

The Dare to C.A.R.E. Program

Taking vascular disease screening and community awareness to the next level.

BY JOHN D. MARTIN, MD; LOUISE HANSON, CRNP; AND JON HUPP, MD

Dare to C.A.R.E. is a comprehensive cardiovascular disease early detection and education program that is offered free to men and women over the age of 60 and for those over 50 with vascular risk factors. Created by John D. Martin, MD, a vascular surgeon, and Louise Hanson, RNP, of Cardiology Associates, P.C., in Annapolis, Maryland, this nationally recognized program now serves as the model of success for promoting awareness of cardiovascular and peripheral vascular disease. At its inception, Dare to C.A.R.E. was staffed entirely by volunteers, including physicians, nurses, vascular technologists, and other allied health professionals. This multidisciplinary program includes vascular surgeons, cardiologists, nephrologists, and interventional radiologists, and has now been attended by more than 7,000 people.

ADDRESSING AN UNMET NEED

During the last decade, we have become increasingly aware that our vascular market share data, statistics from emergency room admissions for morbid complications, and conversations with the referring physician base all pointed to an extremely poor awareness of cardiovascular and peripheral vascular disease. Particularly in our market, but across the country as well, carotid artery disease, abdominal aortic aneurysms, renal artery stenosis, and extremity artery stenosis are clearly underdetected and undertreated. The community is more focused on cancer-related issues, and peripheral vascular disease is addressed only when obvious clinical symptoms appear. There is a minimal sense of public or professional concern, despite the large numbers of patients who are admitted to the hospital or who die from previously undetected vascular issues. It is our belief that with the implementation of the Dare to C.A.R.E. screening and education program, we can

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change this.

Screening for asymptomatic disease in selected disease states has been a hallmark of healthcare policy in this country for many years. Various standards have been used to identify those illnesses in which the prevalence of the disease, test requirements, risk and benefit of therapy, and cost-per-life-saved justify funding of widespread screening. To date, there has been no approved funding for screening for vascular disease. The prevalence of this disease is well known, and certainly the methods of diagnosis (ultrasound) make disease detection inexpensive, noninvasive, and accurate. All patients with identified disease would benefit from more aggressive risk factor treatment and potentially avoid morbid complications or the need for invasive intervention. In addition, there is little dispute regarding the management of asymptomatic critical disease, particularly with carotid disease and aortic aneurysms.

A NATION IN THE DARK?

It is extremely obvious that our community and the nation as a whole have not grasped the frequency and morbidity of cardiovascular disease. The majority of women believe their greatest risk is breast cancer, likely due to the successful national campaigns in the media. There is a great sense that peripheral vascular and cardiovascular disease is a disease that pertains to the elderly and

is inevitable and not preventable. The nation's attention has not been focused on the issue of vascular disease, despite the incredible effect that early detection could have on reducing death and disability. The goal of the Dare to C.A.R.E. program is to change those perceptions.

PROGRAM DESIGN AND GOALS

To achieve our goal, it was our belief that the Dare to C.A.R.E. program's principal intentions needed to be more than just an effort to uncover undetected disease; the program must also educate the public and primary care physicians. The program was initiated by its founders, with support by a broad array of volunteers, our hospital (Anne Arundel Medical Center, Annapolis, MD), and industry sponsors. We were committed to changing the level of public and professional interest in cardiovascular and peripheral vascular diseases. We believed that through the educational efforts, both didactic and written elements accompanying the screening process and continuous communication of the results of testing with primary physicians, we would ultimately impact the behavior of our community and modify practice patterns. To accomplish this goal, we established the principles outlined in Table 1.

NEW DIRECTIONS IN SCREENING AND EDUCATION

We had participated in national screening programs in the past and believed that those efforts, while productive, fell short of our objective of changing awareness and behavior in our community. We believed we needed to expand the concept of screening to include didactic lectures, exposure to risk factor reduction and wellness services related to vascular disease, and an immediate review of the results of risk factor and testing with a vascular specialist. We also wanted to include communication of these results with the primary care physicians, and most importantly that communication would occur on a regular basis, not just once a year. The leaders agreed in principle with the general design of the program and planned the initial event.

PROGRAM LAUNCH

The inaugural event took place in June 2000. Details were put together within 6 weeks of the decision to proceed, and the event was announced via the hospital newsletter. Interested participants called a designated telephone number to register and schedule a screening time. They were encouraged to come at the beginning of the program to attend lectures and educational exhibits. We offered 130 spots for the evening.

We then solicited volunteers to provide administrative and guidance support, blood pressure testing, vascular

testing, and physician meetings. Physicians were recruited to meet with the participants and give lectures. A detailed lecture schedule was prepared with a broad range of topics including risk factor modification and the major topics of carotid artery disease, abdominal aortic aneurysms, renal artery disease, hypertension, and peripheral artery disease. The response to requests for volunteers was overwhelming. Minimal funding was required for materials and food and was provided by industry sponsors and Anne Arundel Medical Center.

Participants visited the exhibits (nutrition, diabetes education, smoking cessation, physical therapy, and OR demonstrations) and listened to the lectures prior to or after their scheduled appointments. At their scheduled times, they would complete the risk factor questionnaire and have their blood pressure checked. The guests were then escorted to the ultrasound area to undergo carotid duplex, abdominal ultrasound, and ABI determination. They were then brought to the physician meeting room to discuss their results. The guests were given a copy of their results, and a copy was sent to their referring physician. Participants were also asked to complete a program

TABLE 1. ESSENTIAL ELEMENTS OF THE DARE TO C.A.R.E. PROGRAM

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| • Free to the public |
| • Funded by donations |
| • Staffed by volunteers |
| • Multispecialty participation |
| • Branding would be of the Dare to C.A.R.E. program, not a particular physician, practice, or hospital |
| • A didactic lecture component as well as vascular testing |
| • Extensive educational materials would be provided |
| • Participants would meet with vascular specialists to discuss findings |
| • Results would be communicated to primary care physicians |
| • No attempt would be made to self-refer patients |
| • All data would be kept in a database |
| • Programs would occur regularly, rather than once a year |
| • Continued refinement would be made to optimize efficiency |

assessment and critique. The results of the ultrasound tests were reviewed with the participants that night, and critical results were called in to the primary care physicians the next day. No attempt was made for self-referral. The program was a huge success, and the next event was scheduled for 3 months later.

RESULTS AND INSIGHTS GAINED

The leaders of Dare to C.A.R.E. met and reviewed the issues, patient evaluations, and concerns raised by the volunteers. Particular coordinator roles were created to improve patient flow and we refined our testing intervals.

The success of this and the other events that followed was predicated on the efficiency of the process and the infectious enthusiasm of the volunteers. At the suggestion of the participants, we shifted the didactic component to the night before, making the program a two-evening event. We were concerned that this would diminish interest in the community, but the result was just the opposite. Participants raved about the lectures, and it was clear this was a critical component of the program. News of the program spread rapidly throughout the community both via hospital newsletters, local newspapers, and word of mouth. Quarterly programs were subsequently performed. Each program filled within days of its announcement.

BY THE NUMBERS

We have screened a total of 7,037 people, 59.5% of which were female; the mean age of participants is 65. Seven percent of those screened were shown to have either carotid disease greater than 40%, an aneurysm, or an ABI less than .7. Regarding critical numbers, 2.3% had carotid disease greater than 60%, an abdominal aortic aneurysm greater than or equal to 5 cm, or an ABI less than .5; 3.1% of men and 1.7% of women screened met this criteria. Interestingly, of those participants aged 40 to 60 years with identified risk factors, 8% had significant disease, and 3.2% fell into the critical group. Forty-nine percent of those screened have shown some evidence of vascular disease. Fifty-two percent were past smokers, and 7% were active smokers; 9.8% were diabetic; 46% were hypertensive; 47% had elevated lipids; and 19% had a prior myocardial infarction.

RECENT INITIATIVES: PROGRAM EXPANSION AND THE DISTRICT 30 PROJECT

As the interest in Dare to C.A.R.E. grew, the pressure to expand mounted. As a result, in 2003, we opted to pursue a more ambitious course and announced the District 30 Project. The goal was to screen every single at-risk person within the designated Maryland State legislative district, which included a target population of 12,000 people. We created a nonprofit foundation, raised funds, and hired

two full-time employees. A kick-off event was held that included the state Senator, the Speaker of the House, the local delegate, the mayor, lawyers, doctors, insurance carriers, the hospital president, local business leaders, and industry partners. All the principals in the health care process were joined together, agreeing on a plan to change the health of the community, a truly unique opportunity. The daily program began with testing offered every day, increasing the evening lectures and maintaining the quarterly programs.

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The press coverage has been outstanding, but we also found that we did not have to run ads on a routine basis to fill the daily and evening programs; people heard about the program through other media sources and by word of mouth. We believe the single most important factor that has led to overwhelming community support has been the altruistic nature of the program and the insistence on maintaining the focus on Dare to C.A.R.E., rather than the physicians, their practices, or the hospital. It is clearly presented not as a marketing ploy, but as a passionate and committed effort to improve the health of our community.

ADDITIONAL IMPACT

Many people have raised concerns that if participants promote the Dare to C.A.R.E. program instead of themselves or their practices and hospitals, the impact on their respective facilities will be minimized. In reality, just the opposite occurs: the patients all come back to the physicians that perform the service. Although we are adamant in our development of this program as a community service, the effects on our system have been hard to ignore. There has been a dramatic increase in the vascular service business at our home institution. Prior to the establishment of this program, our overall vascular market share was a mere 5%, and vascular treatment was one of the poorest performing services in a very successful hospital. Dare to C.A.R.E. has played a pivotal role in changing those statistics.

Primary market share has risen to 74%, one of the top programs in the hospital and overall market share is now approaching 30%. Its revenue ranks third behind the joint and spine programs, and it is on target to double the projected profit for this year. Vascular laboratory testing is up more than 34% in the last 6 months alone, and case vol-

ume continues to expand beyond projections. Halo services including cardiac testing, CT, and ancillary services have also benefited as new patients are drawn to the institution for the program. Good will from the participating physicians and allied health professional volunteers has dramatically affected the profile and reputation of the vascular program within the community, as well as with the primary care referring base. The regional and national reputations have also soared, with a continuous stream of interested physicians and hospital administrators traveling to Annapolis to learn about the program. Clinical research, training, and educational programs have now been established with the assistance of the growing volume of cases at the institution.

In the daily program, 20 to 30 patients are screened on average each day, and the evening programs consistently have 100 to 130 participants each night. Most importantly, the program has greatly influenced the area physicians. They are more aware of vascular disease, and consequently, patients with obvious disease are referred earlier. More importantly, however, those without obvious disease but in the at-risk group, are referred to Dare to C.A.R.E. The physicians have wholly embraced the program, and marketing is no longer needed. Dare to C.A.R.E. is flourishing, with newly created programs including:

- Dare to C.A.R.E. About Physicians: a program for physicians and their families (more than 100 physicians attended this event);

- Dare to C.A.R.E. About Women: a program focused on the unique issues of cardiovascular and peripheral vascular disease in women (recent program had 500 participants registered for a single-evening lecture program);

- Dare to C.A.R.E. Secondary Market Program: 2-day events for regions remote from the hospital with the initial lectures in the remote location and the second night in our hospital facility. These have had a dramatic effect on expanding the reach of the program;

- Dare to C.A.R.E. Corporate Program: a corporate program specifically designed for our local major industries;

- Dare to C.A.R.E. Outreach Program: daily mobile programs in the rural and underserved areas of our community; and

- Dare to C.A.R.E. Legislative Program: extensive screening of the Maryland State House and Senate promoting awareness in our elected officials. More than 130 people participated in the event.

WHAT'S NEXT

The sense of pride and goodwill that surrounds the Dare to C.A.R.E. program is moving and inspirational. It has brought the community and all elements of the health care process together in a manner that we had never

dreamed possible. All over the community, we hear people talking about the program. It has become a part of our culture, and as a result has improved the health of our community. It has achieved its intended goal. As we close in on completing the District 30 Project, we have set our sights on serving the entire county and reaching individuals who typically do not attend these programs. This ambitious project will require great financial support, which remains our greatest hurdle. The evening programs are quite inexpensive and easy to fund; however, the daily programs cannot function without employees and dedicated equipment. Continued growth will depend on acquiring larger industry and business partners to supply funding. As this program grows and awareness of cardiovascular disease increases, we remain optimistic that other potential donors will recognize the value this effort provides and will contribute financially.

It is our sincere hope that others will join us in this campaign. We freely share our ideas and experiences with those who are willing to come and see for themselves. You must experience the program to actually gain a true sense of its impact. All who have attended have walked away with the clear notion that this is not just another screening program—it is so much more. The effort to get Dare to C.A.R.E. started is significant, the inertia is great, the politics are local, and most have difficulty resisting the temptation to personalize it. You must have a dedicated leader who truly believes in the cause. Our success is clearly linked to the fact that we have avoided the temptation to personalize the program and have committed to the Dare to C.A.R.E. brand.

If you commit to this program, we are sure the accolades and financial success will follow to more than justify the effort. More importantly, the contribution you will be making to your community will be far greater than anything you could achieve simply by operating on patients. Nothing has given us greater professional satisfaction than walking down the streets of Annapolis and having someone stop us and say, "I dared to C.A.R.E., thank you for what you are doing." Fortunately for us, now it happens all the time! ■

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