SPEEDIER Planning: Theory of change for Rabies in the Philippines

Black text: SPEEDIER Red text: Other

	Economic Choices	Spatial Challenges	Human Resource	Awareness and Behaviour	Practice	Policy and Guidance (standards)	Health System	PEP use	Surveillance	Capacity to build an evidence base
Problem Statement			Veterinary and medical staff do not work together				The health system is currently weak		Poor surveillance = poor data with which to assess progress	
Individual problem statements	• Economic costs are not fully measured • How to reach the farthest Rabies risk areas • Incentives for more efficient use of vaccines • Costs of travel for treatment are prohibitive • Global vaccine shortage • Cost of vaccines is prohibitive	• Island geography helps and hinders control • Uncontrolled dog movement	• Limited manpower in veterinary services • Animal and health workers don't work together • Lack of budget to address HR discrepancies • Animal and health workers don't fully follow protocols • Poor implementation of IBCM • Lack of manpower in the community • Unclear triggers for bite investigation and sample collection • No trigger to investigate biting dogs • GIDA (Geographically Isolated Deprived Area) at higher risk	• Lack of awareness on Rabies prevention • Responsible pet ownership issue • Dogs are considered not worth investment • Poor health seeking behaviour post-bite • Patients delay bite exposure consultation • Healthy dogs might bite nasty humans • No caution around aggressive animals	• No innovation in good practice • Policy and practice are not aligned • Poor protocols to follow through • Weak referral system • Weak implementation of Anti-Rabies laws • No person assigned to monitor the laws • No M&E for the laws • There is a misunderstanding of Rabies risk • Awareness activities don't reach at risk population	• WHO policies may not be locally acceptable • Criteria to certify freedom not at WHO standard • No evidence-based outbreak response strategy • No existing operational/implementation plans to follow IBCM	• Governments hide Rabies transmission • No local executive commitment to rabies control • Short-term investment plans • Focus on rabies alone will widen health inequalities • Weak service delivering network (link between different sectors) • National and local health priority-setting clash • Roles not (or weakly) assigned • Poor implementation of rabies strategic plan • One health not practiced • Interventions are not sustainable • No support to maintain systems • Inappropriate control measures taken under pressure • Challenging to scale up/out successful interventions • Control across country borders	• Rabies is endemic but preventable • Restrictive policies in administration of vaccines • Administrating PEP requires training • PEP use not guided by surveillance • Misuse of PEP • Human rabies cases occur despite vaccination • Don't understand vaccine failures • Delayed treatment • Poor wound washing • Poor quality vaccine • Health workers not confident withholding PEP • Consequences of wrongly withholding PEP are devastating • Unintended discouragement of PEP-seeking • RIG is used but maybe not needed	• Lack of data capture on human investigations • Lack of data on animal cases • Incomplete exposure/case data • Animal cases are underestimated (passive techniques only) • Dog population underestimated for vaccine targeting • Limited lab confirmation of human rabies • Slow outbreak investigation and response	• Assumptions underlying sample size are guesses • Intervention might 'leak' between clusters • Outcomes not monitored continuously • Sequencing is expensive • Sequencing requires specialist training • Opportunistic genetic sampling • Limited genetic data for Philippines
Solution	Improved knowledge on socioeconomic facilitators and barriers to successful implementation and roll-out: 1) provide evidence for rational and efficient PEP delivery; 2) gather information on economic and societal costs of Rabies, PEP and IBCM		SPEEDIER IBCM protocols and excellent implementation		SPEEDIER IBCM protocols support practice change: 1) surveillance; 2) ascertainment; 3) risk assessment; 4) treatment 5) service delivery	Improved policy environment facilitating adoption of IBCM at the local and national level	SPEEDIER will help improve health system by strengthening Rabies surveillance	High quality training in PEP use through IBCM and judicious PEP use will increase confidence and high-quality deliverance	Set protocols to define what is recorded during IBCM, case investigations and sample collection	SPEEDIER implements genomic surveillance and comprehensive, accurate continuous monitoring of outcomes