

# Intro to Microinsurance and pricing, what is different?

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# Outline of presentation

- Background of why/what microinsurance
- What is different about microinsurance

# Millenium Development Goals

- Eradicate extreme poverty and hunger
- Universal primary education
- Promote gender equality and empower women
- Reduce child mortality
- Combat HIV/AIDS, Malaria, and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

# Importance of MicroInsurance

- In its first report, *Insuring for Sustainability*, the Insurance Working Group of the UNEP FI ranked nine global sustainability issues identified as vital for insurers to address.
- Topping the list is climate change,
- Followed by microinsurance, lifelong income, health, emerging man-made risks, environmental liability, natural resources, recycling and internal resource efficiency.

# What is MicroInsurance?

# Microinsurance is.....

- “...the protection of **low-income** people against *specific perils* in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved”  
~ *Draft Donor Guidelines, CGAP Working Group (2003)*
- “...not a specific product or product line. It is also not limited to a specific provider type. Microinsurance is the provision of cover to a specific market segment, i.e. **low-income persons.**” ~ *IAIS Issues Paper (2007)*

# Who is Involved?

- ILO
- CGAP
- World Bank
- Bill and Melinda Gates
- Bill Clinton (LeapFrog)
- Other agencies
- Insurance companies world wide

# The need for Microinsurance – start with Micro Finance

- Micro Financing is an effective tool in reducing poverty.
- Founded by Muhammad Yunus (Grameen Bank in Bangladesh)
  - Lending without collateral
  - Doorstep service
  - Small payments
- Impact on over 130 million poor
- Spandana

# The need for MicroInsurance (con't)

- Those utilizing MFI's were more vulnerable to “risk events” and when these events occurred the poor would spiral back into poverty and have to borrow money.
- A cycle of “poverty – improving financial situation – risk event – borrowing – poverty” was occurring.
- Micro insurance is a tool to sustain the forward financial momentum even when a risk event occurs.

# What is MicroInsurance?

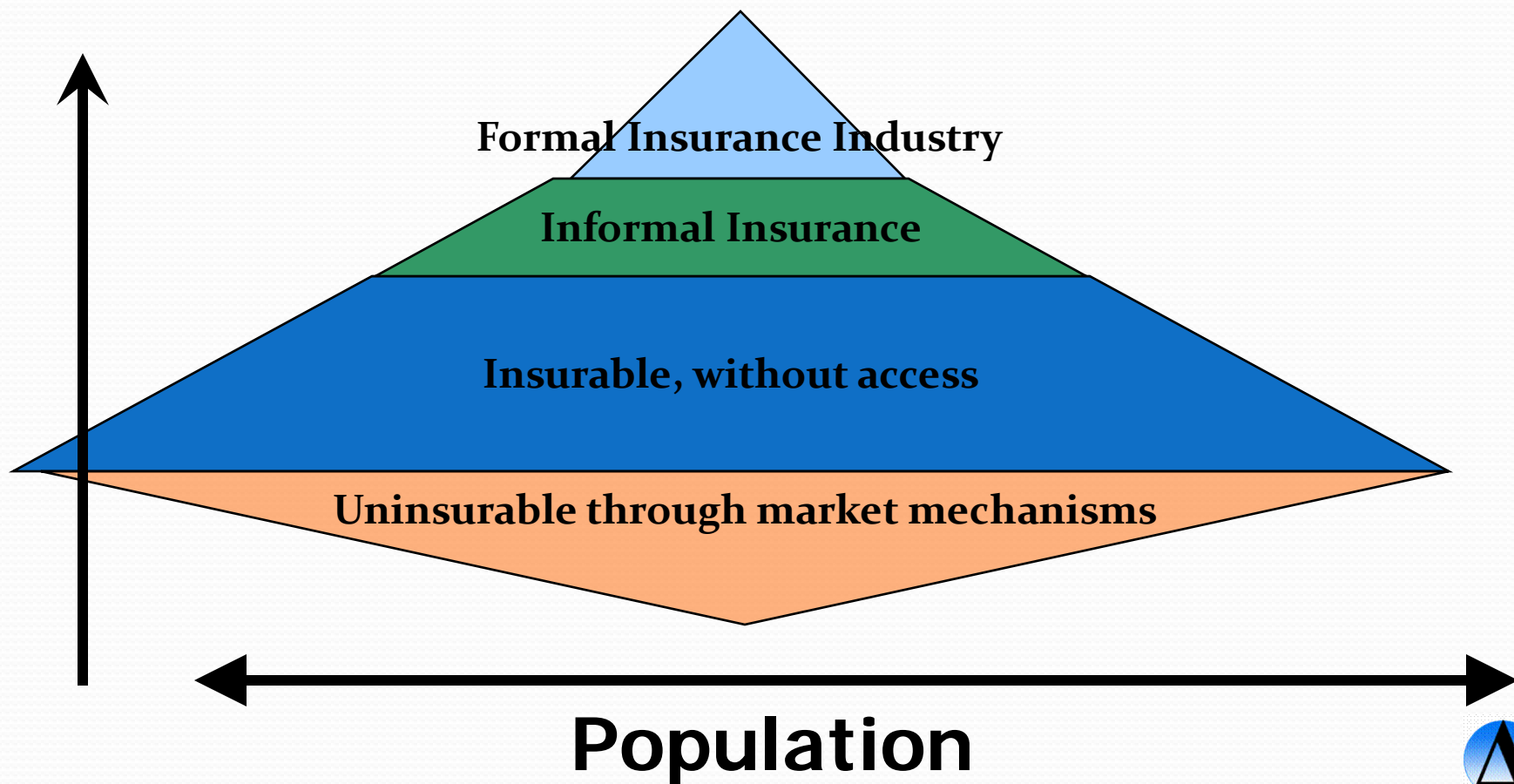
- Protects low income households against risks
- Products are specifically designed for the challenges the target market faces
- The low income households are exposed to more risk
- The poor are more vulnerable as current coping strategies continue poverty cycle

# What is Microinsurance?

- Helps the poor **manage** their risks (i.e.) Health, death, funeral costs, agricultural (drought, crop disease, land exhaustion)
- Cannot eliminate poverty on its own
- Along with other risk management tools can make a valuable contribution to reducing poverty.

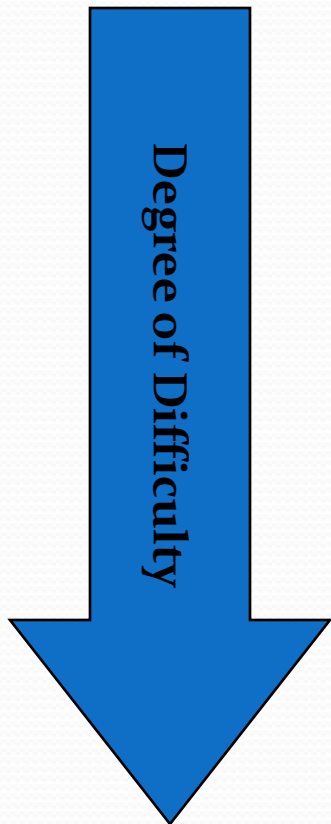
# Who is Insured by Whom?

Source: Craig Churchill, ILO, Introduction to Microinsurance, Wealth

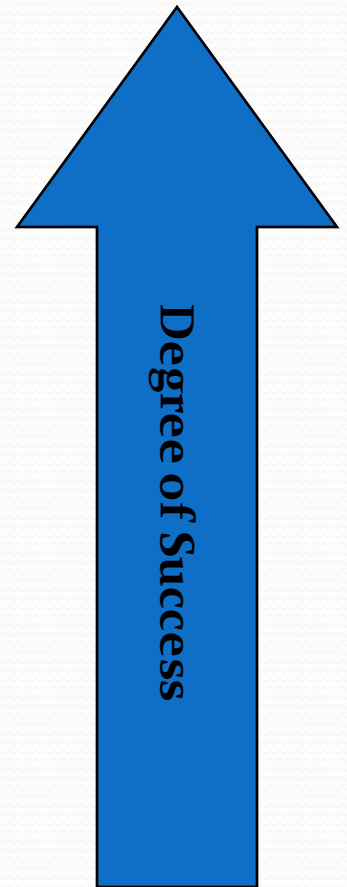


# Most Common Types of MI Products

Source: The Landscape of Micro Insurance in the World's 100 Poorest Countries Roth, McCord, Liber



- Credit Life
- Term Life/Personal Accident
- Savings Life
- Property Insurance
- Endowment Life
- Health Insurance
- Agriculture



# Characteristics of the Insurable Poor

- Vulnerable to Risks
- Often work in the informal economy
- Irregular cashflows
- Often manage risk informally, often through social networks
- Not very familiar with formal insurance
- May not trust insurance companies

Source: Craig Churchill, ILO. Introduction to Microinsurance, Microinsurance Conference, Mumbai 2007

# Key Stakeholders

- Insurance Company
- MFI, NGO, CBO, Co-op etc.
- Healthcare providers



# Why Micro Insurance?

- Extend social protection in the absence of government schemes especially for those in the informal economy.
- New market for insurers – Approx 4 Billion people live on less than \$2 US a day – insurable without access to insurance.
- Learnings can be transferred to higher income markets (I.e.) communication, efficiencies, distribution

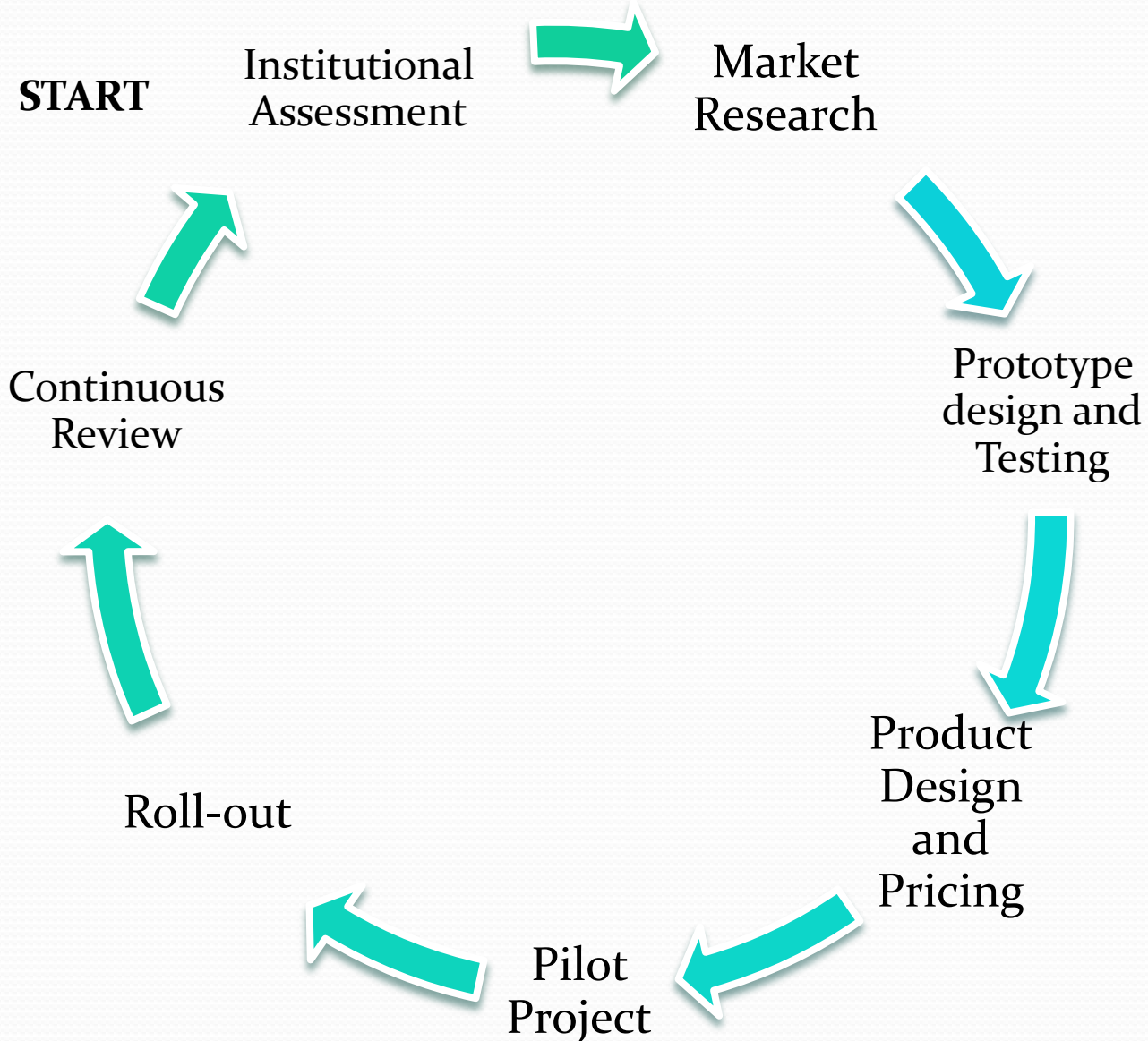
# How is MI Different from Regular Insurance?

- Relevant to the risks of low income households
- As inclusive as possible.
- Affordable premiums: often more frequent than annual pays, small sum insured
- Grouping for efficiencies (Co-ops, MFIs etc.)
- Simple and straightforward as possible

# How is MI Different from Regular Insurance? Con't

- Usually covers all members of a household
- Often products are bundled as one product covering several risks
- Easily accessible claims documentation requirements
- Strategies to overcome the wariness of customers due to unfamiliarity with insurance.

# Product Development Cycle





# Pricing elements of regular insurance



## Risk Premium

- Claims distribution (frequency and severity)
- Copayments
- Cover limits
- Trends
- Risk profile
- **Investment income**

## Expenses

- Administrative
- Distribution
- Reinsurance

## Profit Margin

# So how is Pricing for MI Different?

- **Uncertainty and Reliability of the Values for each Element.**
- If add large loading for uncertainty will price the product out of the market.
- How do you traditionally gather information for each pricing element?

# Cost of Claims

**Claims expected to be incurred =**

**Probability of the event x the expected cost for each covered service**

*Probability of the event Sources:* National data, Actuarial tables, WHO

*Expected cost for each service Sources:* Experience history, National data, approximations from WHO

# So how is Pricing for MI Different?

## **Cost of claims:**

- Accuracy of Data collection: There may not be claims history
  - How suitable is the data for representing the MI target segment?
- **Loss prevention techniques**
- **Impact of Distribution Channel**
- **Skills of management and how plan is administered**

# So how is Pricing for MI Different?

## Expenses:

- Experience:
  - Do the financial statements include and split the expenses properly?
  - If product is sold through an MFI, are overhead costs included?
- For a new product:
  - Are the future projections realistic?
  - All costs included?
  - Impact of Distribution Channel

# Cost of Reinsurance

- The additional amount of premium to add depends on the reinsurance agreement.
- Usually an additional percentage of premium

# Margin to Generate surplus

- Claims results always vary from expected, therefore extra premium is added just in case.
- Essential for the success of the plan
- Building in a small surplus covers fluctuations of claims and also gives funds for future development.
- Amount of Margin – 1% to 10% of premium.
- More stable plans would get a smaller margin.
- Start up plans require a higher margin.

# Investment Earnings

- The returns on the safe investments that can be made will determine the impact on the rate. In most cases it will be a very small impact on the premium.
- For example: if there is annual premium of 100, which can be invested for on average 6 months at 6%, the return would be 3%.
- This 3% can be added to the premium as revenue to cover claims cost and plan administration.
- If the organization has capital that earns revenue this would not be included in the pricing.

# Premium Calculation

Cost of claims + Expenses + Cost of reinsurance + Margins -  
Investment earnings

# Monitor results

- Once rates are set it is important to monitor results
- Can you Key performance Indicators

# Credit Life

- Most common product simple to price

# Voluntary Life Products

- Starting to get more complex
- Must consider the context
  - Distribution
  - Management
- Range in price for 100 to 300% for life products



# Health, the context is everything

- Of all the products this is the most contextual
- Range in price from 100 to 700

# Items with impact on price

- Public health measures
- Education on loss prevention
- Access to nutrition
- Access to quality primary care
- Access to hospital



# Actuaries task in pricing

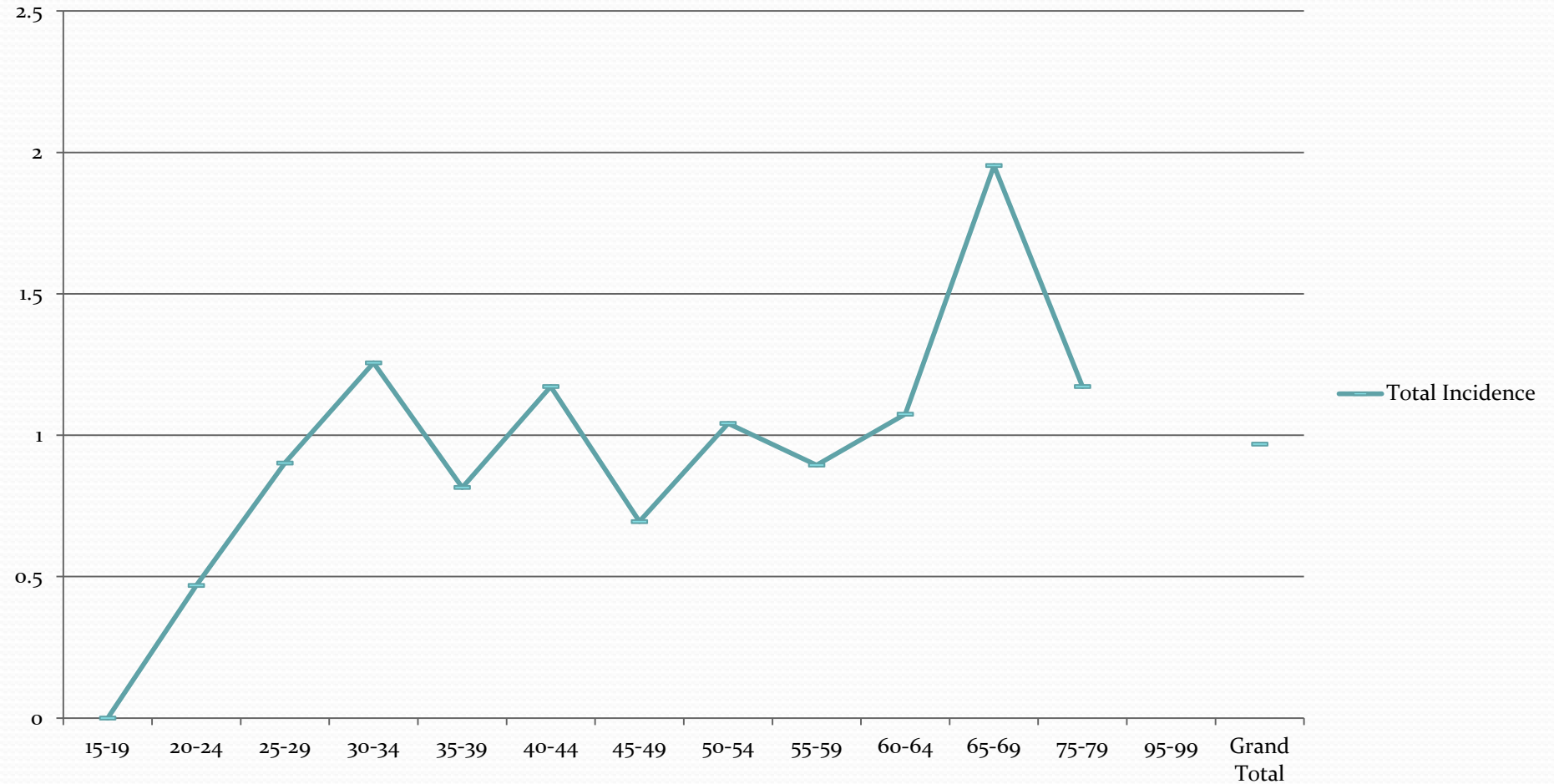
- Must know, understand and use data, even if limited
- Must understand how the management of the scheme will change pricing
- Needs to price close to what will happen to avoid shocks
- Encourage active management monitoring

# Health MI Example - Mongolia

Total Policies Sold	213
Total Person's Covered	676
Average People per policy	3.17
Total Annual Premium	15,264,000 MNT
Total Claims	176
Total Claims Paid	28,537,920 MNT

# Incidence by Age Band

**Total Incidence**



# Evaluation of Product

They stopped selling the product as it was not viable due to high claims.

Why?

- Individual Health Product that was being sold primarily at the hospital causing anti-selection.
- Culturally, people went to hospitals for vacations - 10 days to receive vitamin shots.
- Premium was too low for distribution channel chosen.
- Distribution Channel was not effective.

# Product Design

## **Original Product:**

Max 400,000 MNT per family per year

Premium: 60,000 MNT

## **Hospital**

- Daily cash benefit
- Maximum per stay
- Premium calculation?

## **Proposed Product**

20,000

160,000

# Hospitalization Rate

Mongolia	hospitalization rate	11.1%
	median age of population	27.0
	Average days in hospital	7.8
	Number of physicians per 1000	2.8
	Number of beds per 1000	5.9
Canada	hospitalization rate	8.2%
	median age of population	41.0
	Average days in hospital	7.6
	Number of physicians per 1000	1.9
	Number of beds per 1000	3.4
USA	hospitalization rate	11.6%
	median age of population	36.9
	Average days in hospital	4.8
	Number of physicians per 1000	2.7
	Number of beds per 1000	3.1
source CDC, CIHI, CIA factbook, Mongolian Statistical office		

# Compare National Incidence to Experience

Comparison of incidence rate of first product and population		
Age	first product	population
10-14	3.7%	5.4%
15-19	8.1%	7.2%
20-24	12.5%	6.5%
25-29	24.8%	6.9%
30-34	36.8%	8.6%
35-39	35.9%	10.2%
40-44	43.4%	11.7%
45-49	29.3%	14.9%
50-54	52.1%	17.7%
55-59	39.1%	19.8%
60-64	60.2%	25.9%
65-69	93.8%	33.8%
<b>Total</b>	<b>30.5%</b>	<b>11.1%</b>

# Calculation of net Family Rate

Incidence rate	11.1%
Average days in hospital	6
Benefit amount	20,000 MNT
Number in family	4

$$\begin{aligned}\text{Net premium} &= 11.1\% \times 6 \times 20000 \times 4 \\ &= 53,280 \text{ MNT}\end{aligned}$$

# Conclusion

- The context is everything in pricing microinsurance products
- Basis demographic data is one important element but not the most important one.

# Where to get more information

- <http://www.microinsurancenetwork.org/> for Key performance indicators for microinsurance and to meet who is involved.
- <http://www.ilo.org/public/english/employment/mifacility/> Learnings on microinsurance from projects in place.
- <http://www.munichre-foundation.org> for volume 1 and 2 of Protecting the Poor. Info on microinsurance conferences.