

# **FASD**

## **Economic implications for individuals and families**

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# Message

- Enticing numbers...



- But a lot of unknowns



# Economic questions

- What is the **economic burden** of FASD?
- What are the **costs and consequences** of interventions?
- What is the **budget impact** of government – funded interventions?

# Economic “burden”

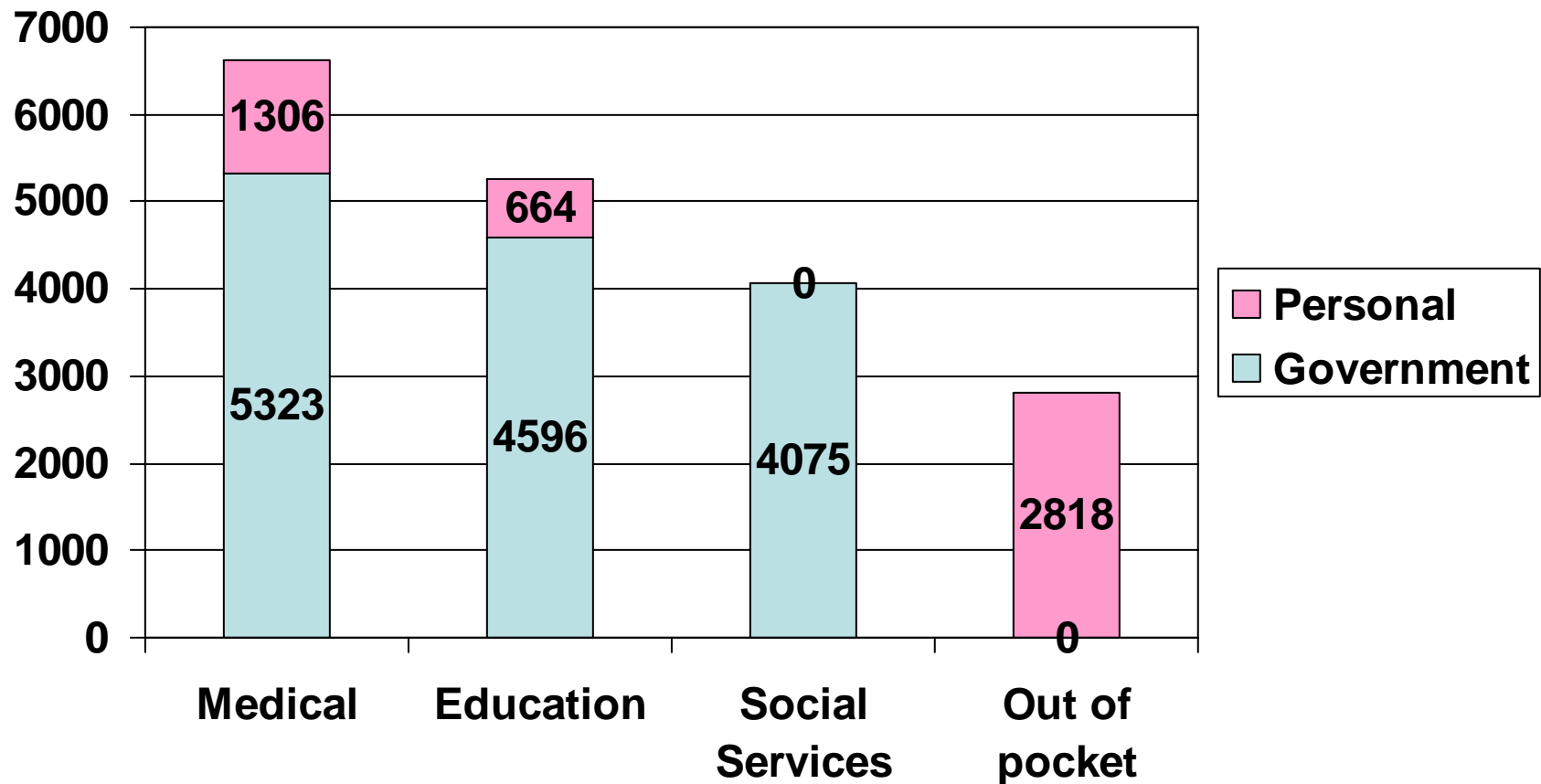
- Based on resources
- Questions about
  - How our scarce resources are used
  - Who pays for them

# What resources are used in treatment (FAS)?

Resource	% of FAS who use it	Lifetime cost
Institutionalization	2.5%	\$1,500,000
Newborn hospital services (NICU)	80%	\$4,250
Audiology tests	56%	\$820
Special education (minimal brain dysfunction)	52.5%	\$103,500
Ambulatory care with special ed (moderate brain dysfunction)	45%	\$270,000
Home care with day services (moderate)	36%	\$272,000

# How much?

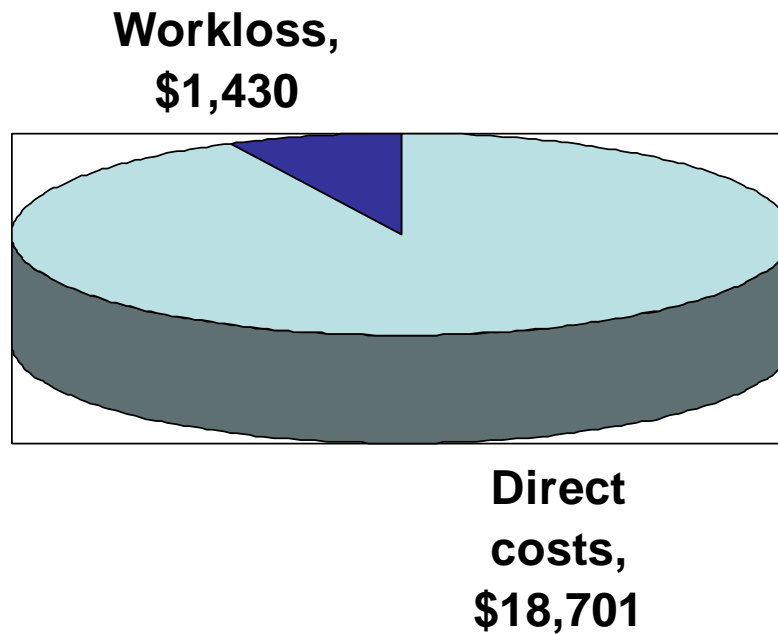
## Per person annual costs of **services for FASD**



Source: Stade, CJClin Pharm 2009

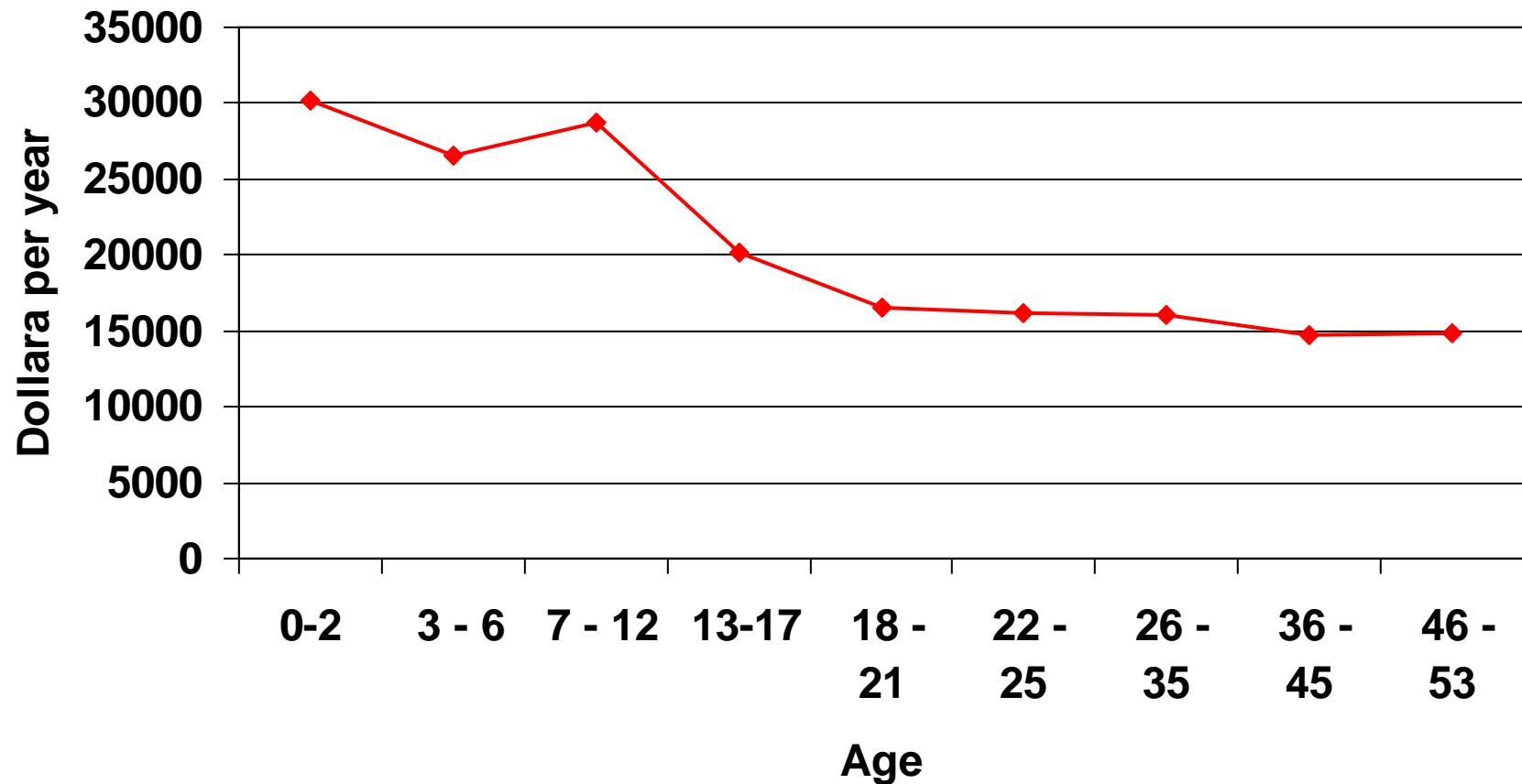
# How much?

## **Societal annual costs per persons because of FASD**



Source: Stade, 2009

# Annual costs by age (FASD)



Source: Stade, 2009



The figure to remember...

**\$21,000 per year**



# Lifetime costs...another figure to remember

- $21,000 \times 65 = \$1.3$  million per person
- Discounted: **\$800,000** per person **lifetime**
- 



# Societal costs

- Incidence of FAS 1/1,000 births
- Prevalence 1/100 population
- Societal costs are
- \$21,000 x 32m / 100
- **About \$ 6 billion**
- **(Not worth remembering)**



# Cost - effectiveness

- Comparative analysis between interventions:
  - Extra Costs
  - **Extra Outcomes**

# Outcomes

- Improvements in health – related quality of life

# Interventions and their cost

- Home visit program
  - Initial visit + social work + visits 2x per month

**\$3,800**  
per client



# Benefits

- Reductions in costs
- Improvements in quality of life

# How effective?

- 19 homes visited → 17 women abstain
- 17 women abstain → ??? Fewer cases FASD



# Cost effectiveness

- **Compare** net costs
  - + Intervention (\$3,800)
  - - Treatment of condition (\$800K)
- **With** benefits

# But...

How many persons visited → 1 reduced case of FASD?



# Budget impact

$\$3,800 \times \text{Number of interventions}$

# But...

- How many interventions to equal costs for one case?
- Number needed:  $\$800,000 / \$3,800 =$
- **210**
- **Sounds promising.**

# And even then...

- If the number was less, say 105...
- There would be net costs
- But also benefits.
- The issue then becomes:
- Are the **extra** costs worth the **extra** benefits