# **HEALTH UNIVERSAL COVERAGE** FOR TACKLING CHILD HEALTH **INEQUITY POST MDG IN INDONESIA INEQUITY POST MDG IN INDONESIA** MAHLIL RUBY

Centre for Health Economics and Policy Study Public Health Faculty of Indonesia University International Seminar Social Determinant of Health: The MDGs and Beyond Denpasar Bali : August 29-30, 2013

Indonesia

# I. BACK GROUND

- At first glance, Indonesia will be easy for achievement Goal 4 of MDGs.
- Based on trend, slowing down in one decade
- MoH supported UNICEF Jakarta have developed the National Action Plan for Child Survival (RAN KHA) for accelerating of declining child mortality (IMR and UMR)



# NEONATAL, INFANT & U5 MORTALITY IN PROVINCES, IDHS 2012



■ AKN ■ AKB ■ AKABA

### **TREND OF CHILD MORTALITY IN INDONESIA**



### II. COST EFFECTIVE: A) DIRECT CAUSE OF CHILD MORTALITY (1)

#### Cause of Neonatal Mortality (HHHS, 2007)



Neonatal mortality contributes 70% for IMR and 35 % for UMR

### II. COST EFFECTIVE: DIRECT CAUSE OF CHILD MORTALITY (2)

#### **Cause of U5 Mortality**



### **II. COST EFFECTIVE: B) INTERVENTION**

Program					
	Lancet		WHO	RAN KHA	
Nutrition	Exclusive Breast fe	eding	Exclusive Breast feeding	Exclusive Breast feeding	
	Complementary (6-9 month)	feeding	Complementary feeding (6-9 month)	Complementary feeding month)	(6-9
	BF (20-23 Month)		Routine Vit A (6-59 month)		
			Vit A – measles		
			Fe Supplement for 6-23 month		
			Feeding on HIV		
			Micronutrient fortification powder		
			Management of mild acute malnutrition		
			Management of severe acute malnutrition		
			LBW feeding		
			Counseling and feeding in emergency		
Immunizat ion	DPT		DPT	Measles	
	Measles		Measles		
	Hib		Hib		
			Pneumonia		
			Rotavirus		
			Polio		
			BCG		
			HPV		

## **II. COST EFFECTIVE: INTERVENTION (2)**

Program	Intervention							
	Lancet	WHO	RAN KHA					
Neonatal	Skill attendant	Active management of the 3rd stage of labor	Clean delivery					
	TT	resuscitation	Resuscitation					
	IBF	Management of obstructed labor	IBF					
	Preventive postnatal care	Kangaroo mother care	Clean practices and immediate essential newborn care (home)					
	PMTCT	PMTCT (HIV)	Injection Vit K					
		Clean practices and immediate essential newborn care (home)	Eyes Antibiotic					
		IMD	Preventive PNC					
		Antibiotic for PROM	Kangaroo mother care					
		Induction of labor (beyond 41 weeks)						
		Newborn sepsis - Full supportive care						
		Newborn sepsis - Injectable antibiotics						
		Preventive postnatal care						
		Costicosteroid preterm labor						
		Treatment of local infections (Newborn)						

### **II. COST EFFECTIVE: INTERVENTION (3)**

Program	Intervention								
		Lancet		WHO	RAN KHA				
Case	Care	seeking	for		ORS				
Management	Pneumo	onia		Zinc (diarrhea treatment)					
	Antibioti	c for Pneum	onia	ORS Diare***	Zinc (diarrhea treatment)				
	ORS Dia	arrhea		AB dysentery	Pneumonia treatment (children)				
	Antimala	arial fever			Case management for asphyxia, diarrhea,				
				Treatment of severe diarrhea	pneumonia)				
				Pneumonia treatment (children)	comprehensive case management for severe (asphyxia, diarrhea, pneumonia)				
				Treatment of severe pneumonia					
				Malaria treatment (children)					
				Treatment of severe malaria (children)					
				Treatment of severe measles					
Others preventive	Vitamin	A		Air minum dalam 30 menit*	ITN				
	source o	drink water		pipe water	clean water and safe water				
	Sanitatio	on facilities		toilet					
	ITN			hand washing with soap					
				clean baby from stool					
				ITN					
				ITN for mother pregnancy					

# III. Costing:

- RAN KHA has to be more realistic according cost effective intervention.
- Providing tool and document to Decision maker (national and local) for allocating budget regarding cost effective intervention including health resources.
- Providing costing tool where local government can conduct costing appropriate local condition.

# **IV. Review Tools**

- International organization (WHO, UNICEF, USAID, WB) have devveloped several tools for costing achievement og MDGs.
- RAN KHA need simple tool and useful.
- The tools that have been developed in the world is:

- 1. MBB (UNICEF & WB, 2007)
- 2. CMYP (WHO, 2005)
- 3. CHOICE (WHO,2007)
- 4. CostIT (WHO,2007)
- 5. Indonesia MSS (MoH & GTZ, 2009)
- 6. Matrik (UNICEF Jakarta, 2011)
- 7. Reproductive Health Costing (UNFPA, 2007)
- 8. Planning and Budgeting for TB Control (WHO,
- 9. RNM for HIV (Futures Institutes, 2005)

- **10.** Malaria Cost Estimation (WHO, 2006)
- 11. Integrated Health Model (UNDP, 2007)
- 12. The Integrated Health care technology package (WHO, 2007)
- 13. Planning, Costing and Budgeting Framework (MSH, 2007)
- 14. Spectrum: PMTCT (Futures Institute, 2002)
- **15.** Goal Model (Futures Institute, 2002)
- 16. CORE plus (MSH,2007)
- 17. OneHealth Tool (OHT) (WHO, 2012)

# CHOOSE: ONEHEALTH TOOL (OHT)

0		(interpret	the local division of	In Inc	donesia for	Jan5_13 - OneHealth (Programme Mode)	
<u></u>	Home Health S	ervices Health Systems	i Impact Modules				۷
0pen	New Save	Set Active Manager	Group	T Arrange All @ <u>C</u> lose All	() Help	😳 Online Support	
	File	Projection	Display	Window		Information	
LIST	Configuration	Health status, mortality	and economic status	Coverage Effec	tiveness 🔻	Results +	8
M Weice		14-					
Click Edit	New project To get started Open existin Browse to find Recently op Select a recent here or on the a	tion , click here to create a new pr ng projection I and open a previously save ened projections projection from the list prov pplication button above f /iew results	rojection 🤪 d projection ided 👻 for additional file optic	ons			
Click	one of the follow	ving links or correspondi	ng tab on the menu a	bove in order to edit			

Click one of the following links or corresponding tab on the menu above in order to ed data or review results.

Health Services Health Systems Modules

## RATIONALIZATION OF OHT:

- Strong recommendation from WHO
- Anyone can operate the tool because all health intervention are prepared.
- Interventions are appropriate cost effective interventions
- Tool provides drugs, consumables, infrastructure, equipment, human resources, information system and program management.
- OHT combines couple tool like MBB, LiST, CHOICE, and others
- The results can be used for advocating action.

### JUMLAH KEMATIAN YANG HARUS DICEGAH



### JUMLAH KEMATIAN YANG DICEGAH MENURUT PENYEBAB

Penyebab	Neonatus	Balita
Diare		8.865
Sepsis	1.940	1.940
Pneumonia	705	2.398
Asfiksia	10.283	10.283
BBLR	9.389	9.389
Tetanus	291	291
Congenital	282	282
Campak		1.770
Jumlah	22.890	35.218

### Under five mortality rate (deaths per 1,000 live births)



Neonatal mortality rate (deaths per 1,000 live births)





#### **5.2. COST FOR STRENGTHENING HEALTH SYSTEM**



# B. Health Facilities (infrastructure, vehicles, IT)1) New Health facilities cost and maintenance cost



# C. Logistic (drugs, consumables, warehouse, vehicles) 1) Drugs & Consumables →

Number of each type of drug & consumables per year for knowing the vast warehouse

### 2). Warehouse and vehicles



# D. Governance (Module, policies) :1) Module and policy



#### **5.3. TOTAL RAN KHA COST**



### 5.4. DATA CONSOLIDATION

- FGD dengan Lintas program
- FGD dengan pakar dan praktisi di daerah untuk mendapatkan strategi yang sesuai dengan kondisi lapangan
- Pengumpulan data di setiap lintas program
- Seminar

# 5.4. DATA CONSOLIDATION5.4.1. RAN KHA PROGRAMS SCATERED



### ACHIEVEMENT OF MDGS DEPEND ON CROSS PROGRAM COMMITMENT AND RESPONSIBILITIES



## 5.4.2. ASSUMPTION AND LIMITATION

## Assumption

- For national
- Cost is based on data / prevalence / national coverage
- Synergy relationships between programs and intervention, automatically calculated by tool;
- there is no extraordinary conditions (disasters, wars, pandemics)

## Limitation

- Integration among cross program
- Each program has not provided yet information in accordance with the RAN strategy especially the management program
- This cost has not clarify yet with real cost (using default cost)
- HR incentive fee/incentive does not count because it gets salary.
- Infrastructure and salary did not count

## VI. RESULT OF COSTING 6.1. NEONATAL INTERVENTION

No	Neonatal intervention	2012	2013	2014	2015	2016	Total
1	Labor and delivery management	145,949,950,872	151,032,789,650	156,226,591,999	161,453,762,097	166,623,066,683	781,286,161,301
2	Active management of the 3rd stage of labour	7,997,658,890	9,699,868,760	11,407,679,396	13,117,767,882	14,822,830,822	57,045,805,749
3	Pre-referal management of labor complication	19,823,137,295	25,993,397,075	29,701,732,397	30,940,822,405	29,694,243,867	136,153,333,038
4	Management of eclampsia	787,051,281	954,566,235	1,122,632,182	1,290,922,349	1,458,717,992	5,613,890,039
5	Neonatal resuscitation (institutional)	125,288,642	164,962,758	204,720,199	244,517,440	284,219,015	1,023,708,054
6	Management of obstructed labor	24,956,943,258	38,439,100,303	51,935,974,774	65,442,538,545	78,922,778,282	259,697,335,162
7	Treatment of local infections (Newborn)	901,844,024	1,242,410,891	1,583,559,014	1,925,010,980	2,265,702,698	7,918,527,606
8	Kangaroo mother care	0	0	0	0	0	0
9	Feeding counselling and support for low-birth-	10,188,881,895	12,724,123,663	15,266,374,790	17,811,644,352	20,350,034,354	76,341,059,053
10	Clean practices and immediate essential newb	40,660,737,445	44,697,630,335	48,764,545,204	52,841,586,110	56,899,093,387	243,863,592,480
11	Antenatal corticosteroids for preterm labor	96,015,792,746	116,451,651,832	136,954,750,849	157,485,196,564	177,955,308,138	684,862,700,128
12	Induction of labor (beyond 41 weeks)	241,851,105	328,237,358	414,781,215	501,404,974	587,831,280	2,074,105,932
13	Antibiotics for pPRoM	40,518,784,648	49,142,742,746	57,795,076,179	66,458,949,953	75,097,362,644	289,012,916,171
14	Newborn sepsis - Full supportive care	272,469,229	696,280,265	1,120,158,730	1,544,230,308	1,967,654,161	5,600,792,694
15	Newborn sepsis - Injectable antibiotics	1,431,784,014	1,907,249,835	2,383,660,457	2,860,532,874	3,336,283,269	11,919,510,449
16	Preventive postnatal care	1,589,100,852	2,045,061,272	2,526,311,789	3,032,273,054	3,561,256,012	12,754,002,979
	Total	391,461,276,196	455,520,072,978	517,408,549,174	576,951,159,887	633,826,382,604	2,575,167,440,835

## 6.2. INFANT AND UNDER FIVE

No	Pelayanan Kesehatan Anak	2012	2013	2014	2015	2,016	Total
1	Vitamin A (children 6 - 59 months)	6,458,610,842	6,612,222,069	6,782,605,573	6,974,236,824	7,191,501,576	34,019,176,883
2	ORS	96,100,475,105	152,426,015,026	145,696,382,775	135,002,249,394	108,998,665,647	638,223,787,946
3	Antibiotics for treatment of dysentery	34,060,195,824	30,838,631,936	29,454,835,021	27,491,640,611	23,682,234,821	145,527,538,213
4	Treatment of severe diarrhea	9,227,811,987	11,275,007,445	13,172,259,080	14,270,271,395	13,819,722,892	61,765,072,798
5	Zinc (diarrhea treatment)	575,270,532	944,138,060	933,486,565	895,771,067	749,937,436	4,098,603,661
6	Pneumonia treatment (children)	4,112,041,842	4,046,099,235	4,022,439,475	3,950,673,338	3,706,296,054	19,837,549,944
7	Treatment of severe pneumonia	28,369,769,016	30,985,739,900	33,179,570,937	34,953,968,054	35,714,277,174	163,203,325,080
8	Malaria treatment (children)	1,308,883,694	1,414,166,638	1,453,874,102	1,442,153,860	1,433,542,066	7,052,620,359
9	Treatment of severe malaria (children)	356,106,613	529,180,833	746,272,649	952,575,724	1,162,844,221	3,746,980,040
10	Treatment of severe measles	36,176,250,662	49,230,112,361	52,483,664,554	18,124,210,334	13,713,404	156,027,951,315
11	Vitamin A for measles treatment (children)	11,035,406,415	11,029,043,849	9,329,122,057	2,679,166,610	1,740,002	34,074,478,934
	Total	227,780,822,531	299,330,357,351	297,254,512,787	246,736,917,211	196,474,475,293	1,267,577,085,174

#### 6.3. IMMUNIZATION

No	Immunization	2012	2013	2014	2015	2016	Total
1	Measles	22,028,749,264	22,569,976,491	24,158,513,903	25,816,488,278	26,328,790,857	120,902,518,792
2	DPT	26,283,234,804	27,324,788,027	30,601,141,895	33,936,882,904	34,947,805,460	153,093,853,091
3	POLIO	11,005,780,364	11,798,588,922	14,293,636,705	16,821,399,101	17,604,766,854	71,524,171,946
4	BCG	20,467,967,443	20,808,526,965	21,791,045,944	22,785,803,183	23,097,939,761	108,951,283,296
	Total	79,785,731,875	82,501,880,405	90,844,338,447	99,360,573,466	101,979,302,932	454,471,827,125

### 6.4. BREAST FEEDING

	2012	2013	2014	2015	2016	Total
Counselling BF	2,225,557,139	2,073,316,586	1,885,199,750	1,663,704,974	1,401,744,149	9,249,522,597

### 6.5. MALARIA

	2012	2013	2014	2015	2016	Total
ITN	19,767,589,170	0	0	19,767,589,170	0	39,535,178,340

	2012	2013	2014	2015	2016	Total
Total direct intervention	721,020,976,911	839,425,627,320	907,392,600,158	944,479,944,708	933,681,904,978	4,306,465,875,731

## VII. FINANCING STRATEGIES

- Direct intervention especially curative intervention will be covered by social health insurance around 50% from total direct intervention cost since 2014 until 2018.
- National and local government focus to strengthening health system (human resources, infrastructure, etc)
- Strengthening health operational fund (BOK)
- Focus on the areas that contribute to child health problems

# VIII. CONCLUSION

- The result of costing can not be used as child costing because many cost information have not been provided yet by MoH
- However, this costing approach has shown that national and local governments can use OHT for allocating the budget to cost effective intervention.
- Child health and other MDGs health goal are still inequity until 2018
- Indonesia will be more equity in post MDGs (2019 and over)
- Indonesia is still inequity in management program and health system because fiscal capacity of local government still difference cross country
- OHT can be used by local government for calculating cost effective intervention (preventive), advocacy, as well as improving integration planning and budgeting..