and over and over again. It is real, it is palpable, it makes a difference in their lives, and it lessens their depression.”

In addition to CHIPS program users, Office on Aging staff have also benefited from their involvement in the CHIPS program. Staff said that they had become more cognizant of seniors’ needs for and access to government services and that they took that into consideration when designing websites and disseminating information.