

2. Cost-Effectiveness of a Health System Vascular Screening Program

John Blebea, MD, Barbara Demagall, RN and Bruce Wilkenfeld, PhD
From: Surgery, Case Western Reserve University, Cleveland, OH

OBJECTIVE: Many vascular screening programs have been initiated at individual practice/hospital levels as well as on the national level by a for-profit entity. Both the national program by the Society for Vascular Surgery as well as local efforts, however, have been terminated due to their high cost. We examined the cost-effectiveness of a screening program established by university health system.

METHODS: A free mobile outpatient screening program was established by our university hospital and three fully-owned community hospitals within its health system. The team was composed of one nurse manager, educator, two vascular technologists, and one driver. The surveillance program was performed in both hospital outpatient clinics as well as private doctor's offices and included blood pressure, serum cholesterol, carotid and aortic ultrasound, and an ankle-brachial index. Results were reviewed by a vascular specialist and sent to the patient's physician.

Financial patient-specific data was examined by charges, revenue, costs, and contribution to margin by reviewing in-patient activity of those screened both before and six months after surveillance during a two-month period.

RESULTS: A total of more than 17,000 people have been screened during the past three years in the surveillance program. During the two-month study period, 1,117 participants were seen. Of these, 11% (126) had never had a hospital medical encounter within our health system but subsequently were seen during the following six months. Twelve (10%) were hospitalized and detailed financials examined:

Charges	Revenue	Total Costs	Net Income	Contribution to Margin
\$340,715	\$155,563	\$109,686	\$45,877	\$111,705

This income compares to a cost of \$56,000 for personnel and expenses during the same time period.

CONCLUSIONS: A system-wide vascular health screening program is expensive but associated with significant financial income and a positive contribution to hospital margin. Payment of approximately \$25/screening would make such a program cost neutral.