**Presentation Format:** Poster Presentation

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1a. **Organization Type:** MCO  
**Current DMAA Member?** No

2. **Co-Presenters:**

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3. **Presentation Category:** Disease management in special populations

**Author biography:**

Dr. Silvana Figar, currently serves as chief of the Epidemiology division of the Hospital Italiano Health Plan (Buenos Aires, Argentina) and as coordinator of the Epidemiology division of the Department of Internal Medicine in the same institution. 
In her present position develops and coordinates the Complex Anti Hypertension Program in the Elderly (CAPE) 
Other responsibilities at the HMO include oversight of quality and management of diabetes mellitus program and secondary stroke prevention programs. 
She is the secretary of the Argentine Society of Medicine (SAM) and integrates the peer review workshop for the Annual Congress of Internal Medicine in Argentina.
Prior to joining the Hospital Italiano Health Plan Dr. Silvana Figar served as a primary care physician in the Ambulatory Care of the Hospital Italiano de Buenos Aires. She has a degree in Internal Medicine (1993). An epidemiology degree from the National Academy of Medicine, and a Statistician degree in Statistics for Health Science from the Buenos Aires University.


ABSTRACT
We started in year 2000 a complex antihypertensive program in the elderly (CAPE). This is the first hypertension management program in undeveloped countries. In order to assess its efficacy we conducted a quasi-experimental individual based program trial. We compared blood pressure levels between a group of patients included in the program (n 246) and another group under usual care (n 212). Mean follow-up was 11 months. Main outcome measures were difference in systolic blood pressure level and in percentage of well-controlled (<140/90 mm Hg) patients between groups. Interventions were: educational sessions for patients, discussion meetings with primary care physicians, reminders included in electronic medical records, and organizational changes such as measuring blood pressure before attendance. The difference of mean change in systolic blood pressure between groups was 8.4 mm Hg (IC 95% 5 to 11 mm Hg). Percentage of well-controlled patients was 66% in intervention group and 47% in controls (p<0.001). Multivariate analysis showed an odds ratio of 0.25 (IC 95% 0.11 to 0.54) for uncontrolled pressure in patients who received the intervention. These results support the efficacy of our program. Routine clinical care of hypertension can be improved with simple strategies that go beyond pharmacotherapy, tending to overcome clinical inertia.

Presentation Description
INTRODUCTION:
Even in financed health care, hypertension control does not achieve its goal suggesting that other factors may play an important role. Resistance to comply with treatment due to the asymptomatic nature of the disease and clinical inertia are some of these mentioned factors. Disease management programs have been developed to narrow the clinical evidence and practice gap. In our setting, a university-associated teaching hospital, we designed a Complex Antihypertensive Intervention Program in the Elderly (CAIPE). To assess its efficacy we conducted a quasi-experimental individual based program trial. A group of patients included in such program was compared to another group under usual care. Outcome measures were differences in systolic blood pressure level and in proportion of well-controlled patients between groups.

METHODS:
In our hospital, primary care of the elderly is carried on by clinicians or by family physicians. Two hundred and fifty patients were randomly selected from each medical group. A computer–based monitoring system detected patients the moment they got in touch with the ambulatory system. The addition of a program’s office to identify and deliver this care routine was the main organization change in the work processes. Goals for the program were established with active participation of primary care physicians, hypertension experts and a disease management coordinator. Trained medical students recorded patients blood pressure and reminded them to keep lifestyle changes and to comply with pharmacological treatment. Blood pressure measurement (BP) was systematically recorded on the electronic medical record before medical appointment acting as a reminder for the physician. Patients were invited to attend four educational sessions with active learning and participation. Educational objectives stressed behavioral changes. Comparability was ascertained by T-test for continuous variables and Chi square test for proportions.
RESULTS
Mean age 73 (65-01) years, females 65%. Intervention group, experienced a mean reduction of 5 mm Hg (p<0.001), while control group showed an increase of 3.4 mm Hg (p=0.004). The difference of mean change before and after the intervention between groups was 8.4 mm Hg (CI 95%: 5.11; p<0.001). In initially partially-controlled patients (BP ≥ 140/90 mm Hg) this difference was 11.5 mm Hg (CI 95%: 6.8,16.5; p<0.001). The final mean difference in diastolic blood pressure between groups was 2.89 mm Hg (CI 95%: 0.9, 5; p = 0.004).

The adjusted analysis to predict lack of control showed an odds ratio of 0.25 (95% CI = 0.11,0.54) for complete Intervention.

DISCUSSION
Our intervention was based on proved strategies such as implementation of specific organizational change (changes in clinical procedures), electronic medical reminders and computer–based monitoring systems to follow-up. Meetings conducted with physicians focused primarily on their acceptability and commitment to an integrated health care program since simple diffusion of clinical guides alone does neither change physicians conduct nor improve level of hypertension control. Collaboration, top management support, teamwork and a design based on knowledge of needs, barriers, and theory enhance the reliability of this large practice-based clinical trial.