

# Reaching zero-dose children in Angola: the cost of inaction

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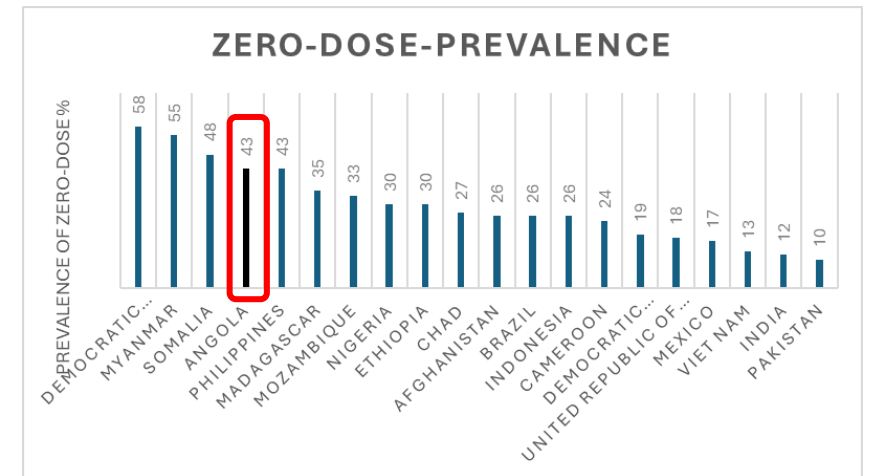
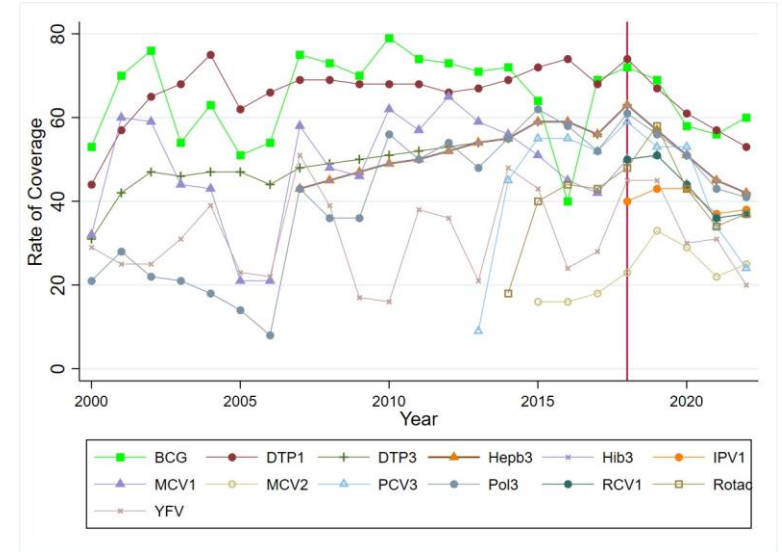
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# INTRODUCTION

- Immunization Coverage for major vaccines is low and declining
- Low immunization coverage relative to structural peers & Sub-Saharan African average
- World's Top 10 with the highest number of zero-dose children



# WHY ANGOLA NEED TO EXPAND COVERAGE?

- Vaccines avert child mortality (Lehmann et al., 2005), (Li et al., 2021)

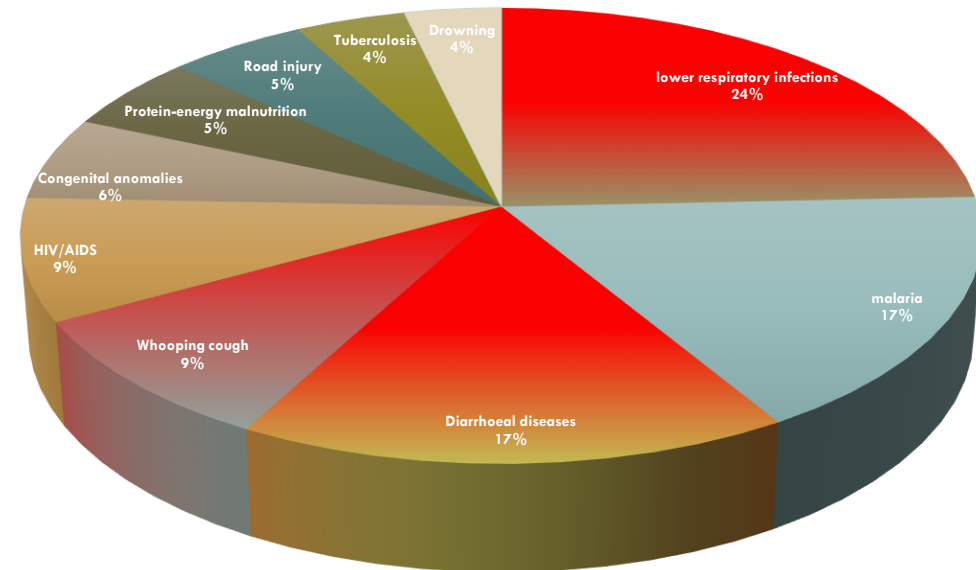
- Cognitive outcomes (Bloom et al., 2012), (Oskprpuchi et al., 2020) productivity in later life (Nandi & Shet, 2020)

- Cost-effective (Ozawa et al, 2012)

## -GLOBAL TARGETS

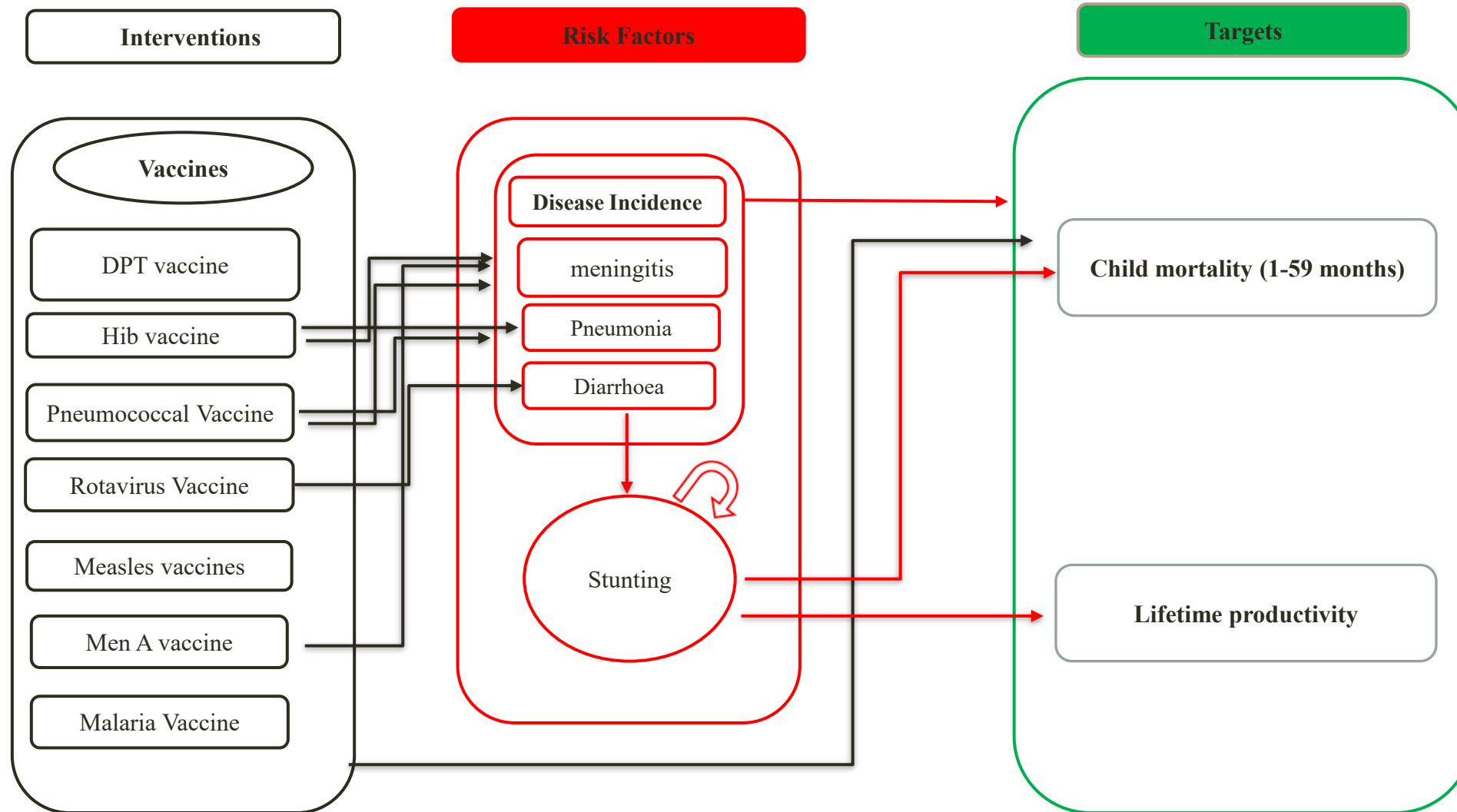
- SDG 3.2. (<5 mortality rate =25)
- IA2030 (90% coverage, reduce zero dose by half)

Top 10 Causes of Under-five Mortality



>50% is Vaccine Preventable.

# CONCEPTUAL FRAMEWORK



# DATA & METHODOLOGY

## COSTS

Data source: WB, UN population, UNICEF, GAVI, WHO using the NIS.COST app

Cost = Target Population \* Cost per dose + Delivery costs



Both are discounted at 7% discount rate  
BCR, NPV and IRR are also calculated

## BENEFITS

Data source: IMF, UN Population

Benefit = Years of Productive Lives Saved  
\*GDP per capita\* labor share of GDP



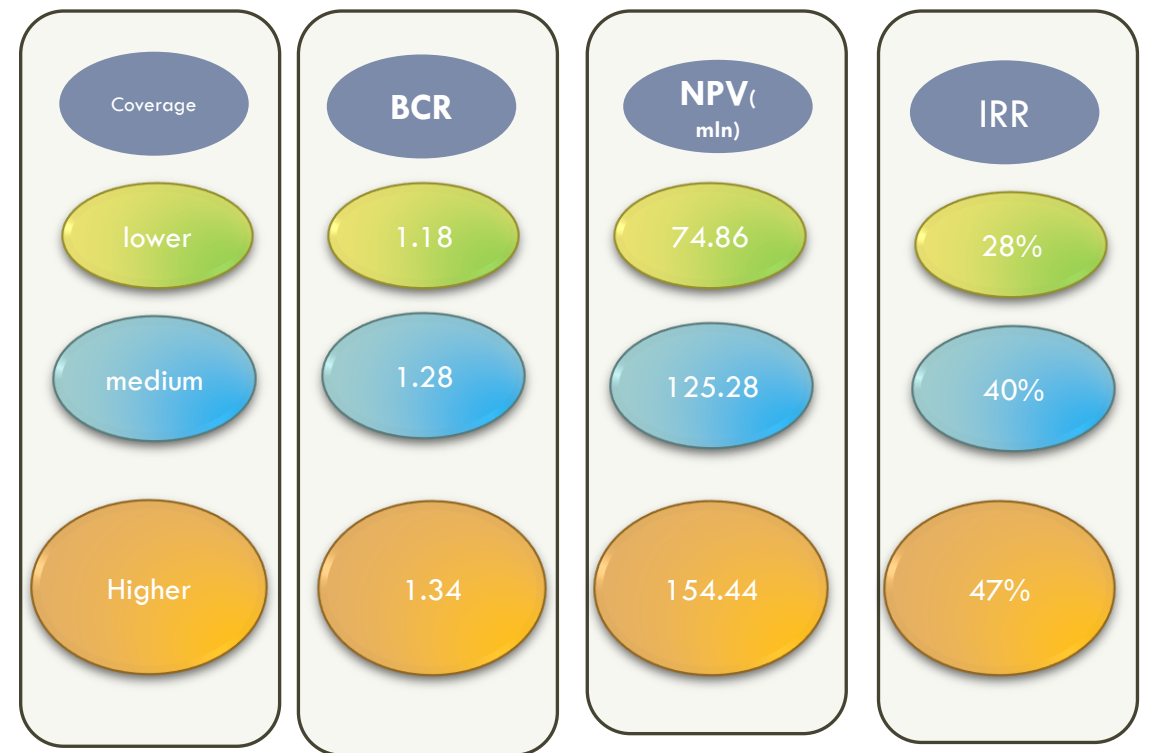
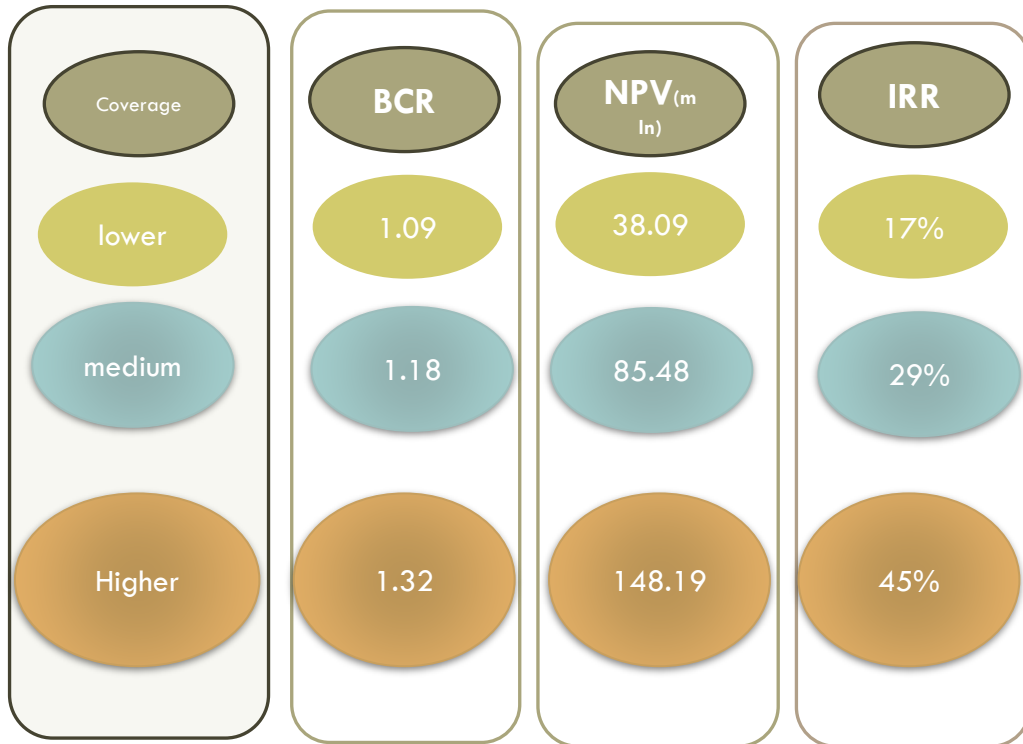
# Results

- **Coverage rate scenarios: from 70% up to 98%**
- **Total lives saved: from 12105 to 15480**
- **Total discounted benefits (in millions \$): 475.43 to 607.72**
- **Estimated Total Costs (in million \$):**
  - Case I (Vaughan et al., 2019): from 437.7 to 495.09
  - Case II (Sim et al., 2021): from 400.56 to 453.27
- **Estimated Net Benefits (in million \$):**
  - Case I (Vaughan et al., 2019): from 38.08 to 112.63
  - Case II (Sim et al., 2021): from 74.87 to 154.44

# RESULTS

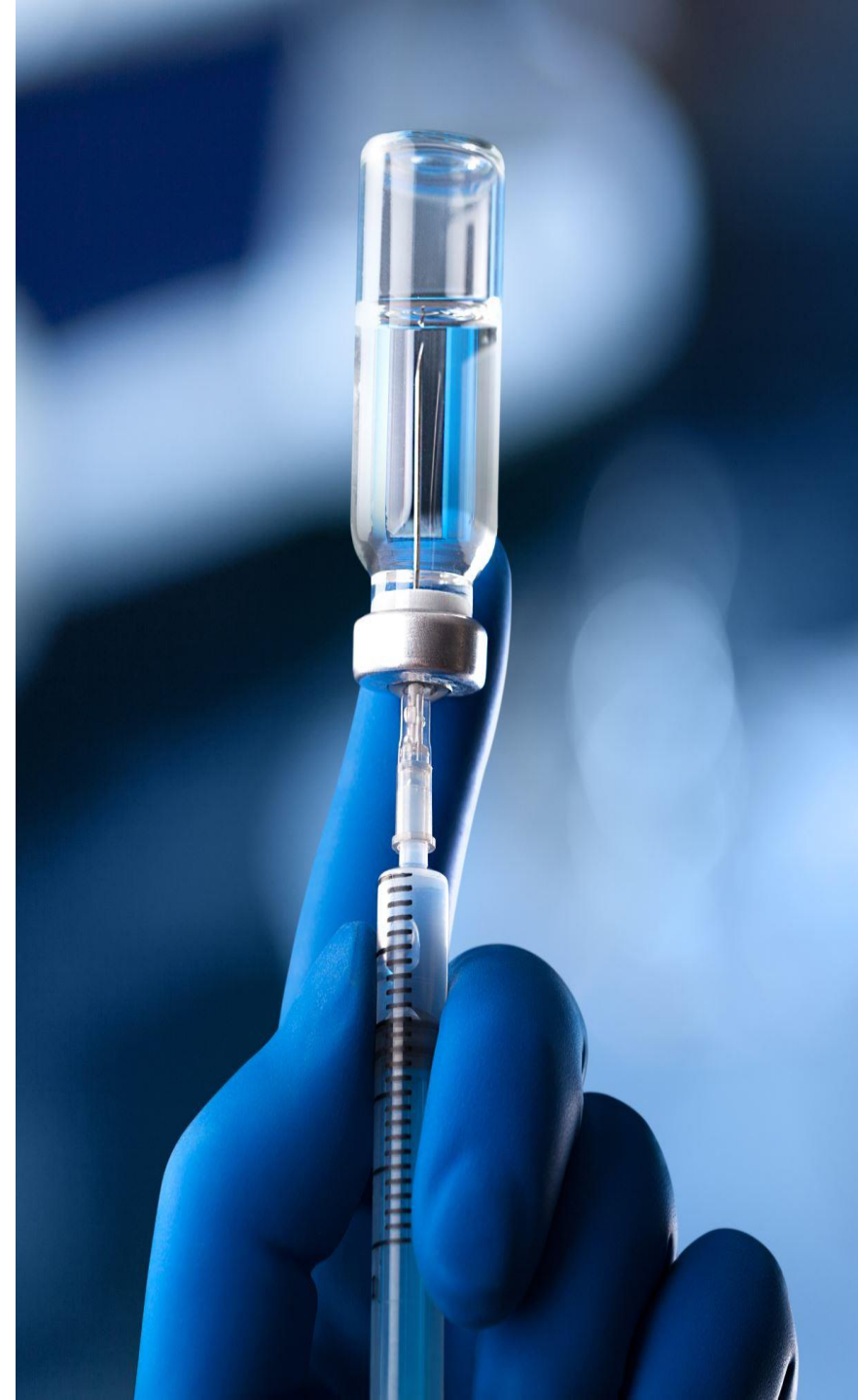
Case I (Vaughan et al., 2019)

Case II (Sim et al., 2021)



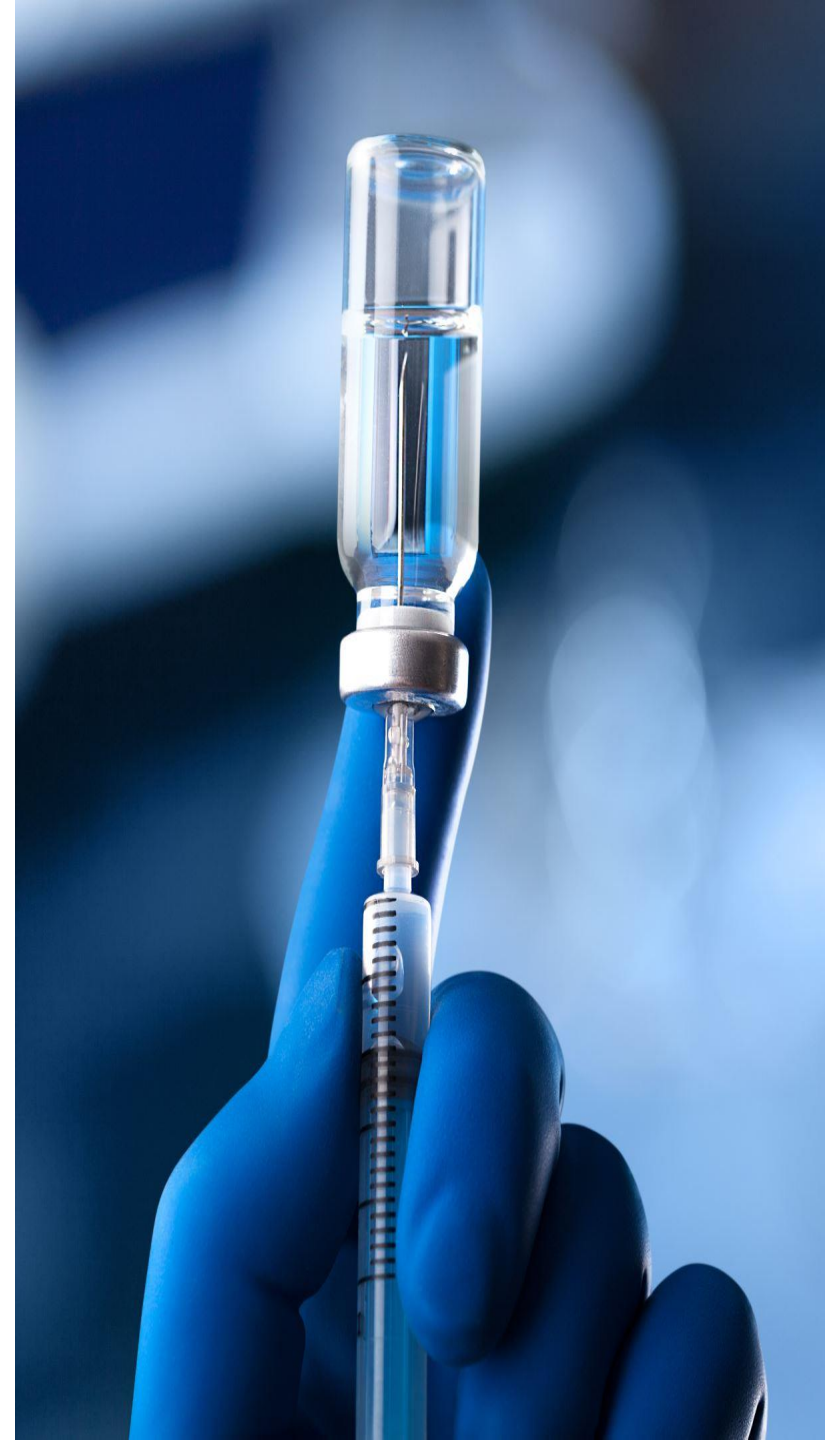
## Conclusion & Policy Implications

- **Investment in the immunization program for children is cost-effective**
  - Benefits are 9% to 34% higher than costs
  - \$1 investment in immunization is expected to yield between \$1.09 to \$1.34 of benefits
  - Net benefits range between \$38 million \$154 million
  - Annual Internal Rate of Return lies between 17% to 47%
- **IF not, it will cost 0.1% of Angola's GDP in five years.**



## Conclusion & Policy Implications

- **Expanding immunization coverage would help Angola:**
  - **To reduce child mortality; Zero-dose children; Stunting prevalence and the cost of illness**
  - **Improve child health, human capital development, and productivity**



An aerial photograph of a coastal city, likely Dubai, showing a large harbor with several ships, a promenade lined with palm trees, and a dense urban area with various buildings. The water is a deep blue, and the sky is clear.

Thank you

“An Investment in X Today is A Choice Not to Invest in Y Tomorrow”