

# CENTRO DE ATENCIÓN INTEGRAL DEL PACIENTE CON DIABETES®

**Center of Comprehensive Care for the Patient with Diabetes** 

**CAIPaDi** 



## Center of Comprehensive Care for the Patient with Diabetes





#### **Primary Objectives:**

- Improve the quality of life of patients with diabetes
- Reduce disabling complications (amputations, blindness, kidney failure)



#### **Secondary objectives:**

- -Identify and overcome barriers to achieving metabolic control goals
- -Promote self-efficacy and corresponsibility in treatment
- -Identify patient profiles to establish specific strategies.
- -Use cost-effective actions based on evidence and feasibility.

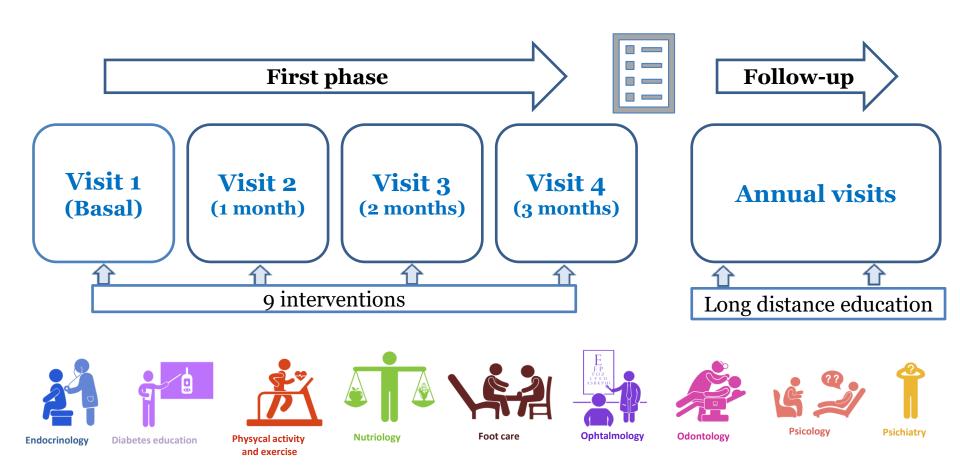




## **CAIPaDi** program

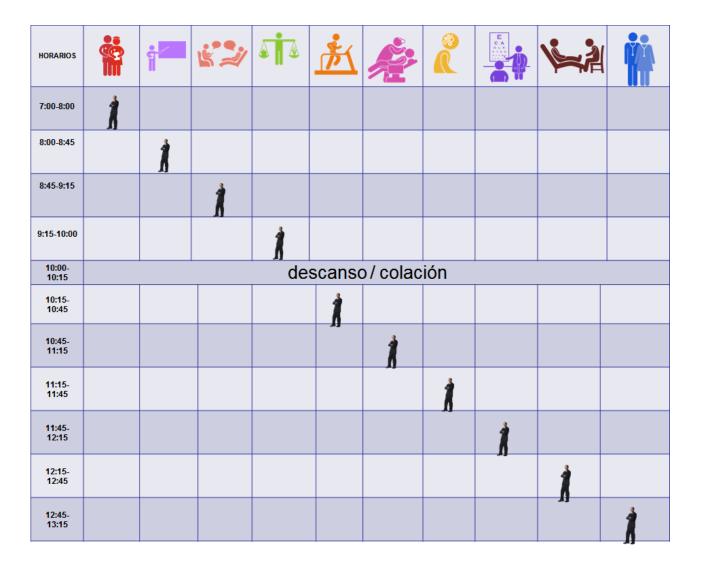


Approved by the Investigation and Ethics Committee of the INCMNSZ Ref 1198
Registered in ClinicalTrials.gov NCT02836808





#### Schedule of interventions in CAIPaDi





Hernández-Jiménez S y cols. Innovative Models For Empowering Patients With Type 2 Diabetes: The CAIPaDi program. Recent Patents on Endocrine, Metabolic & Immune Drug Discovery 2014, 8 (3)



### Long-term effectiveness of a type 2 diabetes comprehensive care program. The CAIPaDi mo



Sergio Hernández-Jiménez <sup>a,\*</sup>, Ana Cristina García-Ulloa <sup>a</sup>, Omar Yaxmehen Bello-Chavolla <sup>b,c</sup>, Carlos A. Aguilar-Salinas <sup>b</sup>, David Kershenobich-Stalnikowitz <sup>d</sup>, for the Group of Study CAIPaDi <sup>a</sup>



Parameter	Goal (% of patients)	Visit 1 (n = 1837)	Visit 4* (n = 1243)	Visit $5^*$ (n = 628)	Visit $6^{*,+}$ (n = 288)
HbA1c > 9%	≤15%	35.3	2.2	9.0	11.1
HbA1c < 8%	>60%	52.4	93.0	82.1	79.1
HbA1c < 7%	>40%	37.0	79.8	65.7	59.3
BP ≥ 140/90	≤35%	17.9	5.0	7.3	5.5
BP < 130/80	>25%	50.6	83.7	65.6	68.7
$LDL-c \ge 130$	≤37%	32.9	3.8	18.6	15.9
LDL-c < 100	>36%	34.3	82.6	57.3	59.3
Eye exam	60%	ND	100	100	100
Foot exam	80%	ND	100	100	100
Renal evaluation	80%	ND	100	100	100
Smoking Status and	80%	ND	100	100	100
Cessation Advice or					
Treatment					

BP: Blood pressure, HbA1c: glycated haemoglobin, LDL-c: Low-density lipoprotein cholesterol, ND: Non-determined.

Diabetes Research and Clinical Practice 2019; 151:128-137

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CPECEM Program, Faculty of Medicine, National Autonomous University of Mexico, Mexico City, Mexico

<sup>&</sup>lt;sup>d</sup>General Director of the Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico

p < 0.001 for differences in HbA1c, BP and LDLc between 3 months vs basal, 1-year vs basal and 2 years vs basal.

 $<sup>^{+}</sup>$  p = 0.004 for differences in HbA1c between 2 years vs basal.





Health care model INCMNSZ

Training model

Extrapolation model

Program reproducibility and adapted to clinics outside the Institute.

Implementation of a comprehensive care program using cost-effective and evidence-based strategies applicable in our institution

Training programs based on competencies for any health care provider related to diabetes (pre and post graduates)





- Innovative Models for Empowering Patients with Type 2 Diabetes: The CAIPaDi program. Recent Patents on Endocrine, Metabolic & Immune Drug Discovery 2014, 8 (3)
- Evaluación de la actividad física para alcanzar un estilo de vida activo en los profesionales de la salud: estudio piloto. Rev ALAD. 2018; 8:145-5
- Periodontal status at two years of follow-up in patients with Newly Diagnosis of type 2 Diabetes Mellitus. International Journal of Clinical Endocrinology and Metabolism 2019; 1-5. DOI: http://dx.doi.org/10.17352/ijcem
- Long-term effectiveness of a type 2 diabetes comprehensive care program. The CAIPaDi model. Diabetes Res Clin Pract. 2019; 151:128–137. doi: 10.1016/j.diabres.2019.04.009
- Assessment of a multidisciplinary intervention in patients with BMI ≥35Kg/m2 and recently diagnosed type 2 diabetes. The Journal of Clinical Endocrinology & Metabolism Vol 104, Issue 7, July 2019: 2994-3002. DOI: 10.1210/jc.2018-01148
- Barriers to adherence to a nutritional plan and strategies to overcome them in patients with type 2 diabetes mellitus; results after two years of follow-up [published online ahead of print, 2019 Aug 3]. *Endocrinol Diabetes Nutr.* 2019; S2530-0164(19)30150-8. doi: 10.1016/j.endinu.2019.05.007





- Prevalence and associated risk factors of diabetic retinopathy and macular oedema in patients recently diagnosed with type 2 diabetes. BMJ Open Ophthalmology 2020;**5**: e000304. doi:10.1136/bmjophth-2019-000304
- Clinical characterization of data-driven diabetes subgroups in Mexicans using a reproducible machine learning approach. BMJ Open Diab Res Care 2020; 8: e001550. doi:10.1136/bmjdrc-2020-001550
- Use of an electronic integral monitoring system for patients with diabetes to identify factors associated with an adequate glycemic goal and to measure quality of care. Primary Care Diabetes 2020. <a href="https://doi.org/10.1016/j.pcd.2020.07.009">doi.org/10.1016/j.pcd.2020.07.009</a>
- Development and Validation of a Software Linked to an Internet Portal That Facilitates the Medical Treatment and Empowerment of Patients with Type 2 Diabetes, Interaction with Medical Personnel, and the Generation of a Real-Time Registry. Journal of Diabetes Science and Technology 2020; Aug:1932296820949941. doi: 10.1177/1932296820949941
- Evaluation of Heart Rate Recovery in Patients with Diabetes Mellitus Type 2 and Elevated Urine Albumin/Creatinine Ratio After an Individualized Exercise Program. Curre Res Diabetes & Obes J 2020; 13(4): 555870. DOI: 10.19080/CRDOJ.2020.13.555870.





- Prevalence of Misconceptions about Diabetes and their Association with Metabolic and Psychological Variables. Diabetes Obes Int J 2021; 6(1): DOI: 10.23880/doij-16000238
- Recomendaciones para el abordaje integral del paciente con diabetes tipo 2. Rev Mex Endocrinol Metab Nutr 2021; 8: 43-51 doi: 10.24875/RME.20001962
- Clinician prescription of lipid-lowering drugs and achievement of treatment goals in patients with newly diagnosed type 2 diabetes mellitus. BMJ Open Diabetes Research & Care. 2021; 9: e001891. doi:10.1136/bmjdrc-2020-001891
- Cost-effectiveness of a self-management and comprehensive training intervention in patients with type 2 diabetes up to 5 years of diagnosis in a specialized hospital in Mexico City. BMJ Open Diab Res Care 2021; 9: e002097. doi:10.1136/bmjdrc-2020-00209
- Results of Two Strategies for Peer-Support in Patients with Recently Diagnosed Type 2 Diabetes. Archives of Metabolic Syndrome 2021; 1(1): 1-7. DOI: AMSJ-2021-03
- Feasibility and acceptance of a virtual multidisciplinary care programme for patients with type 2 diabetes during the COVID-19 pandemic. Ther Adv Endocrinol Metab 2021, Vol. 12: 1–10. HYPERLIdoi.org/10.1177/20420188211059882





- Comorbidity Between Recent Diagnosis of Type 2 Diabetes and Non-Psychotic Psychiatric Disorders:
   Metabolic Characteristics and Clinical Correlates. Neuropsychiatr Dis Treat. 2022;18:1151-1163
   <a href="https://doi.org/10.2147/NDT.S364556">https://doi.org/10.2147/NDT.S364556</a>
- The beneficial effect of a comprehensive diabetes care model on high-risk relatives accompanying patients with type 2 diabetes. Prim Care Diab 2022; 16:791-796 https://doi.org/10.1016/j.pcd.2022.09.008
- Detection of sudomotor alterations evaluated by Sudoscan in patients with recently diagnosed type 2 diabetes. BMJ Open Diab Res Care 2022;10:e003005. doi:10.1136/ bmjdrc-2022-003005
- Tratamiento farmacológico multidisciplinario para la atención integral del paciente con diabetes tipo 2. Rev ALAD. 2022; 12:94-105. DOI: 10.24875/ALAD.22000018
- Long-Term Effects of Anxiety on the Metabolic Control of Recently Diagnosed Type 2 Diabetes Patients: Results from the CAIPaDi Cohort Study. *Neuropsychiatr Dis Treat*. 2023; 19:197-207. <a href="https://doi.org/10.2147/NDT.S392672">https://doi.org/10.2147/NDT.S392672</a>
- Cognitive behavioral treatment to improve psychological adjustment in people recently diagnosed with type 2 diabetes. Health Psychology and Behavioral Medicine 2023; 11: 2179058, DOI: 10.1080/21642850.2023.2179058



#### CERTIFICATE OF WINNING PROJECT

This is to certify that the project "Centro de Atención Integral del Paciente con Diabetes (CAIPaDi)" developed by Dr Sérgio Hernández-Jiménez et al, was the WINNER of the 2016 edition of the Premio ALAD-BD de Educación en Diabetes en Latinoamérica, awarded in special ceremony during the XVI Congreso Latinoamericano de Diabetes de la Asociación Lationoamericana de Diabetes (ALAD) y VIII Congreso Colombiano de Diabetes – in November, 2016, in Bogotá, Colombia.

Bogota, Colombia, November 8th, 2016

Dr. Augusto Pimazoni-Netto

Coordinator, XVI Congreso Latinoamericano de Diabetes de la Asociación Lationoamericana de Diabetes (ALAD)





#### This is to certify that

### Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico - Mexico

has fulfilled the requirements of the International Diabetes Federation and has been approved as an

#### International Diabetes Federation Centre of Excellence in Diabetes Care

(Valid Until December 2021)

**Professor Andrew Boulton** 

President 2020-2021,

International Diabetes Federation

Professor Akhtar Hussain

President-Elect 2020-2021.

International Diabetes Federation







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