



## **ECD measurement: The Chilean experience**

**EQUITY FROM THE START**  
10 YEARS OF EDI AND BEYOND


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**Helia Molina Milman MD.MPH**




## **Contents of the presentation**

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- ECD in Chile – Chile Grows With You  
(Chile Crece Contigo)
- ECD measurement history
- Achievements and Challenges




## The Chilean context



# Chile

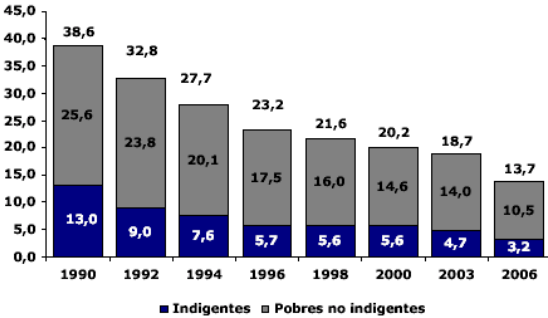
- 16,5 million inhabitants (2006) 1
- 15 regions
- 40% of the population lives in the Metropolitan Region.
- Human Development Index : 0,854, 37 in the global ranking I
  - Life expectancy at birth: 77,9
  - **Infant mortality rate 7.8**
  - Maternal mortality 17.
  - Literacy Rate: 95,7
  - Rate of combined scholl roll : 81
  - % population under poverty line: 13, 7
  - Income inequity (Gini index) : 57,1



## Trends in poverty

(Chile, 1990-2006)

**Gráfico 1**  
Evolución de la pobreza y de la indigencia  
1990-2006  
(Porcentaje sobre la población\*)



Año	Indigentes (%)	Pobres no indigentes (%)	Total (%)
1990	13,0	25,6	38,6
1992	9,0	23,8	32,8
1994	7,6	20,1	27,7
1996	5,7	17,5	23,2
1998	5,6	16,0	21,6
2000	5,6	14,6	20,2
2003	4,7	14,0	18,7
2006	3,2	10,5	13,7

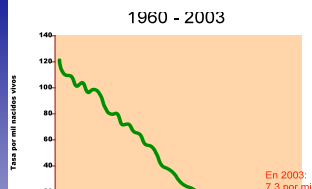
■ Indigentes ■ Pobres no indigentes

**Casen, 2006. MIDEPLAN**

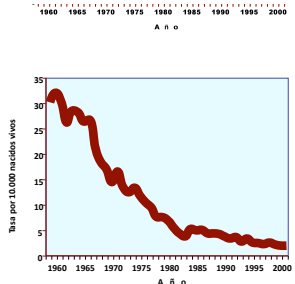


## The Chilean context Good indicators but...

Infantile Mortality in Chile 1960-2003

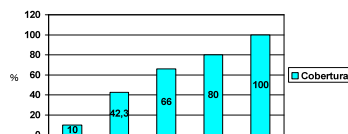


Maternal Mortality Chile 1960-2002



Fuente: Ministerio de Salud

Evolution of Sewage Treatment



Due to growth around 6% between 2003 and 2006, a 3 point decrease in total poverty is projected

Dado un crecimiento en torno al 6% entre 2003 y 2006, se proyecta una baja de tres puntos en la pobreza total para la próxima Casen.



Source: [www.minsal.cl](http://www.minsal.cl) [www.mideplan.cl](http://www.mideplan.cl)



## Proportion of children with different levels in the reading/ vocabulary combined scale

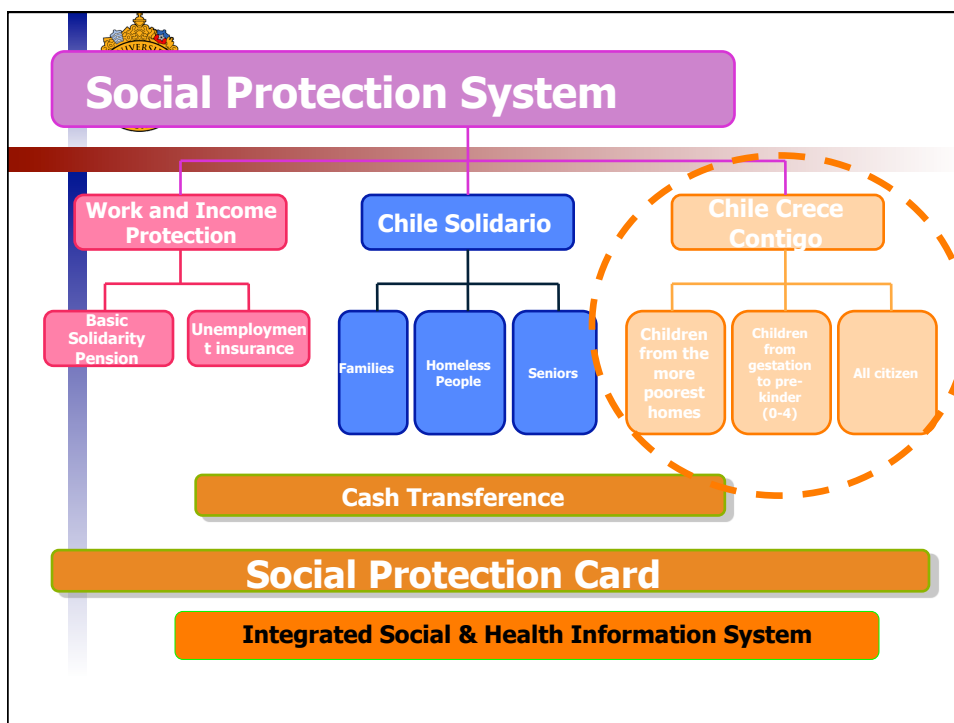
	Chile	Latin America	Canada
Level 4 & 5	5.7	5.6	48
Level 3	17.5	15.0	24
Level 1 & 2	59.4	53.0	27
Below level 1	17.4	26.5	1

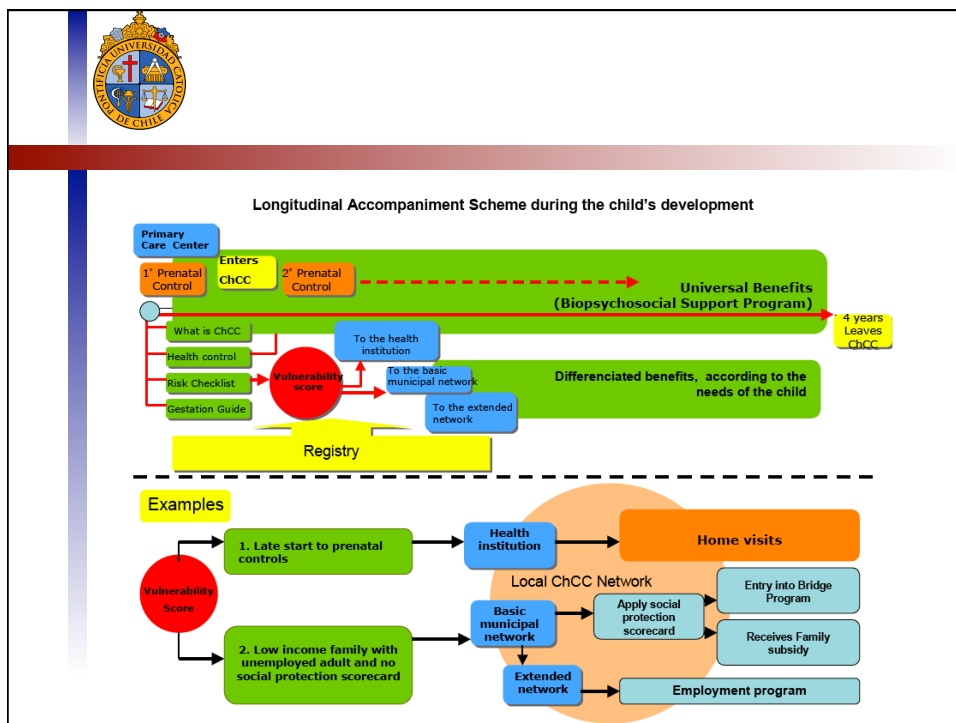
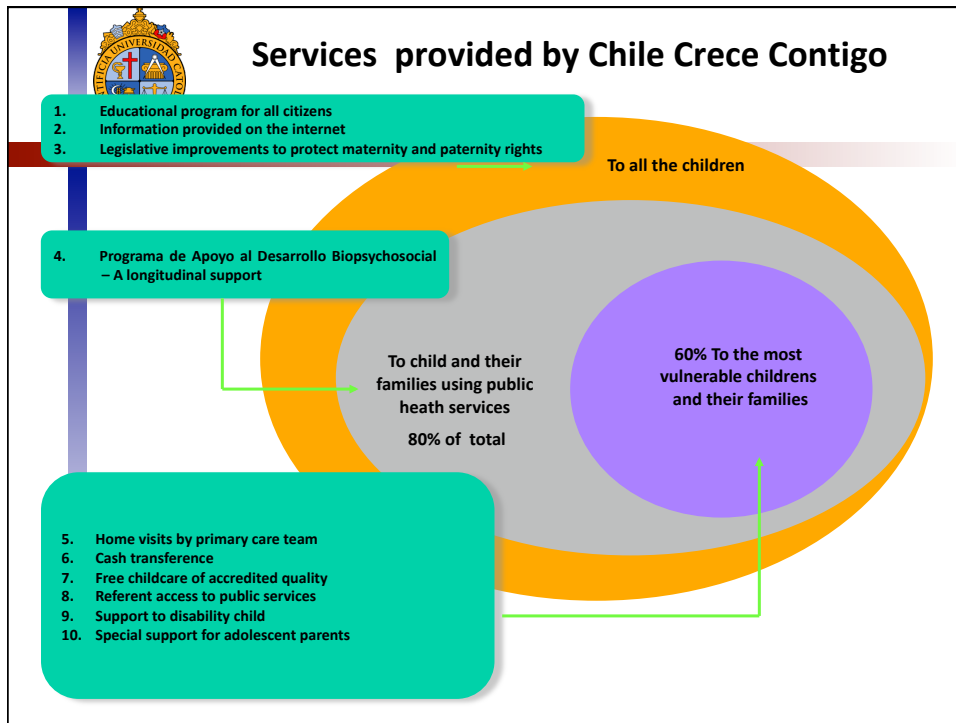


## Strong Political Will

“My goal, towards the end of my government, is that we have been able to establish a childhood protection system aimed to promote the development opportunities of the Chilean boys and girls in their first eight years of life, independently of their social condition, gender or the structure of their families”

(President of the Republic, Michelle Bachelet, on the occasion of the constitution of the Advisory Board for the Reform of the Childhood Policies).

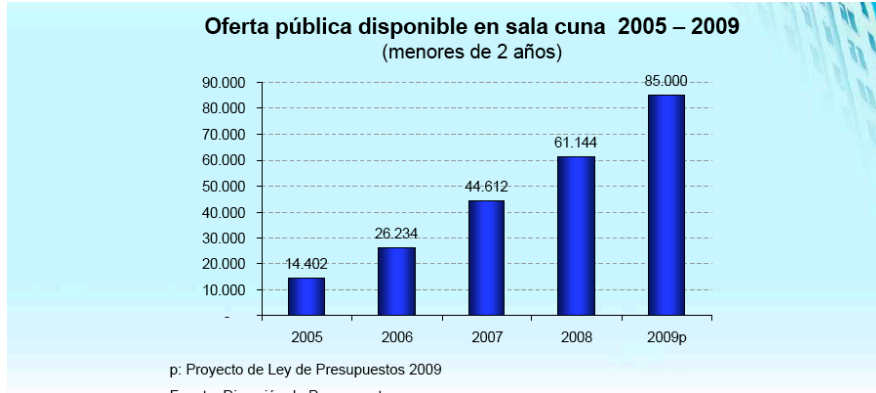




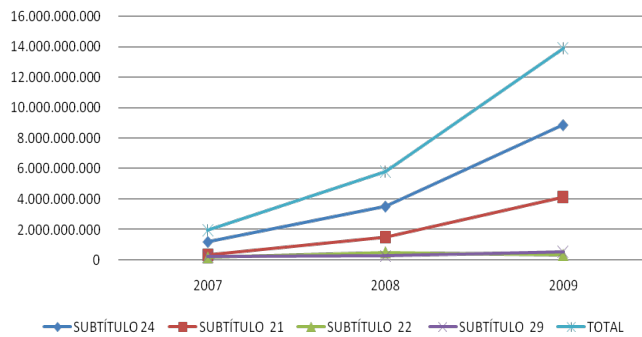


# Chile Crece Contigo

## Growth of Early Child Care Offer



## Chile Crece Contigo: Budget Growth 2007-2009

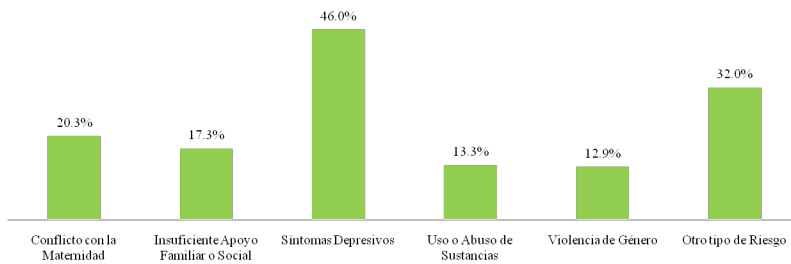


- Subtítulo 21: Personnel
- Subtítulo 22: Goods and services
- Subtítulo 24: Current transfers
- Subtítulo 29: Non financial goods

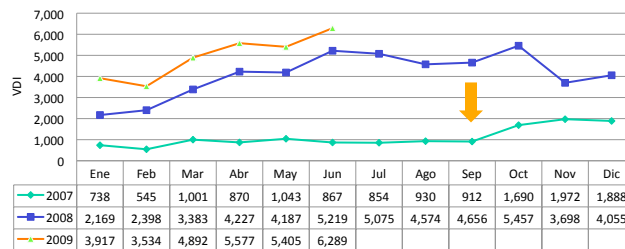


### Chile Crece Contigo: Prenatal risk factors

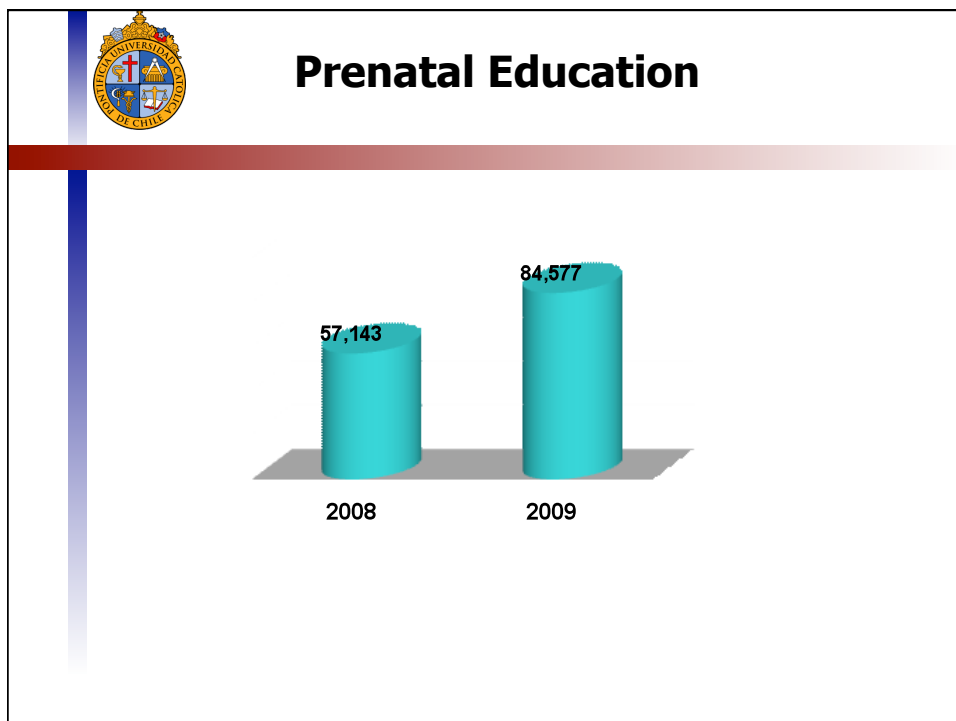
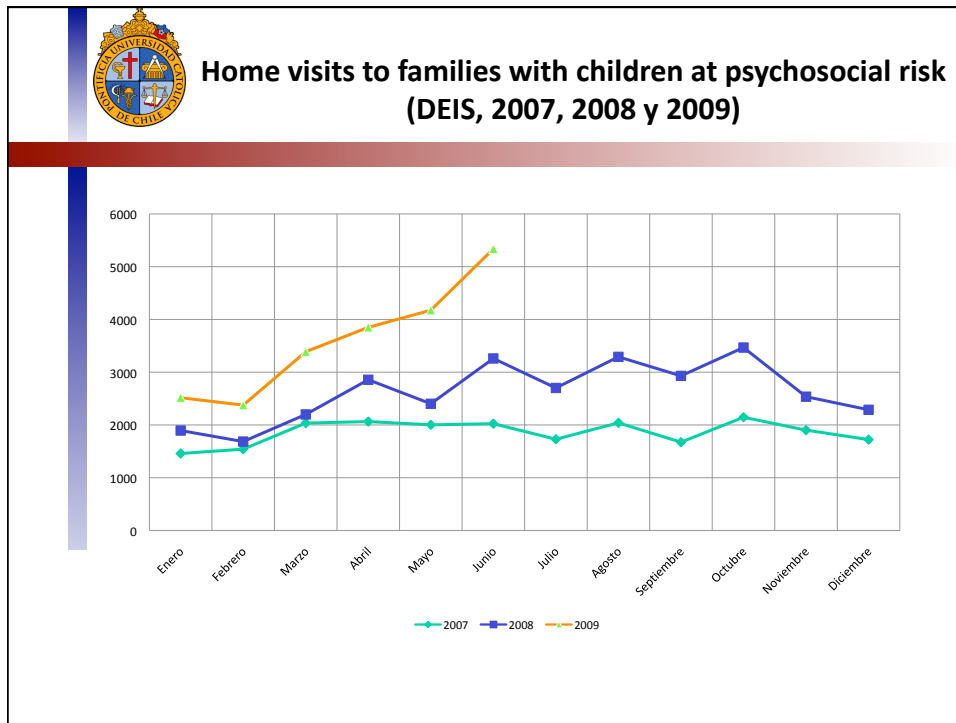
41,4% of the pregnant women admitted to the program had one risk factor (Source: DEIS, 2008).



### Home visits to pregnant women with, at least, one positive psychosocial risk factor according EPsA

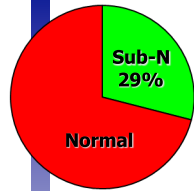


**From September 2007 there is a 6 fold increase in home visits to pregnant women at risk**

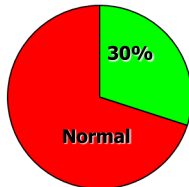


## Measuring Child Development (Chile, 1970-90)

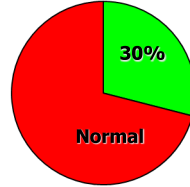
### Infants (0-2 years) EEDP



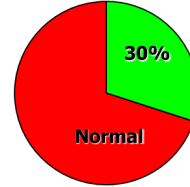
**1974**  
Lira, Rodríguez 1400  
Lactantes N.S.E. Bajo, Stgo.



**1985**  
Edwards col.  
Santiago

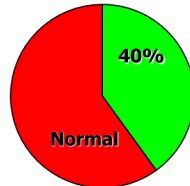


**1990**  
Brand, Fernández  
1300 lactantes, Temuco

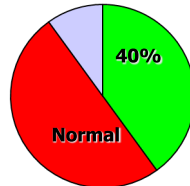


**1995**  
Fernández, Franco-  
Viscarra. 650 lactantes  
IX Región

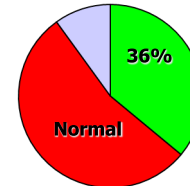
### Preschool age (2-5 years) TEPSI



**1989**  
Seguel, Bralic E.



**1995**  
Fernández, Franco

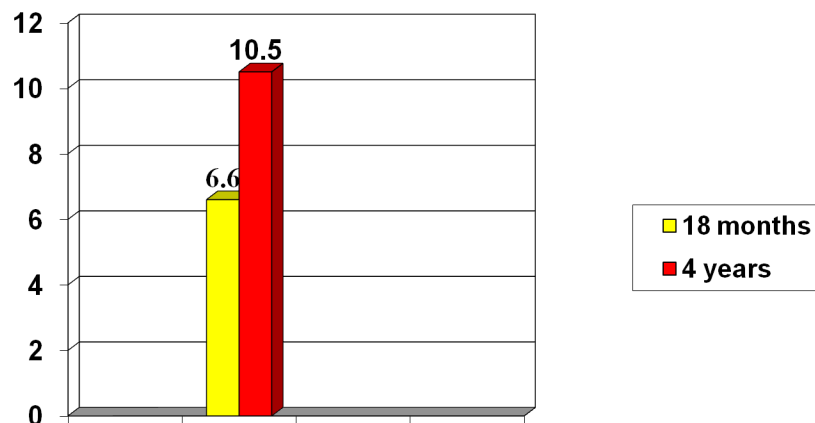


**1997**  
Ministerio Educación



## Evaluation Psychomotor Development

Population under control with delay (2005)





## History of ECD measurement in Chile

- From 1994 NCHS standards for < 6 years old .
- Since 1990 ECD was incorporated as part of regular health control and screening test for psychosocial development (implementation problems: lack of time to apply the instrument and lack of competences of the health workers)
- Since 2000-2006 better coverage and quality of implementation
- 2006 a population based instrument was applied
- Since 2007 Chile Grows with You provided the resources to universalize and enrich the ECD measurement activities



## Instruments currently used at the individual level

### Health Services

- **EEP:**
- **TEPSI**
- **Massie – Cambell**
- Test Griffit
- Bayley



## Evaluation at the Education Level

- No regular application of ECD measurement instruments before 6 years
- From the Health School Program under JUNAEB responsibility some experiences are available :
  - ✓ Mental health screening : Pediatric Symptoms Check list (M. Jellineck, Boston)
  - ✓ TOCA-R (Shepard Kellom) behavioral risks
  - ✓ Developmental Screening Test DDST
  - ✓ Test of vocabulary with images TEVI
  - ✓ DENVER

### **EDI Pilot project**



## EDI in Chile

- EDI was pilot tested in 5 municipalities (2003) and was absolutely well received by teachers and pertinent in our culture.
- The Chilean cohort of children has two years since the beginning of Chile Grows With You implementation
- Ideally, EDI should be installed and implemented to let us know the short and middle term impact of early intervention strategies



## ECD measurement from a population perspective

- Instrument was applied as part of the quality of life survey.
  - For the first time, an infant module was introduced (2006) as part of The quality of life survey (each 4 years)
  - An Instrument was designed, validated and pre-tested
    - ✓ Studied domains in ECD motor, social, cognitive, emotional and language
    - ✓ Mother expectations about the place for child care
    - ✓ Chronic diseases and mental health prevalence (<15 years old)
- Specificity 87% Sensitivity 86% . (from 6 month to 5 years 11 months )



## Analyzing ECD measurement in Chile Health and Education Services

- Good performance in quantitative aspects until 2 years old: height, weight , cranial circumference and combined indicators .
- Lack of psychosocial aspects measurement (social, emotional, language ) but improving...
- Lack of measurement before 4 years old
- At the School level cognitive aspects are prioritized



## Challenges

- To have an integrated vision to evaluate ECD
- To propose new rationality for policy making processes
- To be capable to measure the public policy impact in terms of child health and well-being
- Make inter-sector approach happen in real life
- To assure continuity
- To consider evaluation as a formative and transforming strategy



**CHILE GROWS WITH YOU IS SUPPORTED BY A NATIONAL LAW SINCE SEPTEMBER 2009**

- ECD evaluation is more than academic good.
- Equity from the start needs the synergy of knowledge and political will.
- The existence of a law requires supporting mechanisms in terms of accountability processes, community empowerment in order to reach the goal of social justice

