



Australian  
National  
University

# Improving Clinical Management of Newborns at Hospitals to Reduce Neonatal Deaths

**“Bridging the Research-Policy Divide”  
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# Content

- Background
- Problem tree and my focus
- Solutions
- Stakeholders
- Policy improvement plan (PIP)
- Impacts of these actions (2-5 years)

# Research: “Household Survey on Maternal, Newborn, and Child Health”

## Objectives

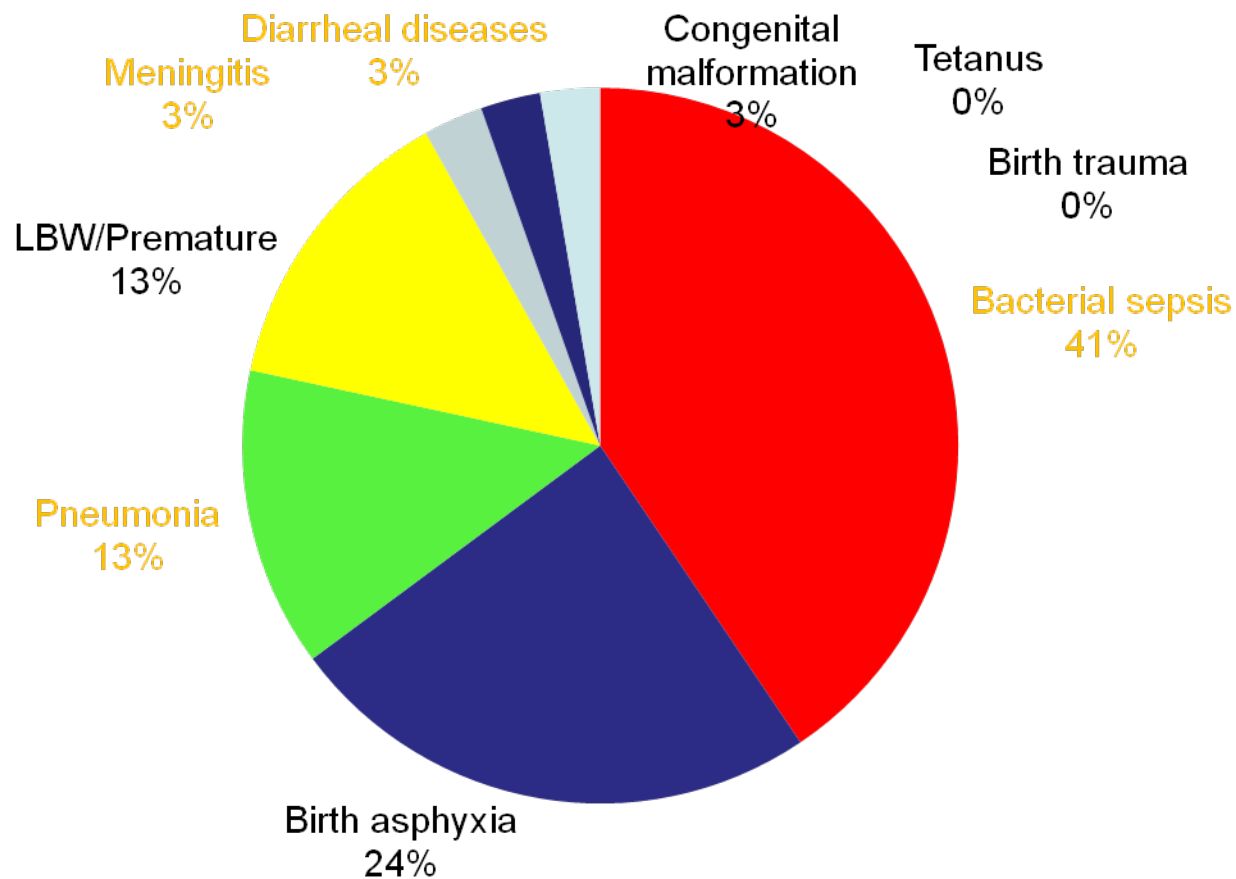
- To identify coverage of interventions on maternal, newborn, and child health
  - Antenatal care (ANC)
  - Delivery and immediate post-natal interventions
  - Neonatal interventions
  - Interventions for infants and children (Nutrition, Immunization, management of suspected pneumonia and diarrhea)
- To provide recommendations to increase the coverage

# Rationale

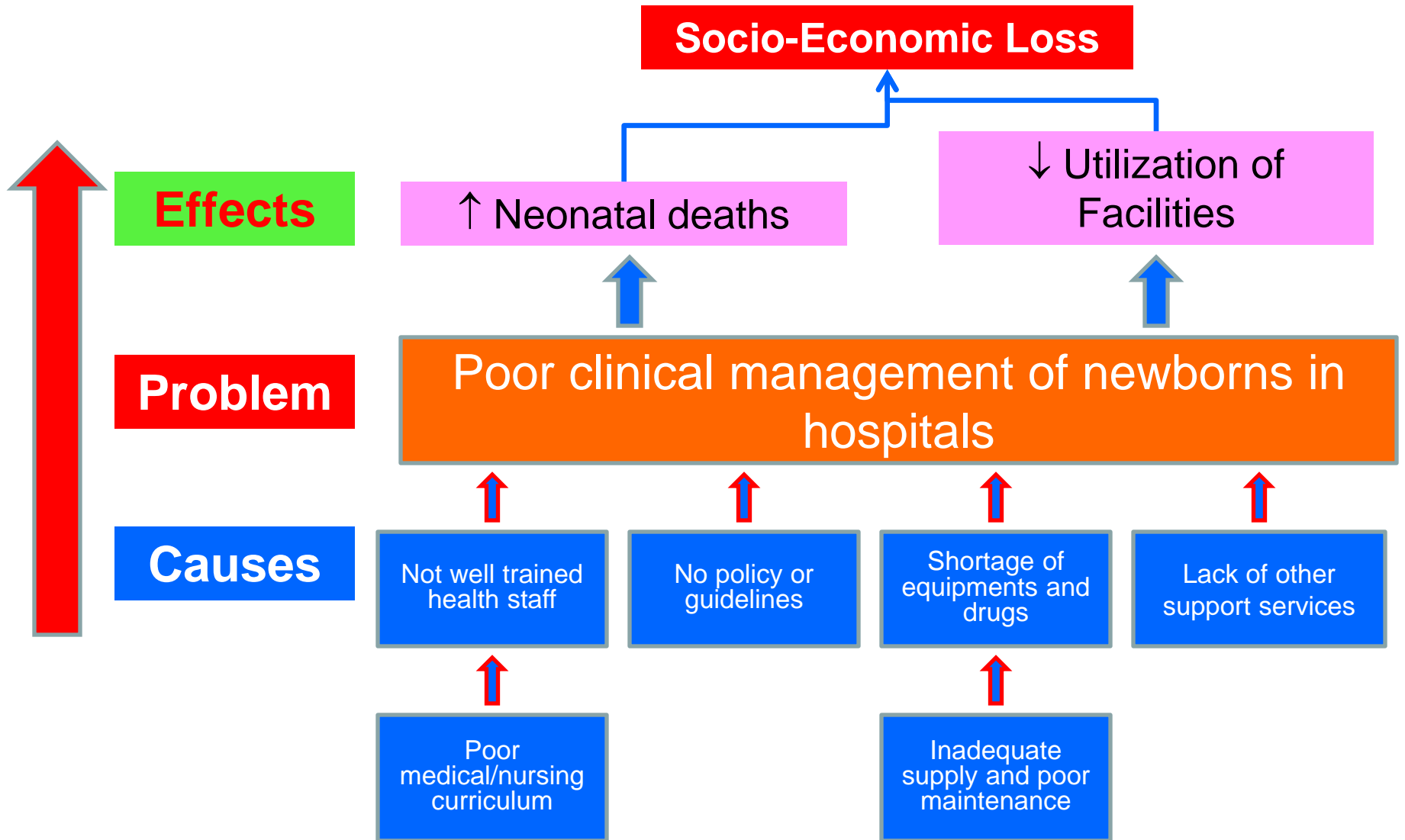
- Hospitals provide **Complementary Package of Services**
- High maternal and under-five mortality in Cambodia<sup>1</sup>
  - Maternal mortality ratio<sup>1</sup> 206/100,000 live births
  - Under-five mortality<sup>1</sup> 54/1,000 live births
  - Neonatal Mortality (0-28 days) 27/1,000 live births  
(50% of all under-5 deaths)

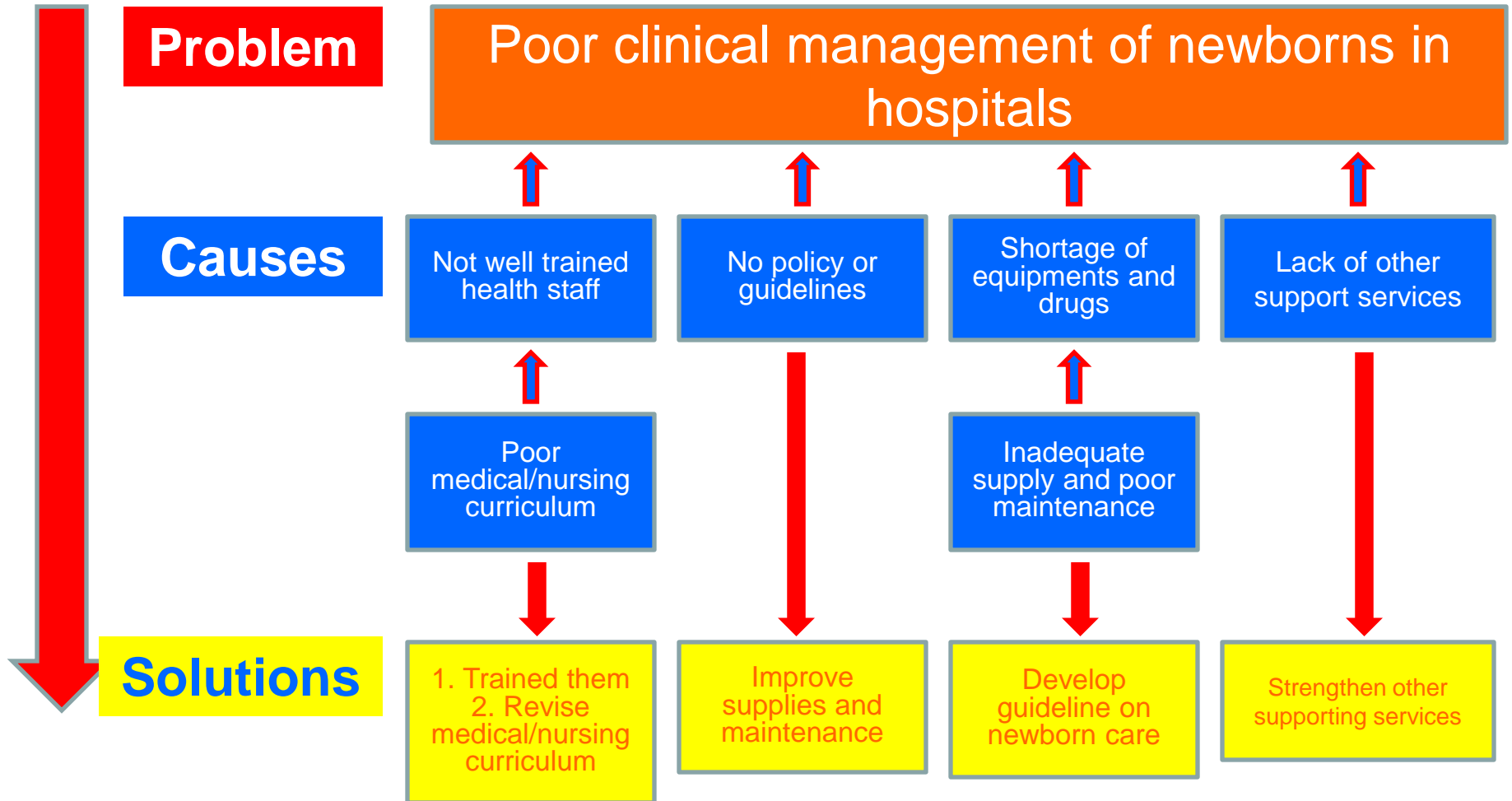
Sources:     <sup>1</sup>Cambodia Demographic and Health Survey 2010

# Causes of neonatal deaths (0-28 days)



Source: Svay Rieng Child Verbal Autopsy Study





# Current Models to strengthen health system

## Capacity Building

- Traditional +/-)
- Coaching & Mentoring

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- Traditional
- Coaching & Mentoring

+

**Health Equity Fund (HEF)**  
(URC/USAID)

## Capacity Building

+

**Performance-based incentive (indicators)**  
(+/-)

**Health Equity Fund (JPIG)**

**Improve Quality of Care in Hospital Setting**



# Evidence-Based Essential Newborn Care

## Antenatal Care

- Tetanus toxoid
- Proper nutrition (iron, folate, iodine supplements, balanced protein and energy consumption)
- Treat maternal infections
- Breastfeeding counseling



## Labor and Delivery Care

- Clean delivery
- Newborn resuscitation



## Postnatal Care

- Hypothermia
- Hypoglycemia
- Exclusive breastfeeding
- Eye care
- Infections
- Birth spacing



# My Policy Objective

- To make **better services for sick newborns** in the hospitals and that will have the following outcome
  - **Improve clinical management**
  - Increasing utilization of health service by care-takers of the sick newborns and
  - **Reduction of newborn mortality**

# Stakeholders

- **Task Force for Maternal and Child Health (MCH): Mobilize resources**
  - National Centre for Maternal and Child Health (MCH)
    - National Reproductive Health Programme (NRHP)
    - National Immunization Programme (NIP)
    - National Nutrition Programme (NNP)
    - National Programme for Acute Respiratory Infections-Diarrhea and Cholera Control (ARI/DDC)
    - National Programme for Prevention Mother-to-Child Transmission (PMTCT)
  - National Pediatric Hospital (NPH)
  - National Centre for Health Promotion (NCHP)
  - Department of Communicable Disease Control (CDC)
  - Department of Planning and Health Information (PHI)
  - Department of Budget and Finance (DBF)
  - Department of Human Resource Development (HRD) and educational institutions (UHS/Nursing Schools)
  - Department of Hospital Services (HS)
  - Health Development Partners: WHO, JPIG (AFD, AusAID, UNICEF, BTC, UNFPA, WB), JICA, USAID, GIZ, and MEDiCAM
- **Provincial/Municipal Health Departments** (+ Operational Health District Offices) and **Health Facilities** (Provincial Hospitals, Referral Hospitals, Health Centres/Health Posts)
- **Village Health Support Groups (VHSG)**
- **Care-Takers and Community**

# SWOT Analysis

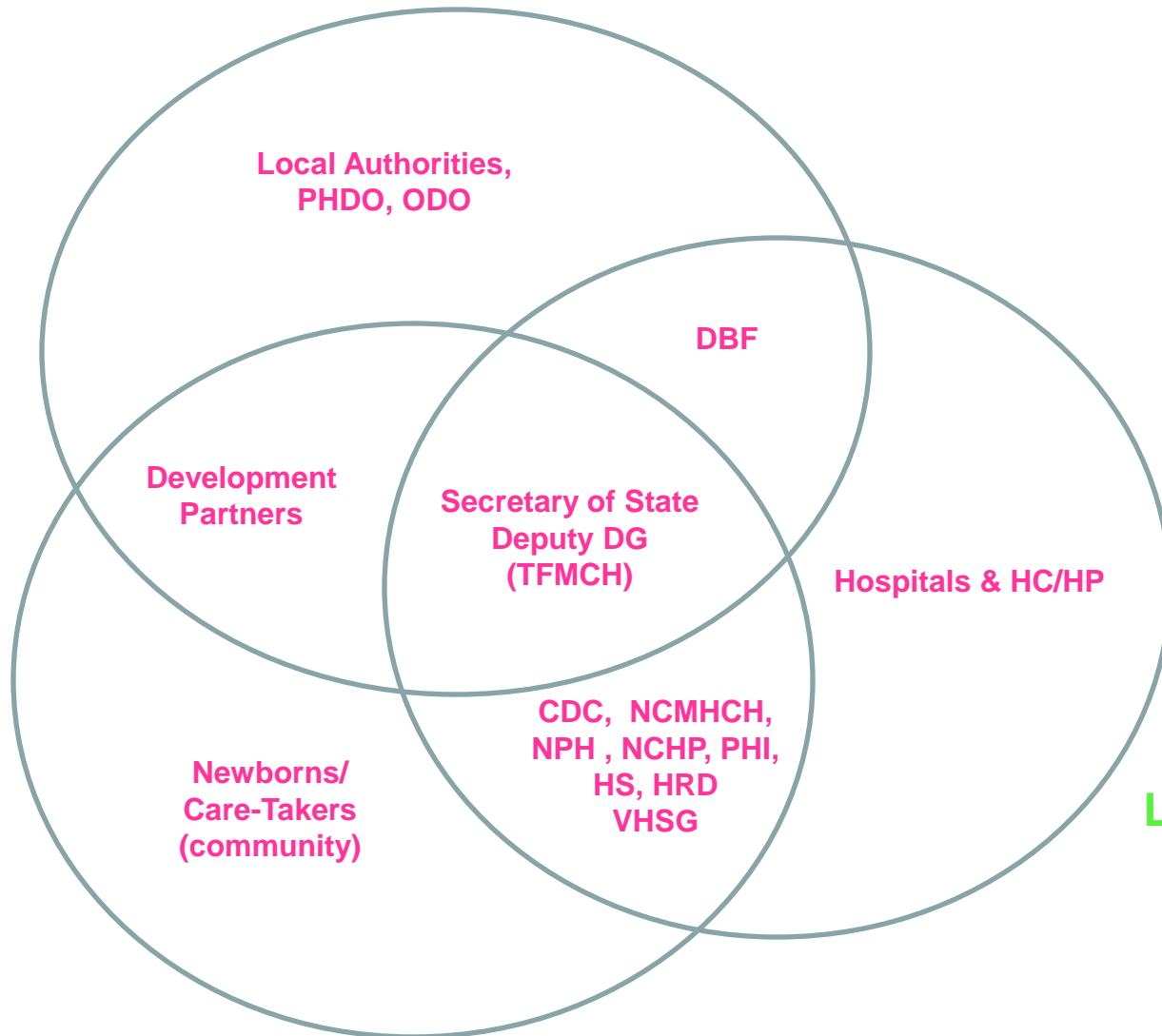
<b>Strengths (S)</b>	<b>Weaknesses (W)</b>
<ul style="list-style-type: none"><li>• Some staff trained in management of sick newborns</li><li>• Supply of Medicines and Equipments</li><li>• Pediatric Ward</li><li>• Financing support</li></ul>	<ul style="list-style-type: none"><li>• Not all staff trained</li><li>• Staff turnover</li><li>• insufficient supplies</li><li>• Not all Health Facilities able to have functioning Newborn Care Unit</li><li>• Few HF with HEF and PBCI</li></ul>
<b>Opportunities (O)</b>	<b>Threats (T)</b>
<ul style="list-style-type: none"><li>• Policy of RGC and MoH</li><li>• Policy of Partners</li></ul>	<ul style="list-style-type: none"><li>• Phasing out phase (partners)</li><li>• Expansion of Private Sector</li><li>• Trust of community with public facilities</li></ul>

# Analysis of stakeholders in term of P, L, U

No	Stakeholders	Power	Legitimacy	Urgency	Types	Symbols
1	Secretary of State	√	√	√	Definitive	SS
2	TF for MCH:					
	CDC, PHI, HS, HRD, NCMCH, NCHP		√	√	Dependent	TechTF
	DBF	√	√		Dominant	FinTF
	Development Partners (Bilateral, UN, Banks)	√		√	Dangerous	P
	IO/NGO			√	Demanding	NGO
3	PHO, ODO	√			Dormant	PHDO/ODO
4	PH, RH, HC/HP, VHSG		√	√	Dependent	Prov
5	Newborn/Care-Takers			√	Demanding	Clients
6	Local Authorities	√		√	Dangerous	Local



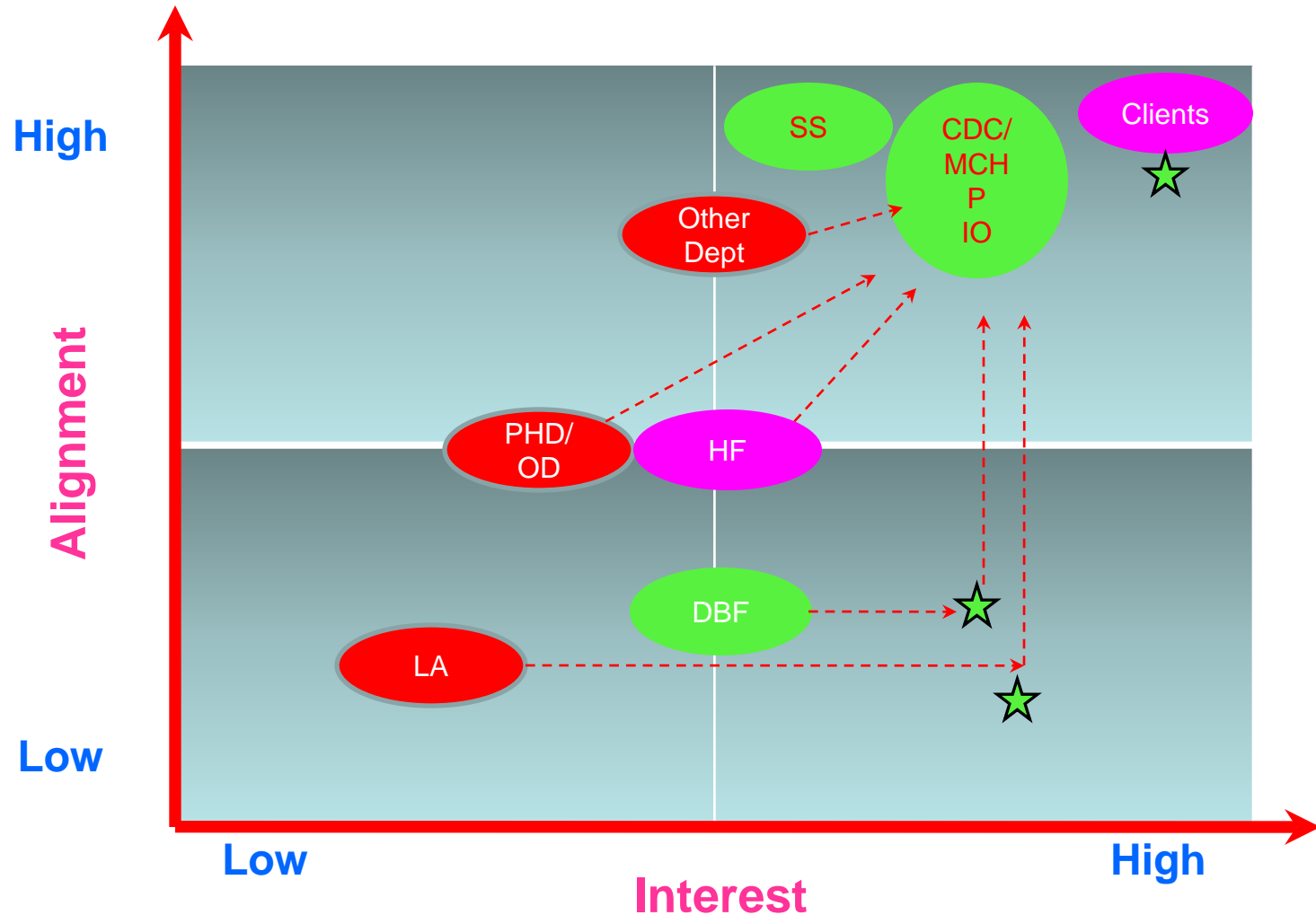
**POWER**

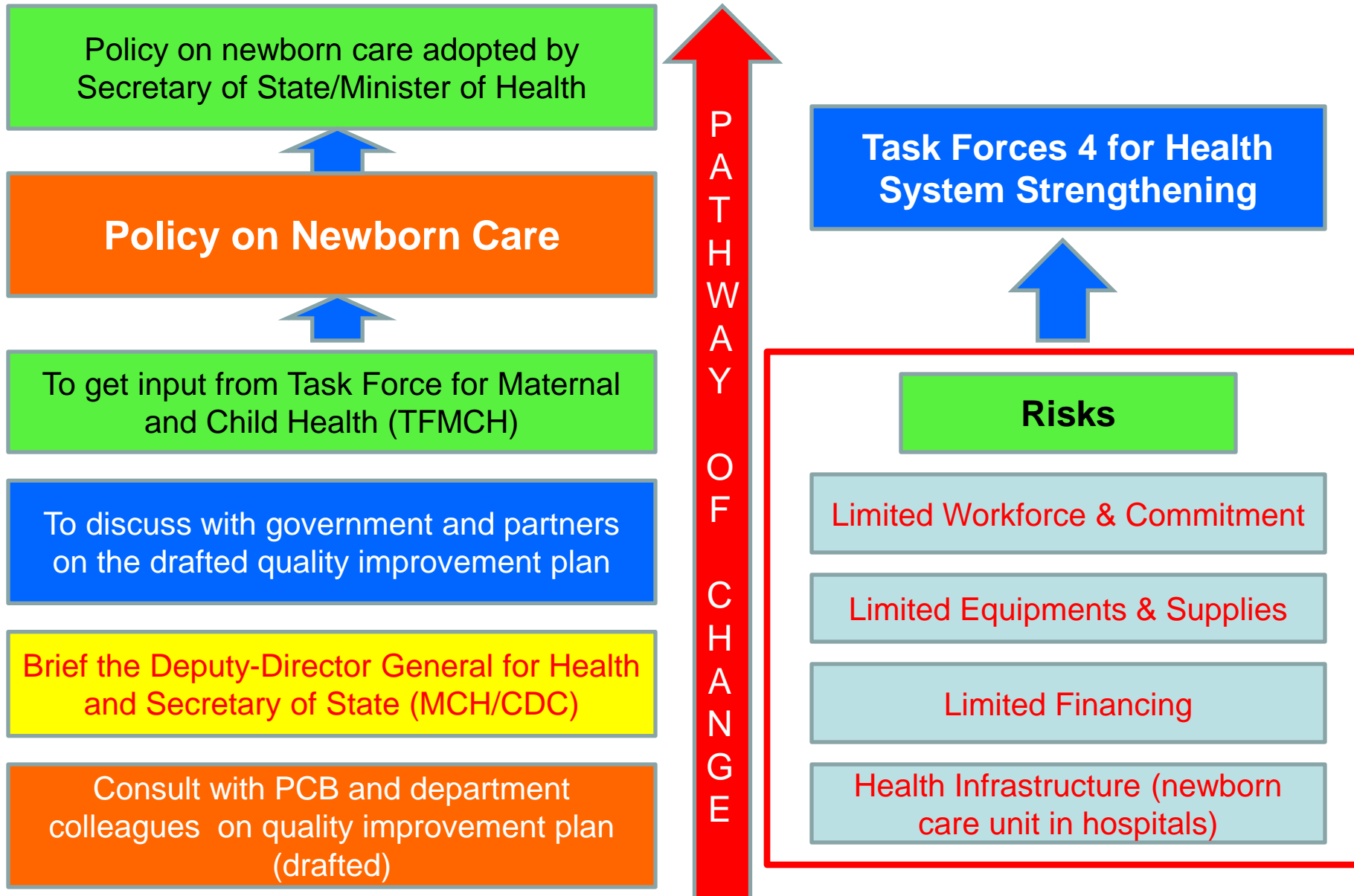


**URGENCY**

**LEGITIMACY**

# Alignment-Interest-Influence Matrix (AIIM)







# Policy to Improve clinical management in Hospitals

- Goal: Adoption of policy to improve management of sick newborns in hospitals
  - Objective 1: To assess the quality of pediatric care
  - Objective 2: To use the findings to develop quality improvement plan (QIP)
  - Objective 3: To review the pre-service training curriculum of the University of Health Sciences (UHS) and Nursing Schools (UHS/Nursing Schools)
  - Objective 4: To develop the training curriculum and guideline for newborn care (pediatric ward)

## Objective 1: To assess the quality of pediatric care (CDC, NMCHC, WHO, UNICEF)

No	Activities	WHO	WHEN	Output
1	Discuss with WHO about assessment of pediatric care (advocate for funding)	CDC	October, 2012	Provided budget
2	Assign a CDC staff to develop workplan <ul style="list-style-type: none"> <li>• Desk review of all relevant documents</li> <li>• Develop a conceptual paper</li> </ul>	CDC	Oct, 2012	Drafted workplan
3	Brief DDG-TFMCH about workplan	CDC	Nov 2012	Agreed workplan
4	Work with WHO, UNICEF and URC, HS and key pediatricians to review the WHO assessment tool	CDC	Nov-Dec, 2012 & Jan 2013	Drafted assessment tool
5	Share the drafted assessment tool to all members of the TFMCH for reviewing	CDC	Feb, 2013	Received feedback
6	Organize a final consultation of the tool in the monthly TFMCH meeting	CDC	March, 2013	Finalized assessment tool
7	Organize a 4-days training for supervisors and surveyors (include 1-day field test and 1-day feedback)	CDC	March 2013	Trained supervisors and surveyors
8	Field data collection	CDC	April 2013	Data collected and edited
8	Data entry, management and analysis workshop	CDC	May 2013	Drafted report

## Objective 2: To use the findings of the assessment to develop quality improvement plan (QIP)

No	Activities	WHO	WHEN	Output
1	Develop a supervisory checklist for site visits	CDC, WHO, NMCHC, CPA, UNICEF, URC	May, 2013	Drafted checklist
2	Send to all members of TFMCH to get feedback	CDC, WHO, NMCHC, CPA, UNICEF, URC	May, 2013	Drafted workplan
3	Organize a final consultation on drafted checklist	CDC, WHO, NMCHC, CPA, UNICEF, URC	May, 2013	Agreed workplan
4	Organize a dissemination and quality improvement plan workshop <ul style="list-style-type: none"> <li>• Disseminate findings</li> <li>• Improvement plan</li> <li>• Present checklist</li> </ul>	CDC, WHO, NMCHC, CPA, UNICEF, URC	Nov-Dec, 2012 & Jan 2013	Drafted assessment tool
5	Conduct quarterly visits to assessed hospitals	CDC, WHO, NMCHC, CPA, UNICEF, URC	Feb, 2013	Received feedback

## Objective 3: To review the pre-service training curriculum of the University of Health Sciences (UHS) and Nursing Schools to review the curriculum (UHS/Nursing Schools)

<b>No</b>	<b>Activities</b>	<b>WHO</b>	<b>WHEN</b>	<b>Output</b>
1	Assign a CDC staff to lead review	PCB	Oct, 2012	Assigned staff
2	Collect curriculum of UHS/Nursing Schools and site visits	PCB	Nov 2012	Agreed workplan
3	Create a team (NPH, AHC, CDC, NMCHC, WHO, UNICEF)	PCB	Nov 2012	Formulated team
4	Review curriculum (desk review) by assigned team	PCB	Nov-Dec, 2012	Revisited curriculum
5	Consultative meeting with relevant stakeholders	CDC, NMCHC, CPA, UHS/Nursing Schools	Jan-Feb, 2012	Revised curriculum
6	Dissemination of revised curriculum	CPA, UHS/Nursing Schools	March, 2012	Disseminated curriculum among faculty staff

## Objective 4: To strengthen the capacity of selected hospitals to provide care for sick newborn (quality)

No	Activities	WHO	WHEN	Output
1	Work with CDC staff to draft workplan (desk review and site visit) • Prepare a conceptual paper	PCB	Oct, 2012	Drafted workplan
2	Brief DDG-TFMCH about workplan	PCB	Nov 2012	Agreed workplan
3	Work with WHO to discuss on workplan (+fund)	PCB	Nov 2012	Revised workplan
4	Brief DDG – TFMCH	PCB	Nov, 2012	Revisited workplan

## Objective 4: To develop the training curriculum and guideline for newborn care (pediatric ward)

<b>No</b>	<b>Activities</b>	<b>WHO</b>	<b>WHEN</b>	<b>Output</b>
1	Discuss with NCMCH on progress of guideline development	CDC	Oct, 2012	Reviewed guideline
2	Finalize curriculum and guideline	NMCHC	?	Finalized guideline

# Expected impact

- Short and medium terms:
  - Skill and knowledge of health staff
  - Technical and financial supports
  - Harmonized, linked, coordination between pediatric ward and other supporting services (SOP)
  - Strengthened partnership between Ministry of Health and partners
  - Increased utilization of health facilities (annual contact of newborn)
- Long-term:
  - Reduction of newborn death