**INTERVENT-Related Research News You Can Use (September 2012)**

**Source:** *Circulation: Cardiovascular Quality and Outcomes* (a publication of the American Heart Association), September 2012 (http://circoutcomes.ahajournals.org/content/5/5/e51.extract)

**Reference:** Turan, Tanya N et. al. Rationale, Design, and Implementation of Aggressive Risk Factor Management in the Stenting and Aggressive Medical Management for Prevention of Recurrent Stroke in Intracranial Stenosis (SAMMPRIS) Trial*. *Circ Cardiovasc Qual Outcomes* 2012;5:e51-e60.
*Note: The multi-center clinical trial was funded by the National Institute of Neurological Disorders and Stroke.

**Purpose of the Trial:**
To compare aggressive medical management alone versus aggressive medical management plus angioplasty and stenting (a surgical procedure to help open a partially blocked artery to the brain).

This article focuses on the intensive risk factor management protocol used in the SAMMPRIS trial and describes the challenges in implementing these protocols and how the challenges have been managed.

**Participants:**
To be eligible for the trial, patients must have had a TIA ("mini-stroke") or non-disabling stroke within 30 days prior to enrollment caused by 70 to 99 percent stenosis (abnormal narrowing) of a major artery of the head or neck. Fifty (50) sites participated in the trial and 451 patients were enrolled.

**The Program:**
Aggressive medical management (risk factor reduction and medications) is performed by a neurologist and coordinator at each site with assistance of an innovative, evidence-based, educational, lifestyle modification program called INTERVENT. Primary risk factor targets included systolic blood pressure and LDL cholesterol and secondary risk factor targets included non-HDL cholesterol, A1C, smoking, weight management and physical inactivity. The INTERVENT lifestyle health coach had responsibility for recommending, reinforcing and providing coaching on specific healthy lifestyle behaviors aimed at risk factor reduction.

INTERVENT was selected as the lifestyle modification program for the SAMMPRIS trial because it is available throughout the United States and is delivered with one-on-one counseling via the telephone. INTERVENT has produced positive health results in a variety of populations, including patients with a prior history of stroke or TIA and patients with multiple risk factors.

**Findings:**
Although follow-up of SAMMPRIS patients continues, early analyses of risk factor measures show substantial improvement. Within the first 30 days, systolic blood pressure decreased by more than 5 mm Hg and LDL cholesterol decreased by more than 20 mg/dL on average, with both of these primary risk factor measures continuing to improve at year one. Improvements in secondary risk factor targets were also seen, with significantly better control of non-HDL cholesterol and A1C, weight loss, improved exercise and smoking cessation compared with baseline. The study's authors believe that these improvements in risk factor control may have contributed to fewer strokes and deaths than expected in the medical management group of SAMMPRIS as compared to previous studies.

**How You Can Use These Results:**
The findings of this trial are important.

- For patients: It's encouraging to know that aspects of the SAMMPRIS aggressive medical management strategy (including the INTERVENT lifestyle management program) can be implemented in real-life patients.
- For health care practitioners: Based on the results to date, it is recommended that intensive management of vascular risk factors should be incorporated into the management of patients at high risk of stroke in clinical practice.