



# **Colorectal Cancer Screening at Mexico: Success and Challenge**

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# Health Care, Mexico

- Mexico does not have a single, national scheme providing health care coverage as a whole.
  - Social insurance (IMSS/ISSSTE), private insurance, uninsured population
  - **Since 2015:** Popular Health Insurance (cover 100% CCR treatment)

# Cancer is the 2<sup>nd</sup> cause of death in the country

- In the absence of a National Cancer Registration System, the Registro Histopatológico de las Neoplasias de Mexico (RHNMM 2002) is the primary information source.

**Table 1** Incidence of CRC in four hospitals in Mexico City. (Modified from [29])

Hospital	Population attended	1978 [%]	2003 [%]	<i>p</i>
Hospital general	Poor uninsured	15	36	<0.001
Hospital 20 de Noviembre	Middle class government employees	20	51	<0.01
Instituto Nacional de CMNSZ	Middle class uninsured	26	39	<0.106
Hospital Español	Upper middle class, European	37	39	ns

- An increased in the frequency of CRC in the last 25 years has been demonstrated (36%)

# Colonic Tumour Localization, Clinicopathological Patterns and Incidence of Colorectal Carcinoma in Mexican Population



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## NCI

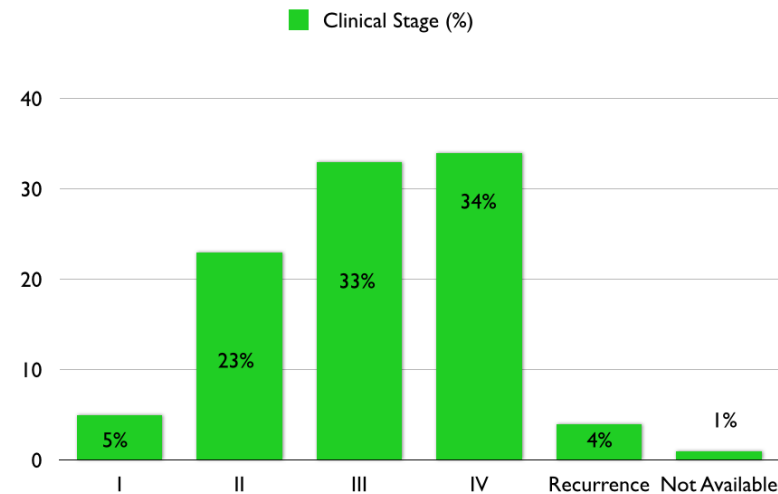
2004-2010 N= 403 cases (only CT pts)

Age 54 y (range 21-88)

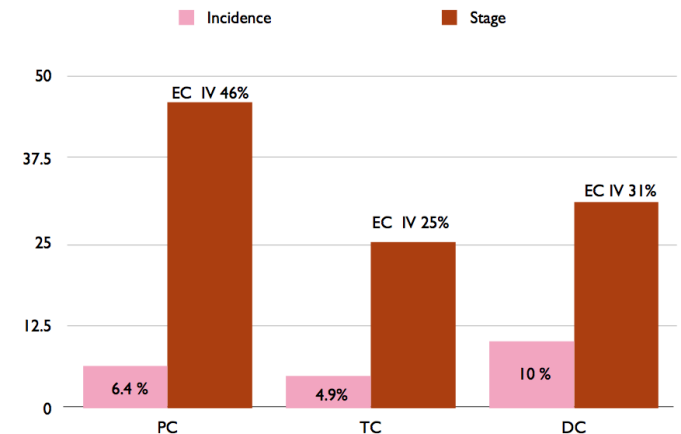
- Incidence in younger patients is increasing (**22.8% pts < 40 años**)
- More than 80% of patients are treated in tertiary cancer centers with advanced tumors (stages III and IV).
- Late diagnosis of the CRC may be attributed to the complete absence of screening programs and contributes to the low survival of these patients

Eur J Cancer 2011, 47(s1) 2011

Clinical Stage at presentation



Colonic tumor localization and Clinical Stage patients under 40 years old





## Endoscopy Department

- Screening
- Diagnosis

## INCan, UFG. Dic 2010-Oct 2015 Cancer Incidence

Sitio	N
Esophagus	255
EGJ	100
Gastric	921
Small	45
Colon	738
Rectum	686
Anus	45
Others	125

Total: 2915

# Experience of a Private Single Center

- A colonoscopy-based screening program for colorectal cancer (Mexico)
- 600 personalized letters were sent (asymptomatic people)
- N=99

**Table 1** Demographics of the subjects included in the analysis according to the colonoscopy result.

	Normal colonoscopy <i>n</i> = 64 <i>n</i> (%)	Abnormal colonoscopy <i>n</i> = 35 <i>n</i> (%)	<i>p</i> value
Gender, <i>women</i>	48 (75)	25 (71)	0.81
Comorbidities	21 (33)	16 (46)	0.27
Complete colonoscopy	64 (100)	35 (100)	NC
	<i>X</i> ± DE	<i>X</i> ± DE	
Bowel preparation	7.95 ± .82	7.83 ± .89	.628
Withdrawal time, min	6.22 ± 1.83	9.64 ± 4.33	.000
Age, years	46.89 ± 6.29	54.14 ± 7.69	.000
BMI	27.07 ± 3.90	27.43 ± 3.48	.651

BMI: bowel mass index (kg/m<sup>2</sup>).

**Table 3** Prevalence of adenomas analyzed by age group.

	No adenoma <i>n</i> = 82 <i>n</i> (%)	Adenoma <i>n</i> = 17 <i>n</i> (%)	<i>p</i> value
40–49 years	47 (57)	2 (12)	<0.001
50–59 years	30 (37)	9 (53)	
60–69 years	5 (6)	6 (35)	

**Table 2** Prevalence of colorectal neoplasm throughout the colon.

	<i>n</i> = 47 <i>n</i> (%)
Tubular adenoma	23 (49)
Hyperplastic polyp	13 (28)
Chronic colitis	8 (17)
Tubulovillous adenoma	1 (2)
Villous adenoma	1 (2)
Fibrolipoma	1 (2)

<b>Colorectal cancer</b>	
<b>Guidelines<sup>12</sup></b>	
Are there colorectal cancer screening guidelines available?	Yes
Guideline recommendations (tests/age groups/frequency)	Fecal occult blood test or fecal immunological test/general population aged 50 years or older/annual
<b>Availability and coverage of screening services</b>	
Fecal occult blood test or fecal immunological test <sup>6</sup>	DK
Exam or colonoscopy <sup>6</sup>	DK
Screening coverage	...

**GOBIERNO FEDERAL**

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Detección Oportuna y Diagnóstico de  
Cáncer de Colon y Recto no Hereditario  
en Adultos en Primero, Segundo  
y Tercer Nivel de Atención

**Evidencias y Recomendaciones**  
Catálogo Maestro de Guías de Práctica Clínica: IMSS-145-08

CONSEJO DE SALUBRIDAD GENERAL

IMSS

ISSSTE

PEMEX

DIF

Vivir Mejor

- Centro Nacional de Excelencia Tecnológica en Salud 2009
- PAHO/WHO Survey on National Capacity for the Prevention and Control of Non-communicable Diseases, 2013.

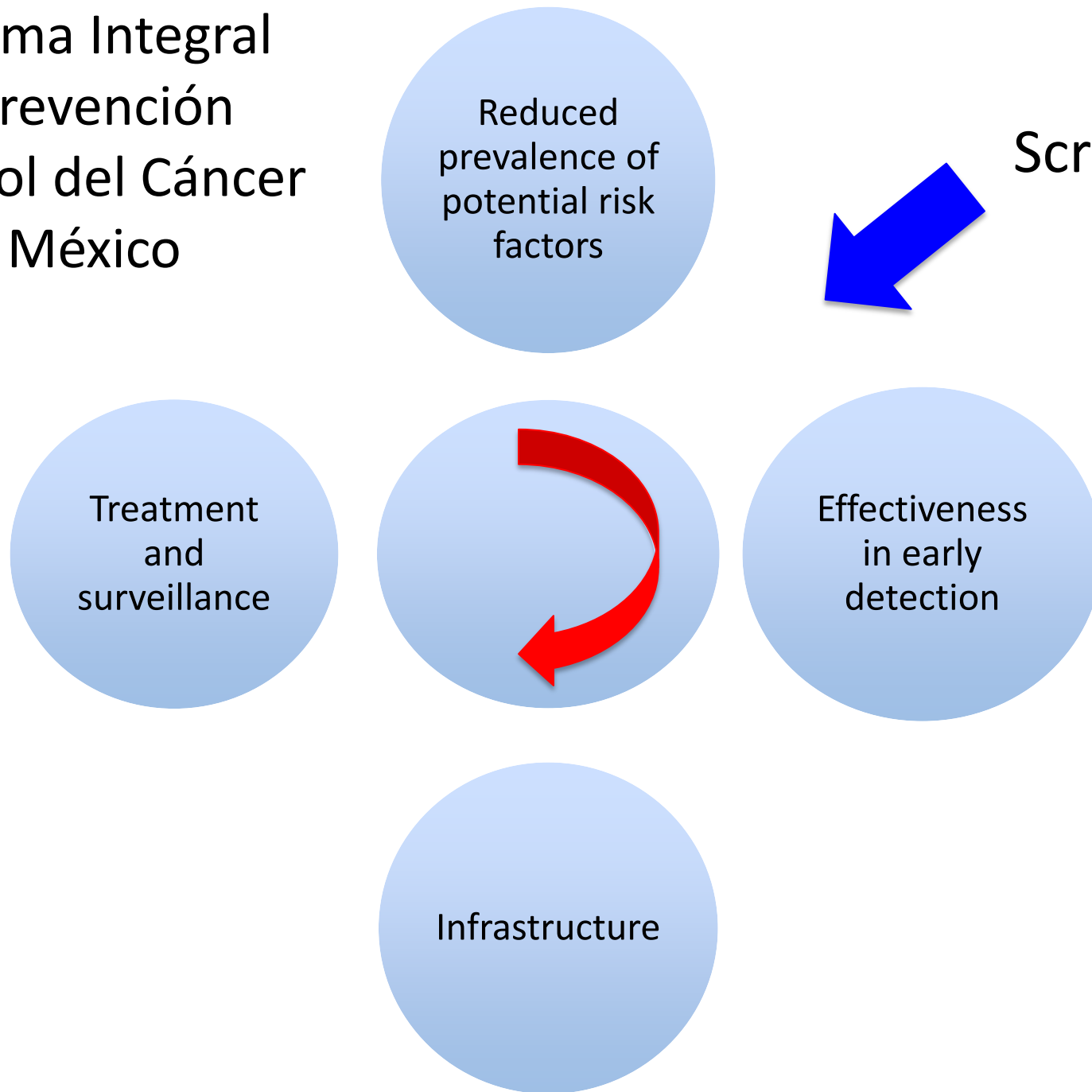
# Opportunities and Challenges

- Population-based cancer registration using data from 3 Mexican cities: North (Monterrey) South (Merida) and in the Center (Queretaro)
- NCI Mexico in partnership with others institutions (IMSS, ISSSTE, etc.) are working in a national CRC screening program, since 2015, as part of a big plan





# Programa Integral de Prevención y Control del Cáncer en México





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