## **Computerized Intervention to Enhance Cardiovascular Prevention. National Computerized Community Cardiovascular Control (4C-N)**

<u>Harel Gilutz</u><sup>1</sup>, Avi Goldberg<sup>2</sup>, Nicky Liebermann<sup>2</sup>, Boris Gogerman<sup>2</sup>, Allon Zuker<sup>3</sup>, Gabriel Plotkin<sup>2</sup>

<sup>1</sup> Cardiology Department, Faculty of Health Sciences, Ben Gurion University, Beer Sheva, <sup>2</sup> Clalit Medical Services, Tel Aviv, <sup>3</sup> Roshtov Software Ind, Omer, Israel

**Background:** Many high-risk patients in need for primary and secondary prevention of cardiovascular disease (CVD), are under-evaluated and under-treated. Lately, a new decision support system was incorporated into the daily work of GP's

Aim: To evaluate physician compliance with computerized recommendation for CVD prevention.

## Methods:

Computerized primary care records, laboratory data and drug prescriptions were used to identify patients at high-risk for CVD using an automatic risk-profile processor based on the presence of diabetes, the European "Score" and the "Framingham" index.

Current guidelines adopted by Clalit Health Services were used to generate clinical recommendations. Patients, aged 30-74y who visited primary care clinics of Clalit H.M.O. throughout 1-2007 to 10-2008 were included.

**Results:** During a 22 months period 1,382,946 patients were evaluated by 4C-N processor; 74.1% were considered as low risk and 23.8% as high risk CVD. In 3.4% of cases (14.3% out of the high risk group) the GP ignored a recommendations for enrollment, thus only 19.9% were enrolled into 4CN intervention group. The main reasons for patients enrollment were the presence of CVD (33.6%), Euro Score >5 (38.6%), the presence of diabetes (24.5%) and Framingham score >20% (3.1%). Most of patients (87.6%) were enrolled within the first 18 month of the intervention activity.

**Conclusions**: The 4C-N intervention detected the expected amount of high risk patients within 18 months. The impact of this first step on improving guideline adherence is yet to be studied.