



Saving Sight, Saving Futures: a Cost Utility Analysis in Uganda

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tiny
eyes.org

Early Incubators: 1950



Photos: New York Times; Ref: Fanaroff & Martin's Neonatal-Perinatal Medicine: Diseases of the Fetus and Infant 10th edition

A close-up photograph of a baby's face, focusing on the eyes and nose. The right eye (viewer's left) shows a white reflection (leukocoria) instead of a normal red reflex. The left eye (viewer's right) shows a normal red reflex. The skin is fair, and the nose is visible in the lower center.

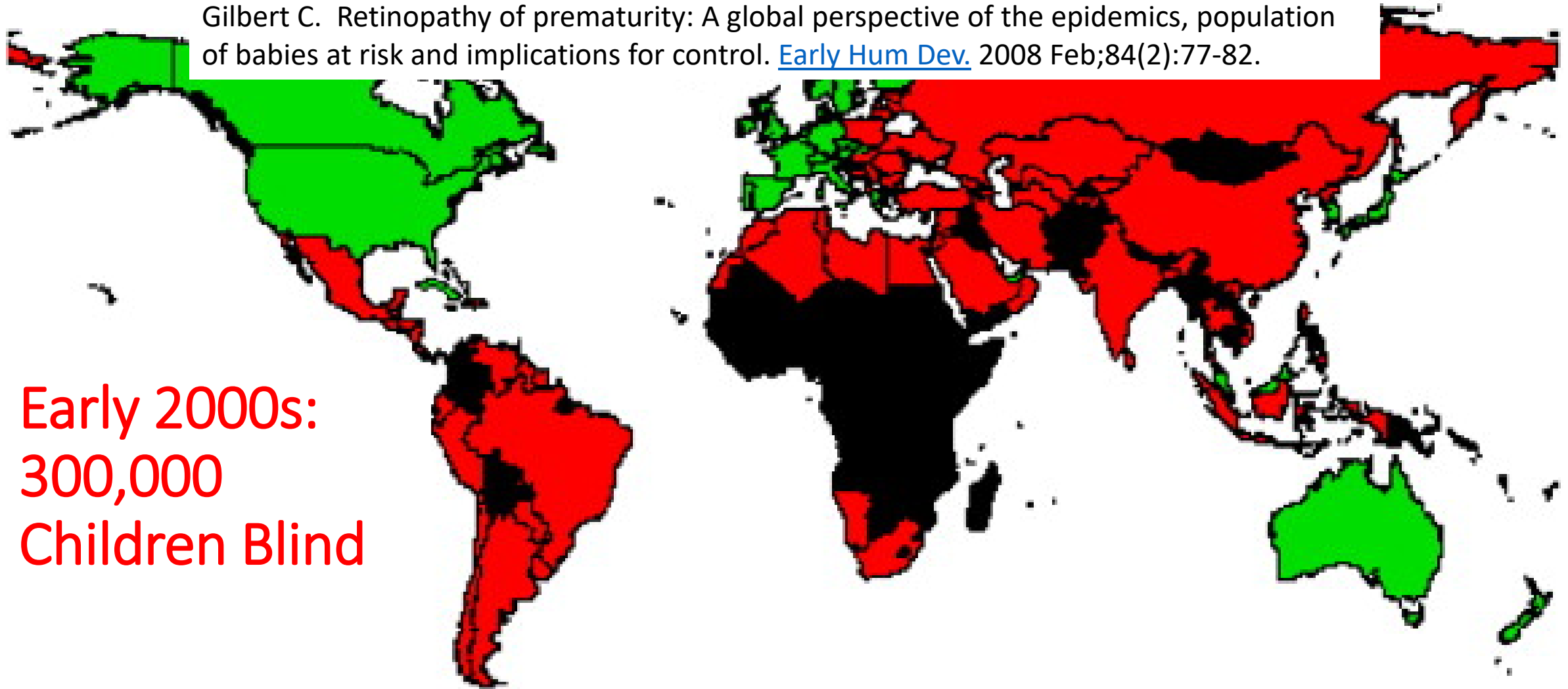
7000 infants
blind by 1953

First Randomized Controlled Trial



Photo by Carrie Lederer

Gilbert C. Retinopathy of prematurity: A global perspective of the epidemics, population of babies at risk and implications for control. [Early Hum Dev.](#) 2008 Feb;84(2):77-82.



Early 2000s:
300,000
Children Blind

≤8/1000

Low risk of ROP blindness – good neonatal care and screening

9–60/1,000

High risk of ROP blindness – neonatal care and screening not always adequate

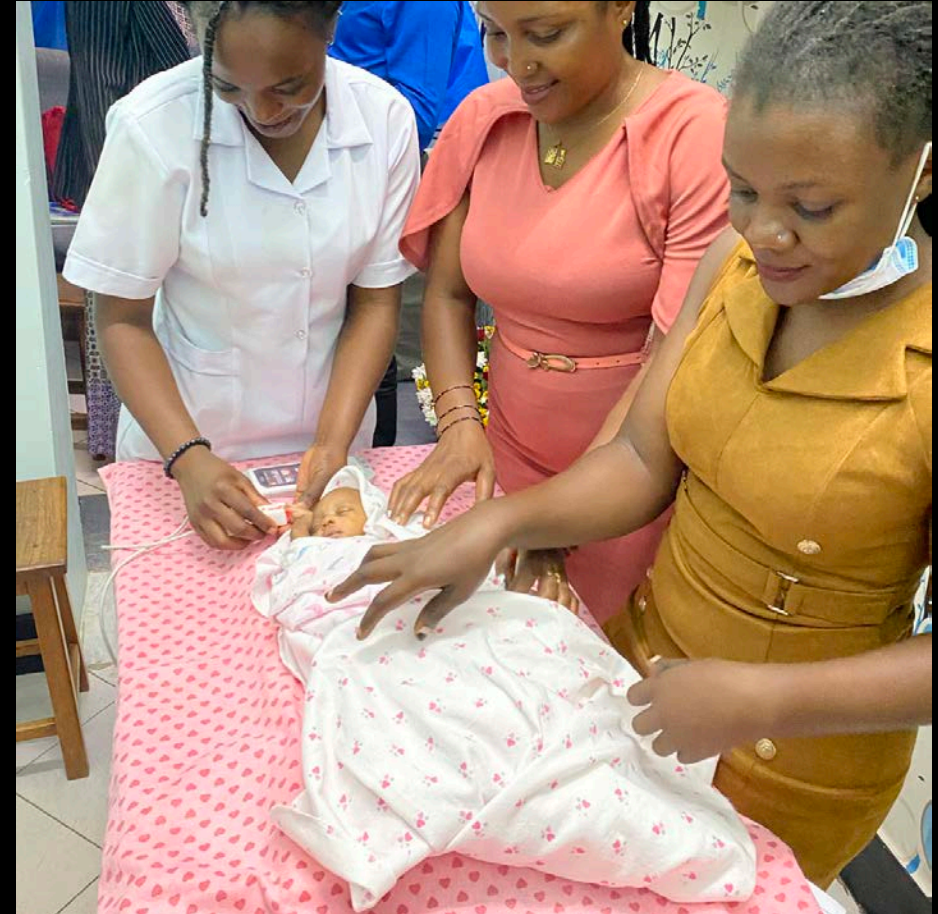
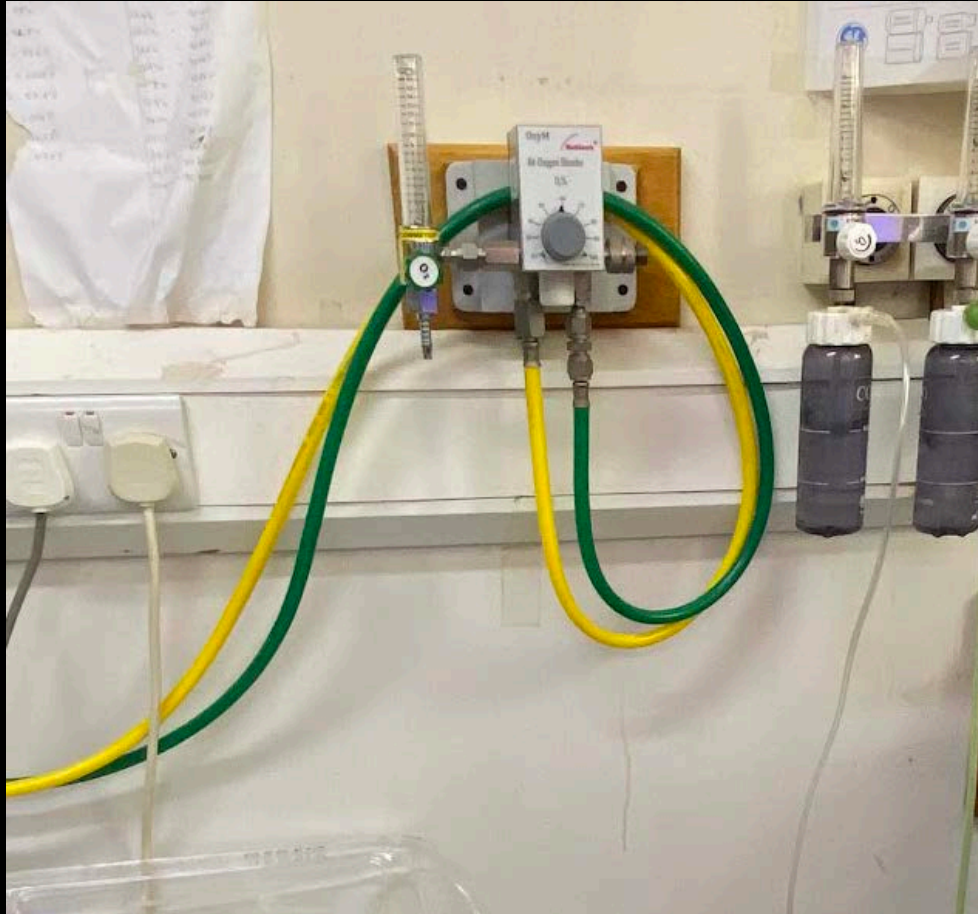
≥61/1,000

Low risk of ROP – neonatal care not well developed



“Let us not
let **HISTORY**
repeat itself”

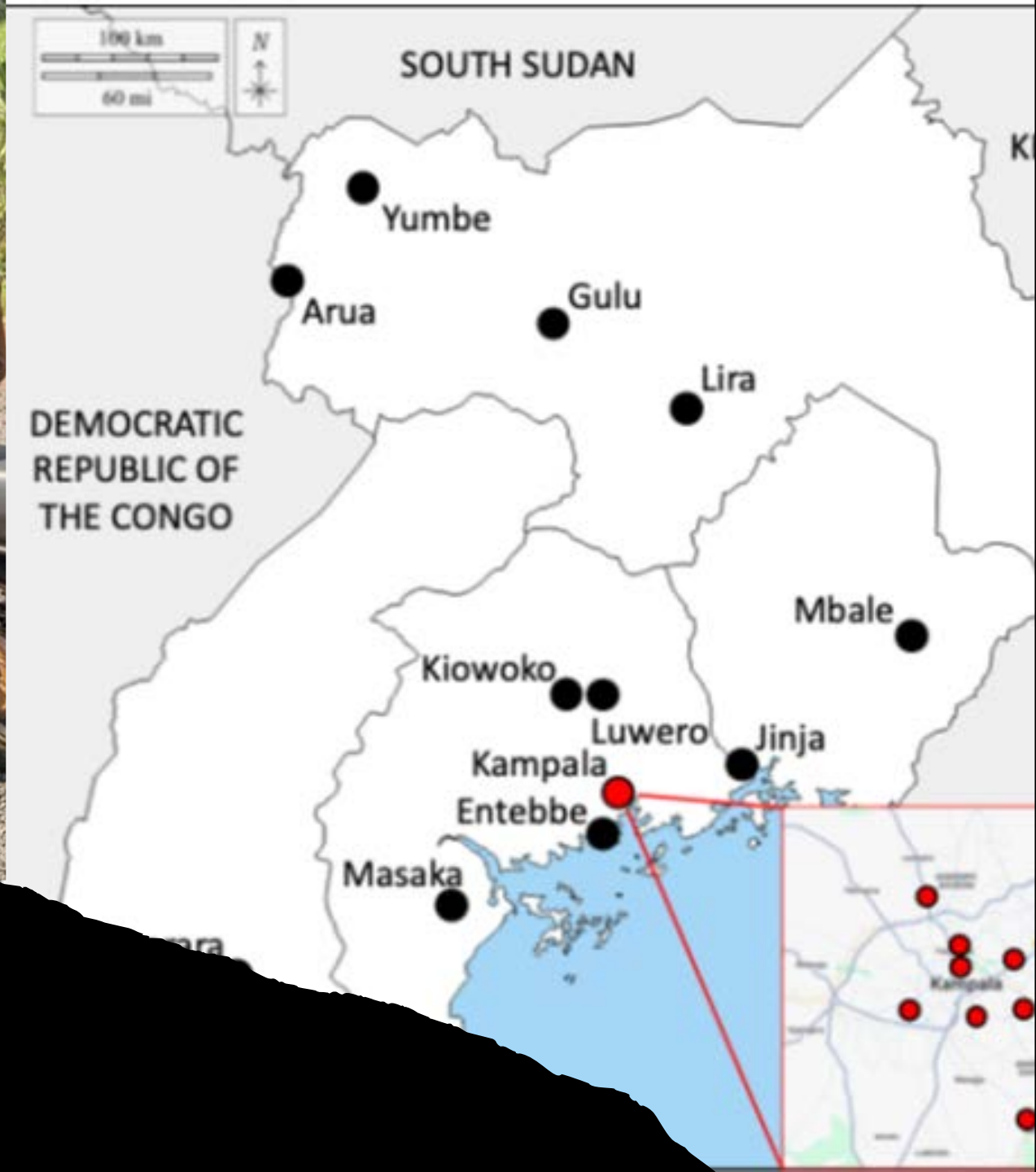
OXYGEN MANAGEMENT EQUIPMENT



Before and After Study in
Kampala, Uganda

Prevention reduces severe
ROP by 54%!





PROOF OF CONCEPT

The Burden in Uganda

1.7 million births/year

171,000 preterm

51,000 very preterm

**6,000 INFANTS
WITH SEVERE VISUAL
IMPAIRMENT (SVI)
PER YEAR**



~ \$150 to
prevent one
case of SVI



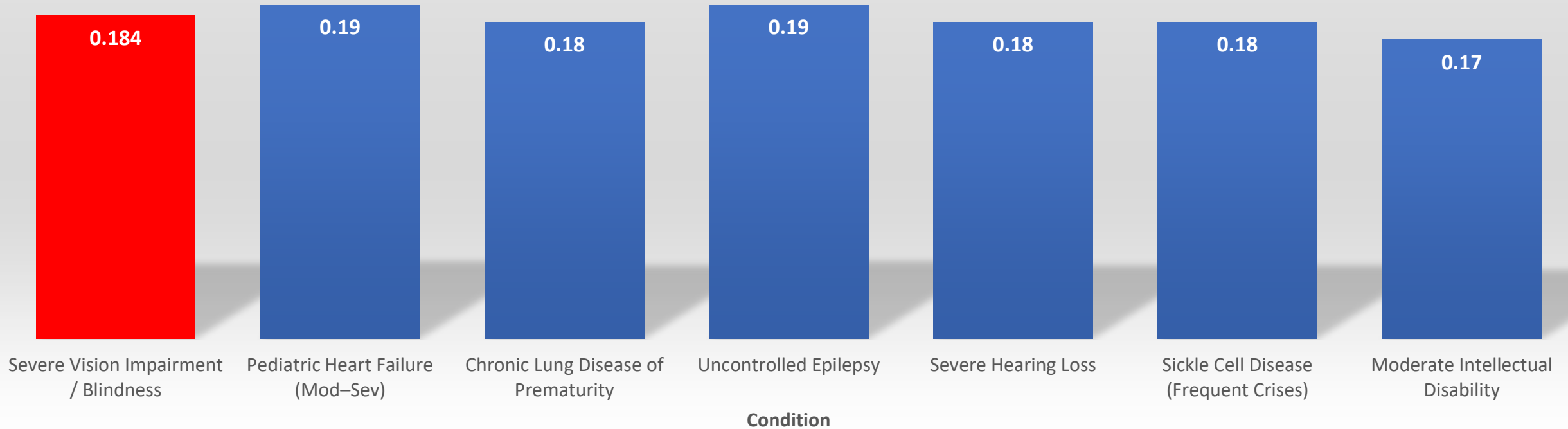
Photo by Carrie Lederer

Disability Adjusted Life Year

- 1 DALY = 1 healthy year lost
- Lower is better
- Disability weight for SVI = 0.184

Disability Weights in Pediatric Conditions

Disability Weight



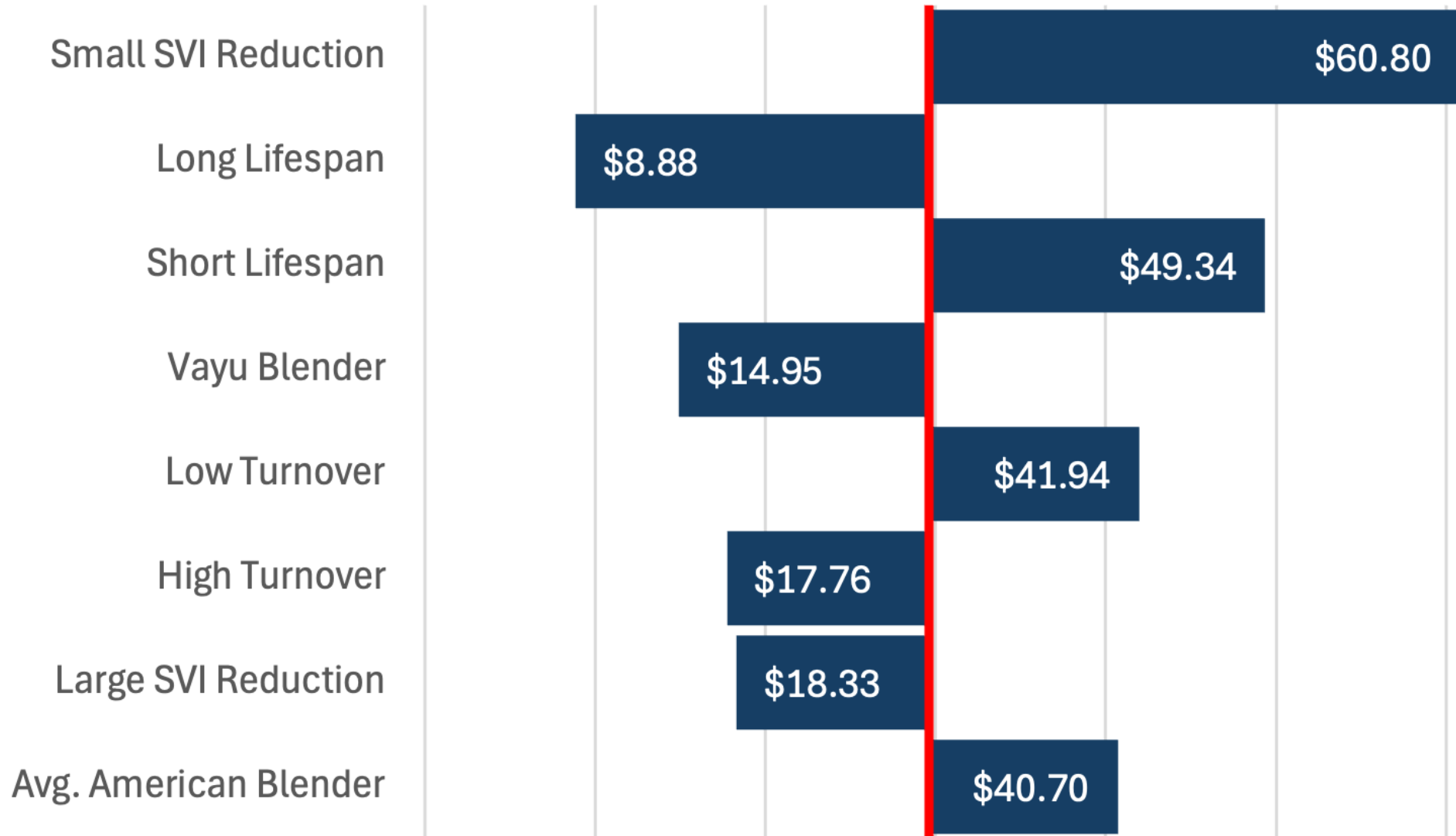
Lifetime Impact

58 years with SVI \approx 11 healthy years lost

$$(58 * 0.184)$$

New Cost per DALY Averted

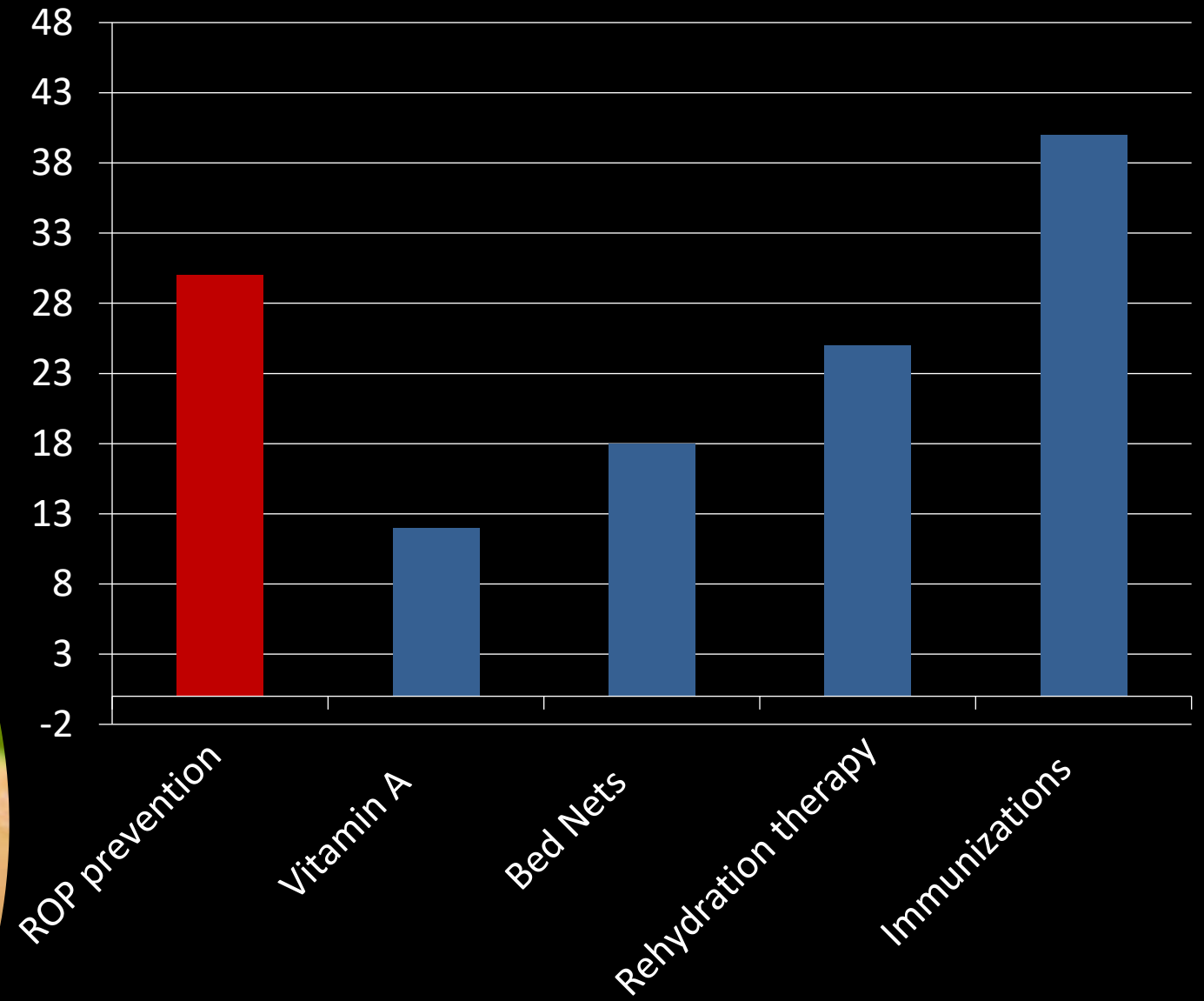
\$0.00 \$10.00 \$20.00 \$30.00 \$40.00 \$50.00 \$60.00



\$29.60



Cost per DALY



Combined with
screening and
treatment

Photo by Carrie
Lederer



A close-up photograph of a person's hands holding a globe made of colorful beads. The globe is primarily blue, with a large, irregular tear in the center. The tear reveals a multi-colored interior, including yellow, orange, red, and green beads. The person holding the globe is wearing a vibrant, patterned garment with geometric shapes in red, yellow, and green. The background is dark and out of focus.

“We live in one world, not three”
(Paul Farmer)

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Photo by Carrie Lederer

