EFFICACY OF A DISEASE MANAGEMENT PROGRAM FOR DIABETES IN ARGENTINA.

G.Rodriguez, E. Soriano, A. Beratarrechea, E. Langlois, M. Marchetti,

K. Kopitowski, L. Litwak, A. Alvarez, F González B. de Quirós .

SERVICIO DE CLÍNICA MÉDICA, SERVICIO DE ENDOCRINOLOGÍA Y

GERENCIA MÉDICA DEL PLAN DE SALUD. HOSPITAL ITALIANO DE BUENOS AIRES.

Contact us: **http://www.hospitalitaliano.org.ar/plan**
Email: **programas.medicos@hospitalitaliano.org.ar**

☐ INTRODUCTION:

We started in year 2000 a Disease Management program addressed at the care of diabetic patient.

☐ OBJETIVE:

Assess efficacy of a Diabetes Control Program in our setting, comparing evolution of the patient the year before and after recruitment to the program
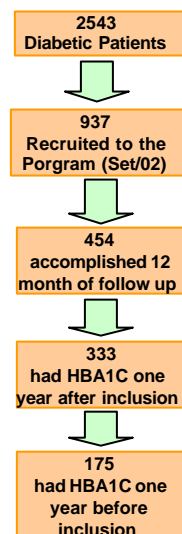
☐ METHODS:

● Design
- ➤ Controlled Trial.
- ➤ Efficacy Before-After Study.

● Cohort Selection
- ➤ Diabetic patients with at least one year of affiliation
- ➤ Recruited to the program from Aug/2000 to Set/02.
- ➤ Accomplished one year follow-up within the program
- ➤ Patients having HbA1C at enrollment one year before and one year after that date.

2543 Diabetic Patients

↓

937 Recruited to the Porgram (Set/02)

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454 accomplished 12 month of follow up

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333 had HBA1C one year after inclusion

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175 had HBA1C one year before inclusion

● Outcome Meassures
- ➤ *Metabolic Parameters*: Changes in HbA1C, Total Cholesterol, HDL
- ➤ *Clinical Parameters*: BMI, Blood Presure
- ➤ *Quality of Care*: Quantity of determination of metabolic parameters performed per patient per year
- ➤ *Health Care Use:* Ambulatory visits and admisions

● Intervention

✓ **Organizational changes :** Program´s office creation.

✓ **Dynamic surveillance list** for identification, recruitment, and follow up patients

✓ **On-going medical education:** Feedback and profiling of performance measures

✓ **Patient education:** courses and workshops with self management education

Insuline use

Cooking healthy

Diabetc foot care

☐ RESULTS:

Table 1: Basal Characteristics (N=175)

1- Demographic data:	
Mean Age in years mean (SD)	64,5(13,2)
Sex (% Fem)	81%

2- Pathology data:	
Time from Diagnosis years mean(SD)	10,7 (7,8)
Type I Diabetes (%)	10,7
Use of Insulin (%)	13,5

| 3- Antecedents:	
Acute miocardial infarction % (n)	2,9 (5)
Hypertension n % (n)	59,4 (104)
Dislipemia n % (n)	50,3 (88)
Smokers n % (n)	28,57 (50)
Sedentarism n % (n)	53,71 (94)

Results in the efficacy cohort. Before and after (N=175)

A- Metabolic Parameters:

Mean difference in Metabolic Parameters (SD)	Year Before Inclusion in the Program	Year After Inclusion in the program	Difference	P-value
-Hb A1c (n=175)	-0.073	-0.6322	-0.54	0.005
Hb A1c < 7% (n=64)	-0.38	0.15	0.53	0.02
Hb A1c 7-8 % (n=50)	-0.28	-0.34	-0.063	0.82
Hb A1c >8% (n=61)	0.41	-1.63	2.05	<0,001
-Total Cholesterol (n= 153)	-9.64	-3.74	-5.9	0.294
-HDL Cholesterol (n= 143)	1.4	-4.09	5.54	<0,001
Proportion of patients with HbA1c >7	0.63	0.44	0.19	<0,001

Evolution of HbA1C in patients included in the Program
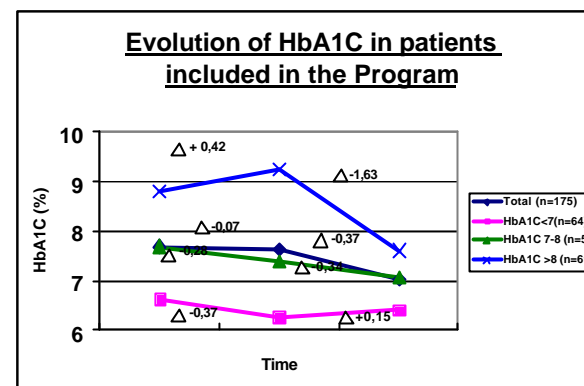
B- Clinical Parameters: 1- Blood Pressure in the efficacy cohort
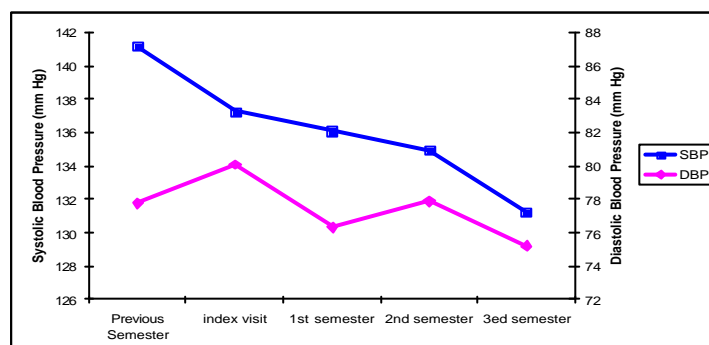
2- Evolution of BMI of patients at recruitment and a year after (n=55)

	Recruitment	Year After	Difference	p-value
BMI	29,16	29,21	0,05	0,66

C & D- Quality of Care and Use of Health Care

C- Mean Number of Determinations Performed per patient per year	Year Before Inclusion in the Program	Year After Inclusion in the program	Difference	P-value
-HbA1c	1.92	2.54	0.63	<0,001
-Total Cholesterol	1.86	2.37	0.51	<0,001
-HDL Cholesterol	1.32	1.98	0.66	<0,001

D- Percentage of patients using care resources %(n)	Year Before Inclusion in the Program	Year After Inclusion in the program	Difference	P-value
-Retinal exam	21,7 (37)	33 (56)	11.3	0.0015
-Foot Exam	8,57 (15)	37,7 (66)	29.1	<0,001
-Admissions	13,71 (24)	16 (28)	2.3	n/s
Programed visits				
-PCP visits	87,43 (153)	88,6 (155)	1.17	n/s
Unprogramed visits				
-Emergency Room	32,57 (57)	42,3 (74)	9.7	0.009

❑ **DISCUSION:** HbA1C and Blood pressure were parameters that achieved better results.
As to qualiy of care, parameters reached previously fixed goals. Use of Nurse and Ophtalmologist visits increased ensuring a better and earlier diagnosis of complications, however higher proportion of patients are to be reached

❑ **CONCLUSIONS**: As shown elsewhere DM is efficacious to control diabetes, further efforts are to be undertaken on lipids control. New strategies are currently being applied to improve results, as reminders, phone contact with patients.