01033

Independent Evaluation

Home Health VNA
Lawrence, Massachusetts 01843

Technology Opportunities Program (TOP)
National Telecommunications and Information Administration

Rapid Response for Clients at Risk
Grant # 25-60-01033

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WHAT NTIA PROVIDED:

Opportunity to collaborate:

Home Health VNA is a regional agency serving 24 towns and cities in the Merrimack River Valley of New Hampshire and Massachusetts. As such, it represents an opportunity to influence the delivery of home care in an extensive region of the Northeast. Closer collaboration with agencies and institutions serving these communities is particularly desirable in an age of cost containment and focus on paring the cost of providing services, avoiding duplication of services, and expediting referrals for services. The NTIA TOP funding enabled Home Health VNA to establish liaisons with a wide variety of agencies and institutions providing services for victims and survivors of domestic violence and their children, for elders enduring abuse, neglect and self-neglect and for persons with disabilities enduring abuse and neglect.

Big picture view: Agencies can easily become insular, immersed in day to day operations, particularly in health care beset by rules and regulations and the vagaries of multiple payers for care. Funding for this project enabled Home Health VNA to correct a myopic view of the cities and towns in its service area and view each as an individual entity comprised of many service providers, each with an individual, yet not totally unique focus. Bringing these agencies together enabled each to have a much more coordinated approach to the problem of violence that occurs in the privacy of home.

EVALUATION OF THE MAJOR TASKS OF THE PROJECT:

Prior to initiation of the project, human subjects approval was obtained from the institutional review boards (IRB) of the University of Massachusetts, Lowell, and Boston

College. As each consent form and other pertinent patient form was developed or modified, each was approved by these IRBs. Ongoing approval was granted on an annual basis.

Train all nursing and social work staff on the incidence and prevalence of all types of domestic abuse in the community and how to identify abuse in the home using customized software. This was accomplished by the creation of training programs and their implementation across the agency and its multiple service sites. Not only were all nursing and social work personnel trained between April 2003 and November of 2003, but policies and procedures were put in place to include this training for all new hires. A self-study module was created to supplement the verbal presentations for training of new staff members. Information is included in the Home Health VNA's patient information handbook on sources of help for abuse/neglect/domestic relations concerns.

Bring together a comprehensive, multidisciplinary group of domestic abuse service providers representing all agencies that provide services for/to intimate partner, child, and elders and persons with disabilities experiencing abuse/neglect/self neglect along with survivors of each type of abuse to form a Merrimack Valley-wide coalition. At the inception of the work of the project, agencies and institutions met together to strategize the implementation phase for this task and added the category of persons with disabilities, based on the profile of persons in their caseloads. Monthly meetings were held beginning in April 10 of 2002 with all agencies identified as including services to victims and survivors of domestic abuse. At each of these meetings, an agency was designated to present to the group about its services and to share literature, including referral trajectory and any appropriate feedback mechanism to the referring agency. This group also acted in an advisory capacity to the project. Their insight was vital to the implementation of the project including feasibility of the individual referral system.

As a result of the project, each participating agency is now fully apprised of the services offered by every other provider agency. Personal contacts among the representatives attending meetings also enhanced the rapidity with which referrals could be handled. A pre-project and post-project evaluation was completed by each participating agency to track the rapidity with which a response could be launched when domestic abuse was revealed by a Home Health VNA patient who then requested service or for whom a report to an official agency such as the Department of Social Services or Elder Services of the Merrimack Valley was mandated.

Funding from the Massachusetts Department of Public Health awarded to the Haverhill Police Department and from the Massachusetts Department of Education to the Haverhill School System enabled the Home Health VNA to partner with any willing agencies and institutions serving the city of Haverhill in creating a coalition to address violence in the community. For nearly 4 years, the now titled Haverhill Community Violence Coalition has been meeting monthly and creating and implementing programs to address various aspects of community violence. This coalition is a part of the larger TOP project for which Haverhill, one of the cities served by Home Health VNA, served as a study site to test the coalition model in a real community.

Implement a software audit of all agencies to insure software compatibility for networking. Provide appropriate software to those agencies deemed deficient. Link all member agencies [the coalition] to the network technology. This was accomplished through the regular meetings of the comprehensive, multidisciplinary group and email survey of those agencies whose representative could not attend the meeting wherein the audit occurred. Changes in the procedure for the project simplified the communication significantly. Thus, the Home Health VNA was able to extract needed health information using access software from the HealthWyse database and then to transmit by encrypted email the appropriate protected health information to the social service agencies. Therefore, the HealthWyse specific hardware—the PCs and pocket PCs weren't needed at any of the social service agency sites. The individual sites were set up with access to secure encrypted email via certifiedmail.com.

Design, develop and implement an automated, streamlined coordinated system of facilitating services to victims of abuse via the use of network technology. Considerable time, far more than anticipated, was consumed creating the software to load the screening tool onto the pocket personal computer, Point of Care Information Systems from HealthWyse. Likewise, encrypting data and programming the ability to select data to transmit to collaborating agencies proved more time-consuming and difficult than anticipated when the grant application was prepared. Thus, the implementation phase for this task was delayed considerably.

Prior to going live with data transmission from the Home Health VNA staff member in the patient's home to appropriate referral agency, data were collected from all the participating referral agencies on the length of time required to receive and process referrals for victims of domestic abuse, as well as the number of referrals from Home Health VNA for the previous 12 month period. After implementation of the electronic data transmission protocol, data were again collected on lapsed time from Home Health VNA staff referral to follow up by the agency to which referral was made. Comparisons could thus be made pre and post project as to percentage of patients screened and referrals to appropriate agency (ies). An electronic system is now in place to track referrals. All the data storage and transmission are HIPAA compliant.

Filing of mandated reports of child abuse, abuse/neglect/self neglect of elders and persons with disabilities is now possible electronically with encrypted emails, reducing the time once consumed by paper and pencil completion of these mandated reports and their delivery to the appropriate agency. A follow up fax is sent of the mandated report form as a quality assurance measure.

Perhaps most importantly, screening for domestic abuse has now been normalized into the intake interview when a patient is enrolled under care from Home Health VNA. The caregiver can use her/his discretion in the timing of the screening when it is clear there will be an ongoing relationship for a period of time.

Provide ongoing training and support to all members of the Social Service Organizations/collaborating agencies on the use of the technology. The projected need for this training was minimized by the adoption of the encrypted email means for

communication of the appropriate protected health information on patients to the collaborating agencies to institute referrals to those agencies. Likewise, communication with official agencies such as the Department of Social Services was simplified through this same process.

Report and document the project's progress. The Project Director completed all the requisite progress reports. She met with the collaborating agencies periodically to update them on progress, as well as holding regularly scheduled meetings within Home Health VNA.

DIFFUSION POTENTIAL

Domestic abuse in all its forms is so pervasive in our society that health and social services agencies are struggling with mainstreaming screening, reporting as mandated by law, and intervening with their patients/clients. Technological advances have enabled caregivers to have point-of-service access to technology through personal computers and hand held computers. Software advances enable caregivers to select, protect and encrypt data and transmit selected encrypted data to official agencies for mandated reporting and to referral agencies for their expertise in interventions.

Thus, continuing education becomes all the more important for caregivers as they struggle with federal and state regulations mandating protection of patient/client records, while at the same time complying with mandated reporting and answering the ethical challenges of protection and provision of the best practice standards of care.

Beginning with the awarding of funding, the Home Health VNA had considerable publicity about the project including articles in internal publications, the University of Massachusetts Lowell's publication entitled *The Shuttle, On Call,* a publication of the *Boston Globe* and in local newspapers including the *Eagle Tribune* in Lawrence, Massachusetts, and the *Haverhill Gazette* of Haverhill, Massachusetts.

Presentations on the Haverhill Community Violence Coalition, a coalition of collaborating agencies in the city of Haverhill, all part of this larger project, Fall of 2004.

Family Violence Prevention Fund conference, Boston, MA October, 2004
Nurses Network on Violence Against Women International, Boston, MA October 2004

The Project Director presented a paper describing the project at the Regional Home and Health Care Conference on May 13, 2004 in Framingham, Massachusetts.

Plans are underway for submission of abstracts to the following:

American Public Health Association for 2005
National Organization of Nurse Practitioner Faculties for 2006
University of Maryland School of Nursing Summer Institute in Nursing Informatics
Boston Area Nursing Informatics Consortium
Nursing Information Systems Council of New England

Nurses Network on Violence Against Women International 2007

Plans are underway for preparation of manuscripts to be submitted to the following:

Project summary for *Newday*, a monthly publication of the Home Health Care Association of Massachusetts

Computer, Informatics in Nursing: on use of the palm PC

Public Health Nursing: on screening by public health nurses

Geriatric Nursing or *Journal of Gerontological Nursing:* Screening of elders

Journal of Interdisciplinary Care International: Coalition building

Online Journal of Clinical Innovations: use of palm PC to screen for abuse

Health Care Informatics: problems of transmitting secure health information

Demonstration Site: Home Health VNA will serve as a demonstration site for other home and healthcare organizations for technical assistance with use of pocket PCs and in particular screening for abuse/neglect. This will be publicized in home care journals in news items sent as news releases and on the Home Health VNA website.

Model of information delivery: The model created in this project could be adopted or adapted by other agencies for a variety of purposes not limited to screening for abuse. We plan to write about this in articles and present this model at conferences as indicated above.

HealthWyse will provide information and a link to the Home Health VNA website for those interested in the project and in use of the pocket PC for home health care as well as in other care settings.

SUMMARY OF EVALUATION

Obstacles:

The obstacles faced by Project Director and other Home Health VNA staff members were far outweighed by the accomplishments of the project. However, they are important to note to guide future projects.

1. Achieving collection, storage, retrieval and transmission of sensitive and private health information was much more time-consuming to accomplish than originally envisioned. Legislation about protection and dissemination of health care data changed some of the original conceptualizations of how this might be accomplished between the Home Health VNA, collaborating agencies, and official bodies such as the Department of Social Services. Once forms were downloaded onto the pocket PCs, it was difficult, if not impossible, to change anything within the forms themselves or their links with other documents on the pocket PC or the mainframe.
2. Digital photography, initially envisioned as a means to capture in real time data about physical signs of abuse and neglect, was not possible. This technology, while quite advanced for personal use, is in its infancy in relation to admission of such photographs as evidence in law enforcement and the legal system. Issues of safety for victims, storage of data, and usefulness to assist victims are yet to be clarified. Furthermore, given the current cost of high resolution digital cameras, the cost at present of providing cameras to home health care staff members is prohibitive.
3. The number of cities and towns served by regional home health care agencies generates multiple players such as police departments, domestic violence service agencies, court systems, and so on. The home health care agency in this project serves parts of two states as well.
4. Turnover in staff members and leaders within Home Health VNA and the collaborating agencies created the need for multiple orientations and trainings in the screening, storage, retrieval and transmission of data about domestic abuse, as well as bringing new staff members up to date in such a large agency covering such a diverse geographic area.
5. In retrospect, a project of this complexity and magnitude necessitates a full time project director.

Accomplishments:

1. Staff members in the Home Health VNA as well as those in the collaborating agencies all gained considerable knowledge about each other, services provided, and who the experts are in particular aspects of caring for victims/survivors domestic abuse. Face-to-face interactions as well as sharing of information about services led to increased ease and comfort in making referrals and seeking guidance in order to provide the best possible care to patients disclosing domestic abuse.

2. Mainstreaming of screening for domestic abuse into the repertoire of the staff members of Home Health VNA led to a considerably speeded up process of

referral and reporting when abuse/neglect was revealed. The ability to transmit selected and encrypted health information and/or mandated reports helped to move collaborating and official agencies into the technological age. All the staff members of Home Health VNA who use pocket PCs to record, store, and transmit patient and other information took a technological leap forward in use of these computers in real time in home health care.

3. Redundancy in screening for domestic abuse and in collection of health information was reduced by increased sharing of information by encrypted email with the permission of patients. Not only did this reduce time in responding to patients at risk, but it also reduced the stress on patients created by repeating their stories to multiple providers.

4. The automation of regional state mandated reporting forms, moving the system from paper to electronic filing, for domestic abuse and the acceptance of the use of automation by regional state agencies was completed and field tested successfully.

FINAL WORDS

Had the project timeline played out as planned, we would have had time to capture a year's worth of implementation data and experiences. Since that was not possible, we now plan to continue evaluation of the project, using a qualitative approach. During the spring and summer of 2005, we plan to interview key players in the project both internally in the Home Health VNA and also among staff of the collaborating agencies. We also plan to continue collection of quantitative data including screening rates, numbers of mandated reports, and numbers of referrals to collaborating agencies, as well as outcomes as far as that is possible.

The Haverhill Community Violence Coalition will continue its work and serve as a model of community collaboration around a focused issue, that of violence. We plan to disseminate this model to the other 23 towns and cities served by Home Health VNA.