

SUPPLEMENTARY FILE 1

INTERVIEW PROTOCOL FOR HEALTH REGULATORS

Discussion Topics	Examples of Specific probes
A. <u>General information</u>	1. Name: _____ 2. Name of your department: _____ 3. Gender: _____ 4. Age: _____ 5. Years of medicine related working experience: _____
1. How do you understand the term “medicine shortage”?	
2. During the past 12 months, have you ever heard about the situation in which the supply of some drugs cannot meet the demands of market?	✓ If yes, please list several names of those drugs _____
3. Does your department have ever received notifications regarding to medicines shortage?	✓ If yes, from whom does your department receive the notification? ✓ What was the impact of notification?
4. Does your department have ever sent out notifications regarding to medicines shortage?	✓ If yes, whom does your department send the notification to? ✓ What was the impact of notification?
5. Does your department have ever taken some measures to prevent medicines shortages?	✓ If yes, please explain the details of the measures _____
6. Does your department have specific rules or procedures to struggle with medicines shortage?	✓ If yes, please explain the details of the rules or procedures _____
7. What are the effects of medicines shortages on patients?	✓ Financial consequences ✓ Clinical consequences
8. What are the reasons of medicines shortages?	✓ What are the reasons of medicines shortages from the perspectives of medicine manufacturers?

	<ul style="list-style-type: none"> ✓ What are the reasons of medicines shortages from the perspectives of pharmaceutical distributor or wholesaler? ✓ What are the reasons of medicines shortages from the perspectives of healthcare institute? ✓ Are there any other reasons causing medicines shortage? ✓ Among those causes above mentioned, what are the three most important ones in your opinion?
<p>9. How to solve the medicines shortages problem in your opinion?</p>	<ul style="list-style-type: none"> ✓ What the governmental authorities could do to manage medicines shortages? ✓ What the drug manufacturers could do to deal with medicine shortages? ✓ What the distributors or wholesalers could do to deal with medicines shortages? ✓ What the healthcare institutions could do to deal with medicines shortages? ✓ Are there any other solutions to manage this problem? ✓ Among those solutions, what are the three most important ones in your opinion?
<p>10. Which type of factors contributes to the shortage of particular brand of medicines?</p>	<ul style="list-style-type: none"> ✓ What are the reasons for particular brand shortage in your opinion? ✓ What are the possible solutions for particular brand shortage in your opinion? ✓ Why patients ask for specific brand of drug when equally comparable formulation is available? ✓ Why medical doctors keep on prescribing a brand whose supply is limited in market?