Project Purpose

The purpose of the Rapid Response for Clients at Risk (RRCR) project of Home Health VNA is to implement a community-based, coordinated, real-time domestic violence detection and intervention project aimed at facilitating assistance for those clients who are identified to be at risk of, or living with, abuse. The project will focus on the three major categories of domestic violence; intimate partner, child and elder abuse. The project will be implemented in Home Health VNA's service area, which includes twenty-four cities and towns in the Merrimack Valley of Massachusetts and Southern New Hampshire (see map attachment 1).

Domestic violence is defined as a pattern of abusive behavior that one person uses to cause physical harm to another person, and/or to control and manipulate the behavior of another person. The abuse could be physical, emotional, financial, and/or sexual and can involve women, children or the elderly. Domestic violence can be found in any intimate relationship, regardless of ethnic identity, creed or status. Domestic violence happens everywhere – in our town, in our neighborhood, on our street. It happens to women we see at the supermarket, children we teach in school, elders we meet at church. It happens to our mothers, our sisters, our friends and family members. It happens to us.

National statistics on domestic violence testify to the alarmingly high incidence. According to a 1996 report published by the American Medical Association, nearly a quarter of the women in the United States – more than 12 million – will be abused in the home by a current or former partner some time during their lives. The report states further that 19 to 30 percent of all women seeking treatment in emergency rooms have been battered. A 2000 report published by the Department of Health and Human Services states that in 1998 more than 900,000 children were victims of abuse. Of those, fifty-four percent suffered neglect while almost one quarter suffered physical abuse. The most common pattern of abuse was a child victimized by a parent in the home. And, each year hundreds of thousands of elders are abused, neglected and exploited by family members and others. According to a 2000 report published by the Administration on Aging, 551,011 persons aged 60 and over experienced abuse, neglect and/or self neglect in 1996. Most often, elder abuse occurred in the home by an adult child or spouse.

In the Merrimack Valley region of Massachusetts, domestic violence has reached epidemic proportions. The twenty-four cities and towns that make up the Merrimack Valley consist of three large communities, Haverhill, Lawrence and Lowell, and 21 small and mid sized communities separated by enormous racial, ethnic, economic and demographic differences. For example, according to a 1998 report published by Boston University School of Public Health for the Massachusetts Prevention Center, Haverhill, Lawrence and Lowell are the most demographically diverse communities, have the largest populations below the poverty level, the highest dependency ratios (% of the population <14 and >65), the lowest incomes and the highest unemployment rates. Lawrence is the poorest city in Massachusetts and the 23rd poorest in the country. The report states further that Haverhill, Lawrence, and Lowell have a population density 10 times and a nonwhite proportion of the population more than 15 times greater than that of the smallest communities. In Lawrence, 42% of the population is Hispanic compared to less than 5% for the state. In Lowell, 11% of the population is Cambodian, compared to 2% for the state. Lawrence and Lowell exceed the state average for admission to substance abuse programs. Lawrence has 2 times the state rate for alcohol and other drug use deaths. Lawrence had the highest reported 1996 rate in Massachusetts of violence-related wounds treated in emergency departments. Of the other seven mid-sized communities and 14 communities with populations less than 20,000 there are major differences in terms of size, density and diversity,

but very little variance in terms of wealth, poverty and unemployment rates. Of what importance are these demographic and economic differences? Although domestic violence crosses all races, genders and socio-economic lines, it is more prevalent among the poor and unemployed, and among Blacks and Hispanics, among substance abusers, and in crowded urban communities. This does not in any way imply that abuse does not occur in other groups, but in poor, crowded, urban communities, abuse is easier to detect. It is, therefore, safe to say that if there is a high rate of domestic violence in a particular area, the problem exists everywhere in roughly the same percentages. Victims who reside in more affluent areas of the Merrimack Valley may be more reluctant to seek help due to financial and professional reasons and thus be at greater risk.

Of the more than 36,000 restraining orders filed in Massachusetts in 2000, almost 2700 or 14% were filed in the Merrimack Valley. In the Greater Lawrence area, an area of approximately 6.5 square miles, the local YWCA received more than 4000 calls last year from women requesting domestic violence information or services. And the Women's Resource Center, the Merrimack Valley's central coordinating agency for women seeking domestic violence aid and shelter, currently receives on average 450 calls for assistance per month. Of the 16,464 reports of child abuse filed in a 3-month period in Massachusetts in 2000, 4,417 were from the Merrimack Valley. The most common form of child abuse reported was physical abuse. Indeed, at Lawrence General Hospital, the regions designated trauma center, 107 children were treated for injuries sustained during suspected incidence of abuse in 2000. The Massachusetts Department of Public Safety estimates that 50% of the time, there is both child abuse and domestic abuse in the same home. And, of the 6084 cases of elder abuse reported in Massachusetts in 2000, approximately 620 were from the Merrimack Valley. According to a report published by Elder Services of the Merrimack Valley, the central reporting agency for elder abuse in the region, the most common type of elder abuse reported in 2000 was neglect – physical harm caused by the failure of a caretaker to provide adequate food, shelter or health services for a elder- most often a homebound elder.

One of the major barriers affecting domestic violence intervention is that abuse is difficult to detect. Most abuse occurs behind closed doors, in the privacy of one's home. For this reason, abuse can occur, and remain undetected, for years until it escalates to the point that emergency medical or social intervention is needed. In addition, unless the victim is asked questions specifically designed to uncover abuse, and asked those questions in a caring comfortable setting, victims may not realize that the threats, slaps, and intimidation they live with is called domestic abuse, that it can get much worse, and that help is available.

A second barrier is that domestic abuse usually remains undetected until it has escalated to the point that the victim has received serious physical or emotional injuries. In fact, the majority of cases of domestic abuse are reported by medical personnel in emergency rooms or in physicians' offices well after a long period of abuse has occurred. By that time, the victim has probably suffered years of fear, humiliation, and isolation.

Third, after the abuse is uncovered and services and intervention are requested, the social service and advocacy system designed to protect victims can be too overwhelming and personally intrusive for victims to navigate. Victims are forced to trudge through a confusing social service and court system that may take days or weeks to navigate. And, on average, a woman, child or elder may have to describe his/her story of abuse over and over again to a wide variety of different agencies in order to apply for and receive services such as emergency shelter, medical care, protection, legal services, etc.

Finally, there are few, local, bilingual/bicultural services available for non-English speaking victims, leaving an already isolated group vulnerable in a time of crisis. Currently in the Merrimack Valley there are only a handful of bilingual/bicultural Hispanic or Cambodian domestic violence advocates or caseworkers that understand the cultural differences that could fuel household violence and leave victims reluctant to seek help. Indeed, non-English speaking victims are the most isolated and the least likely to ask for help.

Home Health VNA proposes to design, develop and implement an innovative, rapid response domestic abuse detection and reporting program which will break the secrecy of abuse by uncovering violence where is occurs – in the home. In addition, using state of the art, hand held technology, designed by HealthWyse, we will eliminate the use of paper screening tools and reports, streamline the referral process for services, and facilitate referrals to a wide variety of state and local social service agencies. These practices will dramatically reduce the time it takes for victims to apply for and receive community services. The outcomes will include:

- The adaptation of the AAS (Abuse Assessment Screen) screening tool to accommodate detecting intimate partner, child or elder abuse. This tool will become a customized report in the hand held technology used by the visiting nurse and will be included as part of the patient assessment in all initial skilled nursing visits (see attachment 2).
- The adaptation of the Client at Risk form developed for the Community Police Domestic Violence Project, Greenfield MA (see attachment 3). This tool will also become a customized report in the hand held technology and will be used by Social Workers summoned to a "rapid response" home visit to a patient who answers positively to queries about abuse. Information gathered during this visit will be used to determine the type, nature and extent of abuse, the type of intervention necessary and what intervention services will be needed.
- The adaptation and development of bilingual/bicultural AAS and Client at Risk screening tools in both Spanish and Cambodian (Puerto Rican, Dominican, Haitian and Portuguese versions of the AAS exist)

The above adaptation and development will result in:

- An increase in the number of cases of domestic abuse detected by visiting nurses who have been scheduled for an in-home visit due to a skilled nursing need.
- The collection of real-time evidence of abuse via the use of digital photography, which can be attached to the hand, held computer. This evidence can then be used in a court of law.
- The development of a confidential, real-time, paperless system of referring victims to domestic violence intervention services. All information regarding the victim and the nature and type of abuse will be instantaneously compiled in the systems database and stored in a confidential section of the victim's medical record. This information will be confidentially downloaded as needed to appropriate legal, social service and advocacy agencies that provide services for victims. Agencies can then begin working on the case coordinating services within their own agency and between different agencies eliminating the need for the victim to have to place multiple phone calls to multiple agencies describing his/her story of abuse over and over again in order to receive assistance.

The Rapid Response for Clients at Risk technology project proposed by Home Health VNA is not designed to duplicate services provided by state or local social service and advocacy groups, but to support them in their work with victims of abuse. In addition, we recognize that in many instances, especially those involving an intimate partner or an elder, the victim chooses not to pursue a case after the immediate crisis is over. In fact, on average, an abused woman will be

battered eight times before seeking help. An adult victim cannot be forced to seek assistance against his or her will. In those instances, this new technology service will be customized to provide victims with domestic violence resource guide organized by zip code, such as the local YWCA domestic violence hotline, the Elder Abuse Hotline from Merrimack Valley Elder Services and/or the telephone number of the local legal aid office.

Innovation

Home Health VNA, the 2nd largest home health care agency in Massachusetts, provided care to 10,917 unduplicated patients resulting in 313,015 patient visits the Merrimack Valley in 2000. Home Health VNA is a private, non-profit home health agency serving communities in the Merrimack Valley and Southern New Hampshire since 1895. Home Health VNA offers skilled nursing services, specialized supportive programs for homebound individuals, and education and prevention service for elders, families and children in our communities. Nurses, physical, occupational, and speech therapists, social workers and other clinicians care for more than 2000 patients on any given day, and travel from patient to patient, home to home averaging 280 miles each in a typical week. In-Home Health Services give the clinician a direct glimpse into the real lives and real challenges of their patients –an advantage rarely available to facility or community-based agencies. Providing care in the home gives visiting nurses the unique advantage of viewing the dynamics of the family unit – where the vast majority of abuse takes place. Visiting nurses also care for patients over a period of time and for multiple visits, building trusted relationships. The ability of a clinician to screen for, detect, and facilitate intervention and assistance for intimate partner, child, or elder abuse while in the home on a skilled nursing visit eliminates a significant barrier to abuse detection.

Detecting domestic abuse in the home is not new practice for visiting nurses. However, detecting the risk and preventing abuse is innovative and will be extremely effective. Visiting nurses have a long history of detecting and reporting abuse as well as encouraging victims to seek assistance. However, recent advances in technology now provide us with the opportunity to play a leading role in the fight against domestic violence, and enable us to more effectively care for patients in our community.

Discussions about escalating domestic violence issues in our community began more than 6 months ago when a group of educators, law enforcement officials, health care providers and social service agency providers met to discuss the issues. This core group of professional theorized that the most effective way for agencies to meet the needs of victims of abuse was to collaborate with community based social service agencies that work with all types of abuse victims to facilitate communication and cooperation between agencies. The group also began to look at domestic violence on a continuum, with the victim and family needing faster, less complicated intervention services from a wide variety of community based agencies over time.

At the same time, Home Health VNA's senior management began to research a new technology service that could enable our agency to enhance communications, reduce paperwork and streamline operations. The technology service chosen by Home Health VNA is called "point of care" information systems developed by HealthWyse.

The HealthWyse point of care system includes a hand held pocket personal computer (PC) that provides a complete patient medical record to the visiting nurse, and point of care software in the agency office which together manage the complex flow of information about a patient. Using this pocket PC, the nurse is able to obtain immediate access to the entire patient health history including allergies, medications, current medical condition, treatment plan and

other vital health information. It enables the nurse to treat, document and update all aspects of the patient's condition while still in the patient's home during the nursing visit. This vital health information is then transmitted over a phone line to our main office computer system, to the patient's physician's office and to the PC's of other VNA nurses providing care to that patient. In this way, members of the care team are immediately updated about the patient's current condition. Using this PC eliminates the volumes of required, medically necessary, paperwork that nurses must find, sort, fill out and file in order to effectively treat patients. And, it provides all medical information with complete confidentiality.

As Home Health VNA nurses began using HealthWyse it became clear that the same technology used in skilled nursing visits could be customized for other uses such as to aid in the detection and documentation of incidence of domestic abuse. The technology could also be customized to facilitate referrals for assistance to a wide variety of community based social service and advocacy agencies. HealthWyse can also link with other agency software systems to streamline the referral process and coordinate services, such as the search for emergency shelter availability. And, high speed transmissions of detailed information about the abuse, the abuser, the family and household situation, and intervention and services needed can be downloaded to appropriate social service agencies or other professionals in real-time, with complete confidentiality, 24 hours a day, seven days a week. It also enables nurses to save data, such as evidence of abuse, for later use (with patient consent). Finally, the systems can be customized to display, print, and transfer information in multiple languages.

A committee composed of the original core group of collaborators, HealthWyse management staff and Home Health VNA nurses and social workers was formed to discuss customizing HealthWyse software, and to brainstorm how this customized software could be used to implement a domestic violence detection and intervention project. From that meeting, the RRCR project was initiated. The major tasks of this project will be to:

- Train all nursing and social work staff on the incidence and prevalence of all types of domestic abuse in the community
- Train nursing and social work staff on how to identify abuse in the home using a customized software system
- Bring together a comprehensive, multidisciplinary group of domestic abuse service providers representing all agencies that provide services for /to intimate partner, child and elder abuse victims along with survivors of each type abuse to form a Merrimack Valley wide coalition
- Implement a software audit of all agencies to insure software compatibility for networking
- Provide appropriate software to those agencies deemed deficient
- Design, develop and implement an automated, streamlined coordinated system of facilitating services to victims of abuse via the use of network technology
- Link all members of the coalition to the network technology
- Provide ongoing training and support to all coalition members on the use of the technology
- Report and document the projects progress

A project manager will oversee the project, coordinate training for all nurses and social workers, work with all social and advocacy agencies, train all members of the coalition, report on the projects progress, and disseminate information about the project to other interested agencies. (See attachment 4)

Diffusion Potential

Domestic Violence occurs every day, in every community, in every corner of our world, causing fear and pain behind closed doors. The Rapid Response for Clients at Risk proposal submitted by Home Health VNA is unique in that a century old, in-home nursing model will be revitalized in a new and unique way with the use of technology. In addition, intervention services, such as legal aid, shelter, protection, and information will be coordinated and immediately available to victims in a manner that respects their dignity and confidentiality.

A major advantage to the use of this model over established approaches is that for more than 100 years visiting nurses have been on the road, traveling to wherever there was a skilled nursing need – providing medical care. This project is an extension of that model. That is not to say that more established social service models of care have been ineffective. But innovative technology now exists to extend the in-home nursing model and to work hand in hand with social service and advocacy groups creating an interdisciplinary nurse-social work–advocate model of providing domestic abuse services in the home and in the community.

The RRCR project is an easy model to replicate and can be adapted by visiting nurse associations or other home health providers across the country. The major advantage to this project is that it builds on established models of service delivery and can respond to domestic abuse across the continuum (see attachment 5 and 6)

Home Health VNA has planned several strategies to share lessons learned from this project.

1. The project design, development and outcomes will be written for publication in national nursing, social work, and interdisciplinary publications.
2. A summary of the project will be published in Newday, a monthly publication of the Home Health Care Association of Massachusetts
3. A New England wide collaborative, interdisciplinary, conference about the incidence and prevalence of domestic violence and the role of technology in detection and intervention will be designed and offered at the completion of the project
4. Home Health VNA will act as a demonstration site for other home and healthcare organizations that may require technical assistance.
5. Information about this project will be linked to our existing web site, homehealthvna.baweb.worldnet.com. The site will be updated quarterly.
6. HealthWyse will feature information about the project on its existing web site. It will make information and contacts available to its installed base of clients and future clients.

Project Feasibility

HealthWyse was chosen because of its state-of-the-art information delivery and retrieval system, comprehensive data collection and reports management features as well as its instantaneous information sharing features. The palm-sized PC was designed to eliminate the barrier between patient and nurse.

HealthWyse provides a complete package of hardware, software, telecommunications and training for a set per-visit cost. The major advantage to this arrangement is that there is no up-front cost or capital equipment investment for hardware or technology that may in fact become obsolete in a limited time frame.

HealthWyse utilizes Microsoft CE Pocket PCs for clinicians' data capture devices. Each clinician has a complete set of their patients' charts on their Pocket PC. New assessments and notes are entered with each visit, historical data are accessed and reference material such as formulary and food-drug interactions are consulted. As needed, clinicians connect via standard

phone line to the HealthWyse data center. At this central hub data is exchanged to update clinicians' Pocket PCs and the PCs in the offices of the home care provider. Physicians, community agencies and other authorized users access appropriate data via secure web access.

Data security is critical in the HealthWyse technical design. HealthWyse meets all HIPAA security standards. All users log into the system using electronic passwords, any data transmitted via the Internet are encrypted and all user actions can be tracked in the system. Patient data are never made available to those unauthorized to view those data.

Community Involvement

Due to the nature of this project, the majority of our community partnerships will be with other non-profit agencies. A committee will be formed consisting of the core collaborating group as well as the project manager and three representatives from Home Health VNA (a nurse, social worker and family advocate) and the following organizations who provide intervention and advocacy for victims.

1. The YWCA's in Greater Haverhill, Greater Lawrence, Greater Lowell and Greater Newburyport currently serve as referral agencies for women and children who are victims of domestic violence and sexual assault. Services provided include crisis intervention, court advocacy, support and counseling, emergency and transitional housing as well as information and referral services. A representative of each of the YWCA's will join the coalition, provide in-kind support, and play a critical role in planning and implementing the project.
2. The Women's Resource Center, with offices in Haverhill and Lawrence, provides legal advocacy, emergency shelter and information and referral services to women and children. The Women's Resource Center is part of a larger network of agencies that work coordinating services for women and children across the state. A representative of the Women's Resource Center will also be part of the coalition and has agreed to organize a task force to identify, recruit and enlist the support of, key referral agencies in the Merrimack Valley for victims of intimate partner abuse
3. Elder Services of the Merrimack Valley provides information and referral services, elder care management, and community education and advocacy for elders in the Merrimack Valley. They also serve as the local protective service agency responsible for investigating all reports of elder abuse and neglect. A representative of Elder Services of the Merrimack Valley's Protective Service Department will join the coalition and has agreed to organize training for nurse's staff on detecting elder abuse.
4. The Domestic Violence Unit of the Department of Social Services for the State of Massachusetts works identify domestic abuse in families, collaborate with other agencies, and educate the community about abuse of women and children. A representative from the area offices serving the Merrimack Valley will join the coalition

In addition, the coalition will solicit program design planning suggestions from survivors of abuse and other interested members of the community. It is estimated that building coalition and developing the partnerships between all agencies will take a minimum of six months.

Escalating violence in our communities has fueled the need for new ways to detect and prevent abuse in the home. Two local, high profile incidence highlight the need for violence detection and prevention. The first is a Haverhill resident who allegedly was firing weapons in the community and then allegedly shot and killed seven coworkers in his place of employment on December 26. And, most recently, a 5-year-old girl from Lawrence was murdered by severe

blows to the stomach by the live-in girlfriend of her father. Evidence in this incident now links the father to sever abuse that may have occurred over more than a year. These incidences underscore the need for a community wide response to the broad range of abusive behaviors and the impact abuse has on victims, families, neighbors, and employers.

Domestic Violence training for nurses, representatives of the core collaborating group will provide social workers and home health aides. Training will consist of an initial four-hour session on the incidence and prevalence of domestic violence along with information on how to identify abuse in the home. Regular technology training sessions administered online will follow this session. Technology training for collaborating agencies involved in the project will be the responsibility of the project director with input and assistance from HealthWyse.

Evaluation

Home Health VNA has made a strong commitment to quality care, efficiency and cost containment. To ensure that this program is of the highest quality the agency will follow a rigorous evaluation process. The organization will collect data on victims, medical and referral outcomes and project outcomes. We will also solicit client and staff feedback and incorporate these findings into on going project planning and implementation. In addition, an advisory team consisting of information systems personnel and nursing staff will evaluate HealthWyse custom reports and ease of use of equipment. The analysis will be used to implement improvements.

The RRCR evaluation plan will include a synthesis of multiple methods including longitudinal outcomes evaluation through an electronic chart review and prospective tracking of clinical data, abuse documentation, patient care evaluation, interviews with staff and surveys of referring agencies – all of which will include quantitative and qualitative data. Data will be gathered related to the targeted outcomes identified in the Project Purpose section. All data will be managed in Microsoft Access databases and Excel spreadsheets. Consultation from contracted university evaluation experts will be ongoing.

The project manager will lead the management of the evaluation plan with input and assistance from the contracted consultants Dr. Joellen Hawkins from Boston College and Dr. Carole Pearce from University of Massachusetts, Lowell (see attachment 7 and 8). An administrative assistance from Home Health VNA staff will provide additional data collection services be devoted to activities associated with evaluation of the project. The project manager and the contracted consultants will be responsible for all data collection and analysis. The consultants will be directly involved in each phase of the project including coalition building, customizing the software, technology audits, training and diffusion. Each phase of the project will be evaluated separately using evaluation tools that are most appropriate for the tasks. For example, domestic violence training evaluations will include pre and post tests by all participants. All project participants are committed to sharing data for the benefit of the project.

Through an adjunct project funded by the Massachusetts Department of Public Health for the Haverhill Police Department, we will initiate a community education project for the Haverhill community, one of the communities served by Home Health VNA. Outcome measures will include the number of restraining orders filed by residents of Haverhill, the number of phone calls to the police for reasons of domestic violence, the number of visits to the emergency department for injuries resulting from domestic violence, and the number of deaths in Haverhill associated with domestic violence.