

### Barriers & Facilitators Assessment Toolkit (Worked Example)

# Introduction to the Worked Example: Planning Implementation of Hand washing Guidelines.

Hand hygiene compliance is critical to preventing spread of infections in many settings, including hospitals and health care centers. Existing data suggests that hospital patients in low- and middle-income countries are exposed to rates of healthcare associated infections at least 2-times more often than in high income countries. In addition to the universal challenges to the implementation of effective hand hygiene strategies, hospitals in low- and middle-income countries face a range of unique challenges (see Watson, D'Mello-Guyett, Flynn (2019); Loftus, Guitart, Tartari et al. (2019) and Xu, Shi, Yang et al. (2021)).

#### **Questions:**

What are the Barriers and Facilitators to the implementation of hand washing guidelines in health care facilitates in LMICs?

What are evidence based implementation strategies to address identified Barriers & Facilitators?

Reference: 1. Watson J, D'Mello-Guyett L, Flynn E, et al Interventions to improve water supply and quality, sanitation and handwashing facilities in healthcare facilities, and their effect on healthcare-associated infections in low-income and middle-income countries: a systematic review and supplementary scoping review BMJ Global Health 2019;4 2. Loftus MJ, Guitart C, Tartari E, Stewardson AJ, Amer F, Bellissimo-Rodrigues F, Lee YF, Mehtar S, Sithole BL, Pittet D. Hand hygiene in low- and middle-income countries. Int J Infect Dis. 2019 Sep;86:25-30. 3. Xun Y, Shi Q, Yang N, Yang N, Li Y, Si W, Shi Q, Wang Z, Liu X, Yu X, Zhou Q, Yang M, Chen Y. Associations of hand washing frequency with the incidence of illness: a systematic review and meta-analysis. Ann Transl Med. 2021 Mar;9(5):395.

### How to use this Example:

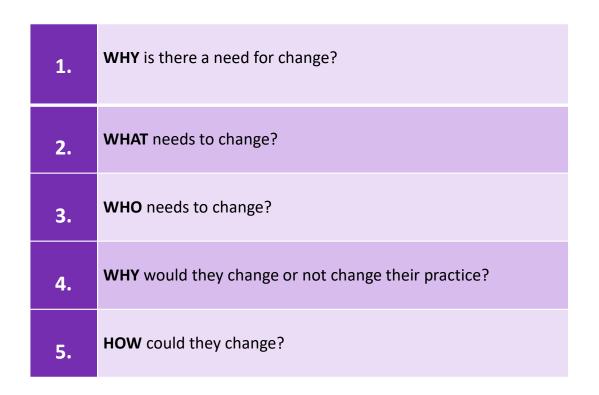
Barriers & Facilitators are factors that can impact (positively or negatively) the implementation of evidence-based tools and can be found at three different levels of practice:

- 1) the Patient/Community level;
- 2) the Health Provider level and;
- 3) the Health System level.

Implementation strategies are ways to address Barriers & Facilitators and can be used to improve the implementation of a specific evidence-based policy or guideline.

Over the next few slides, users will be shown how to use the toolkit to a) identify specific Barriers & Facilitators related to an example evidence based guideline and b) how to select strategies to address the identified Barriers & Facilitators using **the example of a hand washing guideline**.

# Five questions to consider when planning for implementation of an evidence based policy or guideline:



**Reference:** Straus S, Tetroe J, Graham I, Leung E. "Knowledge-to-action: what it is and what it isn't". *Knowledge Translation in Health Care* Available: <a href="https://ktbooks.ca/knowledge-to-action-what-it-is-and-what-it-is-an

### Worked Example: Hand washing Guidelines

In this example, we want everyone (patients, health care providers, family members, hospital workers etc.) to wash their hands before and after every contact with a patient, patient surroundings, body fluids, and before clean procedure.





Reference: Unity Health Toronto. Hand Hygiene Compliance. Updated May 20, 2020. Available from: https://unityhealth.to/wp-content/uploads/2022/01/Hand-Washing 20200520 1600 compressed.pdf

1. Why is there a need for change?	Hospital acquired infections are an important cause of morbidity and mortality worldwide, with lack of proper hand washing techniques an important contributor	
2. What needs to change?	To address this challenge, improved compliance with evidence based hand washing policy and/or guideline is needed.	
3. Who needs to change?	Everyone who has contact with patients, including: health care workers, hospital workers (i.e. like cleaners, food handlers), and community members (i.e. a patient's family, visitors to the hospital).	
4. Why would they change or not change their practice?	Factors (positive or negative) that can impact the implementation of a hand washing guideline (i.e. <b>Barriers &amp; Facilitators</b> ).	
5. How could they change?	Use of evidence based implementation strategies to address identified Barriers and Facilitators of change can increase the successful implementation of a handwashing policy or guideline within a health care facility	

# In this example, the toolkit will be used to answer these questions:

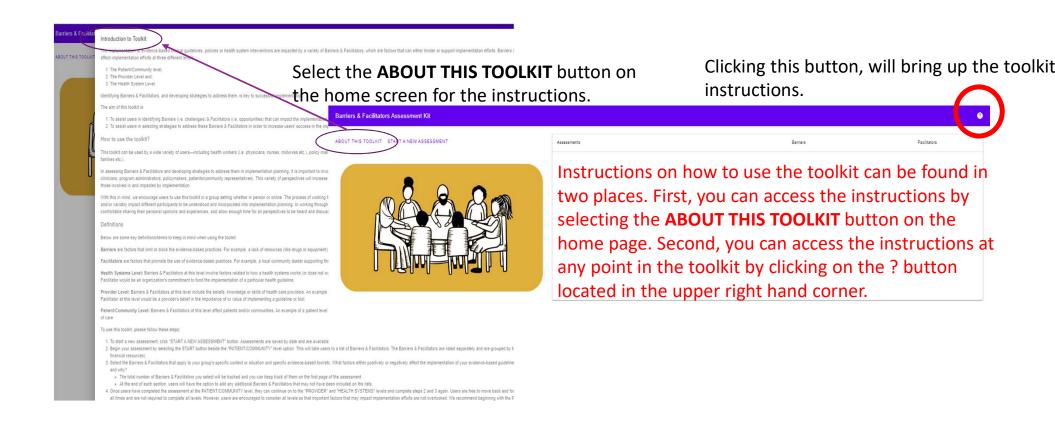
4. Why would they change or not change their practice?

Factors (positive or negative) that can impact the implementation of a hand washing guideline (i.e. Barriers & Facilitators).

5. How could they change?

Use of evidence based implementation strategies to address identified Barriers & Facilitators of change can increase the successful implementation of a hand washing policy or guideline within a health care facility

### Where to find the toolkit's instructions:



### Step 1: Start a new assessment

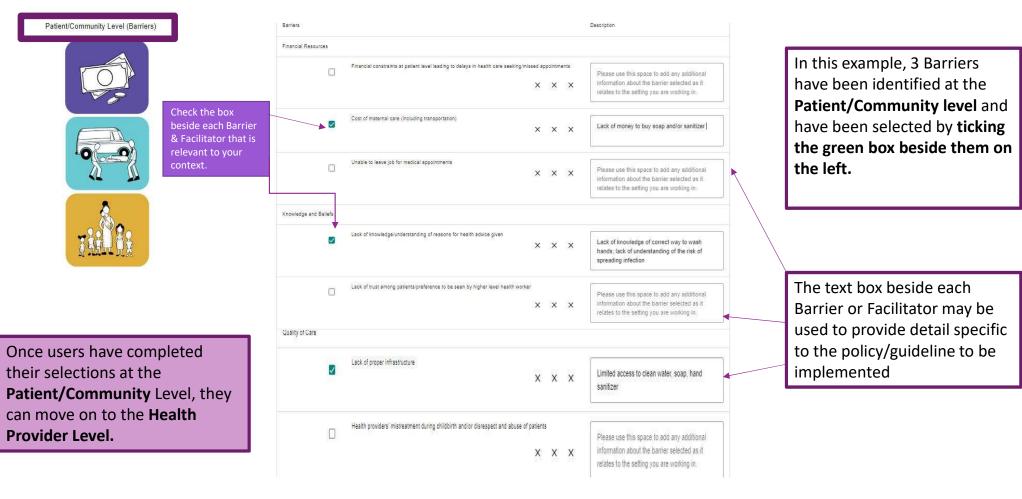
When you click on the link for the toolkit, it will take you to the home page of the "Barriers & Facilitators Assessment Kit." To begin, click the button that says **START A NEW ASSESSMENT**. For the toolkit's full instructions click the button that says **ABOUT THIS TOOLKIT**.



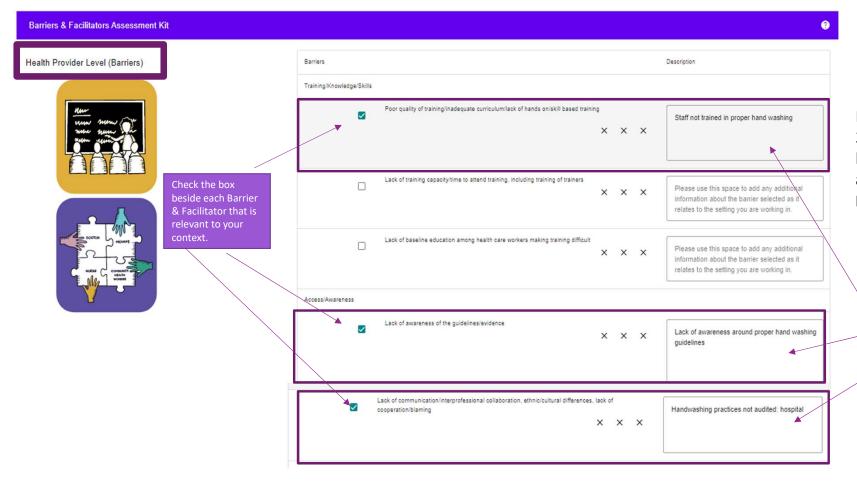
### Step 2: Start with the Patient/Community Level

Begin your assessment by selecting the VIEW button beside the PATIENT/COMMUNITY level option. This will take you to a list of Barriers & Facilitators, which are listed separately and Keeps track of how many Barriers & Facilitators you identify at each level of access are grouped by topic/theme. Barriers & Facilitators Assessment Kit This tool helps you identify barriers across three different levels of access. Facilitators Levels of Access Select **VIEW** to access each level

#### Step 3: Select Barriers & Facilitators at Patient/Community Level



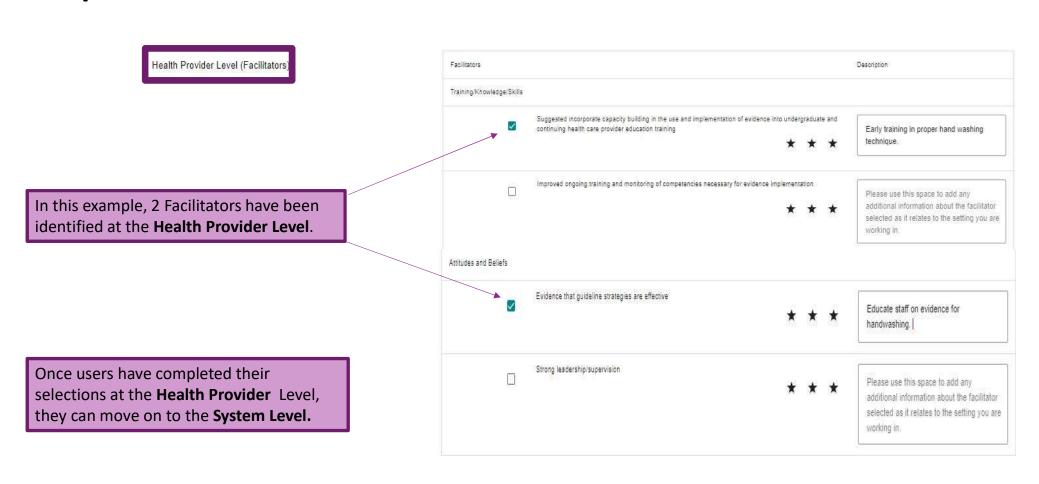
#### Step 4: Select Barriers & Facilitators at Health Provider Level



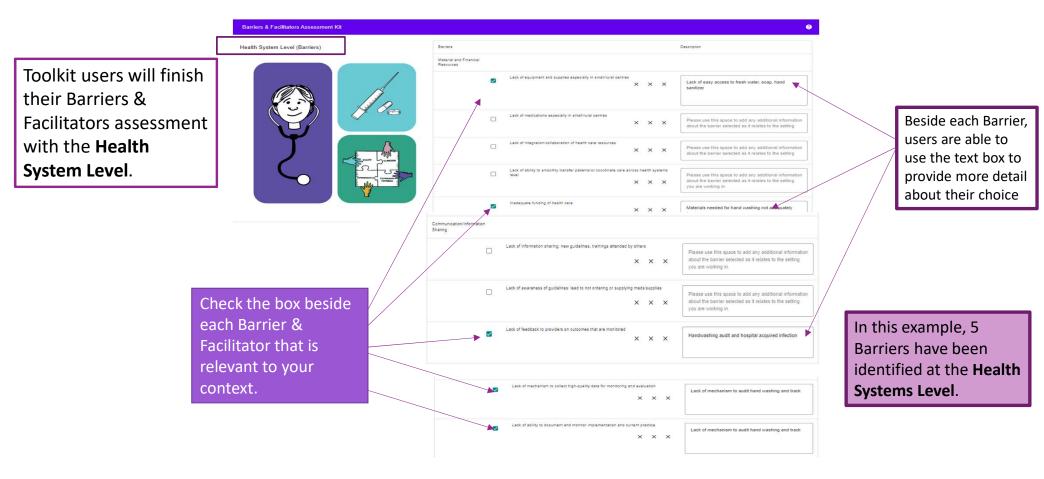
For this example, 3 Barriers have been identified at the **Health Provider Level**.

Beside each Barrier or Facilitator, users are able to use the text box to provide more detail about their choice

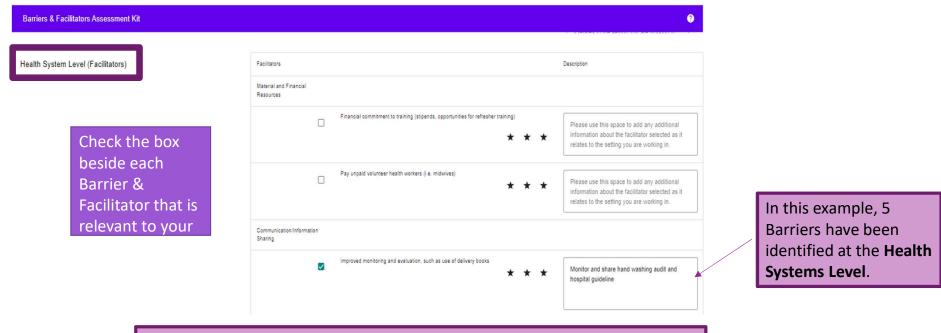
#### Step 4: Select Barriers & Facilitators at Health Provider Level



#### Step 4 : Select Barriers & Facilitators at Health System Level



#### Step 4: Select Barriers & Facilitators at Health System Level

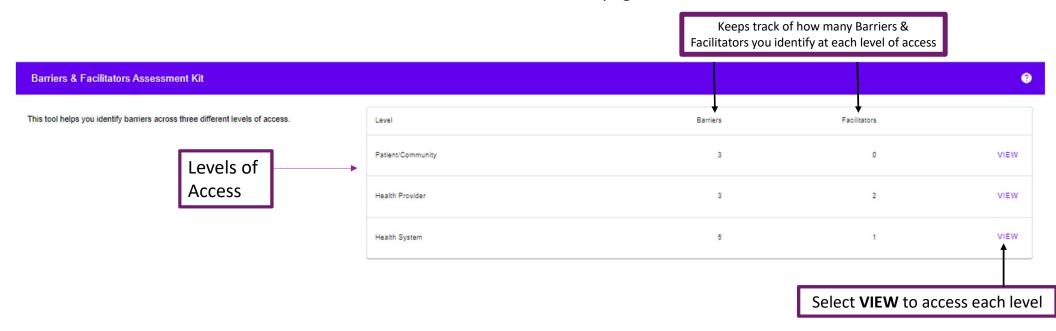


In this example, 1 Facilitator has been identified at the Health Systems Level.

#### **Keeping Track of Selected Barriers & Facilitators**

Barriers & Facilitators for this example have been assessed at the **Patient/Community Level, Health Provider Level** and **the Health Systems level**. The next step is to organize these selections and determine which ones will have the biggest impact on the implementation of a handwashing guideline.

The total number of Barriers & Facilitators will be tracked on the front page of the user's assessment



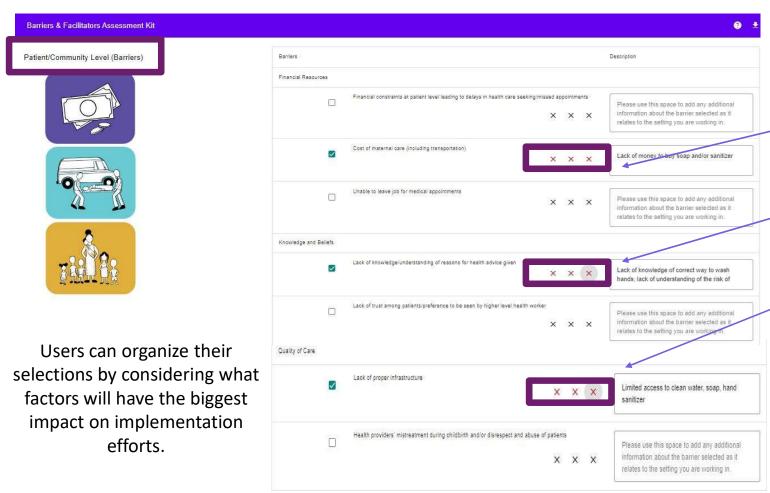
### **Step 5: Organizing Barriers & Facilitators**

After you have completed your initial assessment, as a group you can organize your choices by considering what factors will have the biggest impact on implementation efforts and using the Xs and  $\frac{1}{X}$ s.

The Barriers with the biggest potential impact (i.e. ones that are of high importance) should have 3 xs and the Barriers with the smallest potential impact (i.e. ones that are of low importance) should have 1 x.

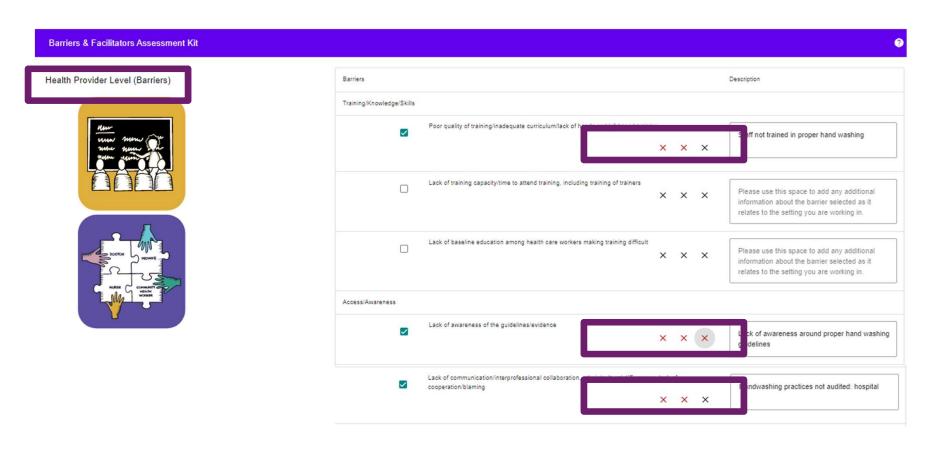
The Facilitators with the biggest potential impact (i.e. ones that are of high importance) should have 3 stars and the Facilitators with the smallest potential impact (i.e. ones that are of low importance should have 1 star).

#### Step 5: Organizing Barriers & Facilitators: Patient/Community Level

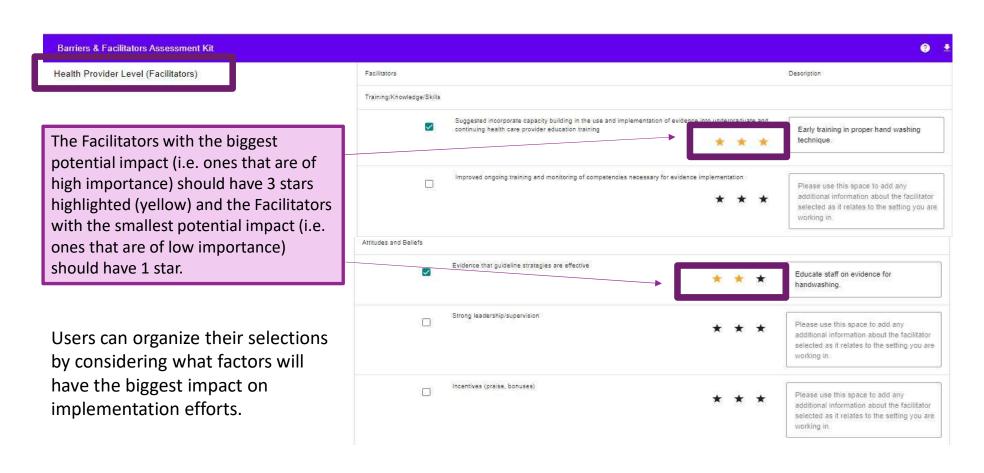


The Barriers with the biggest potential impact (i.e. ones that are of high importance) should have 3 Xs highlighted (red) and the Barriers with the smallest potential impact (i.e. ones that are of low importance) should have 1 X.

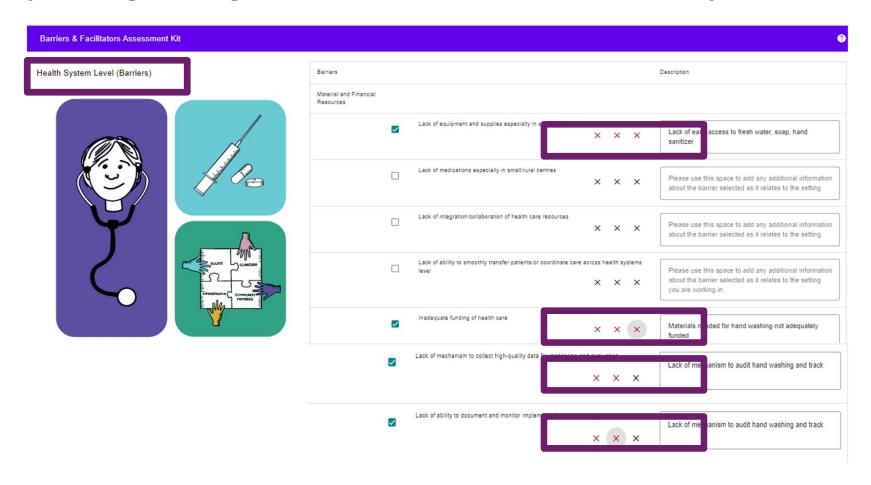
#### Step 5: Organizing Barriers & Facilitators: Health Provider Level



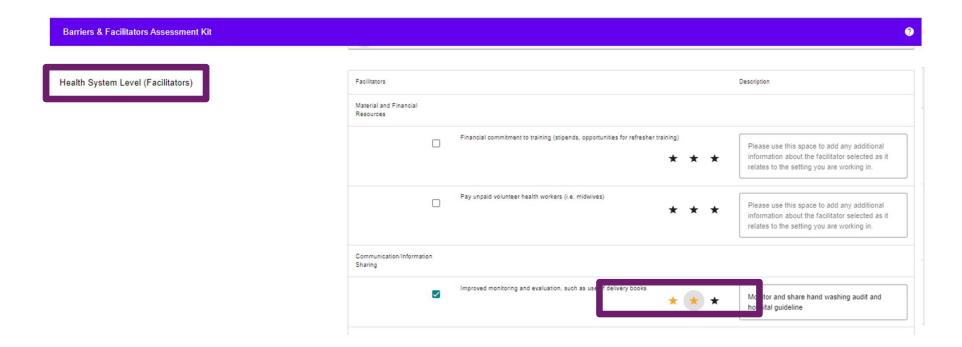
#### Step 5: Organizing Barriers & Facilitators: Health Provider Level



#### **Step 5: Organizing Barriers & Facilitators: Health Systems Level**



#### Step 5: Organizing Barriers & Facilitators: Health Systems Level



#### Results of Barriers & Facilitators Assessment

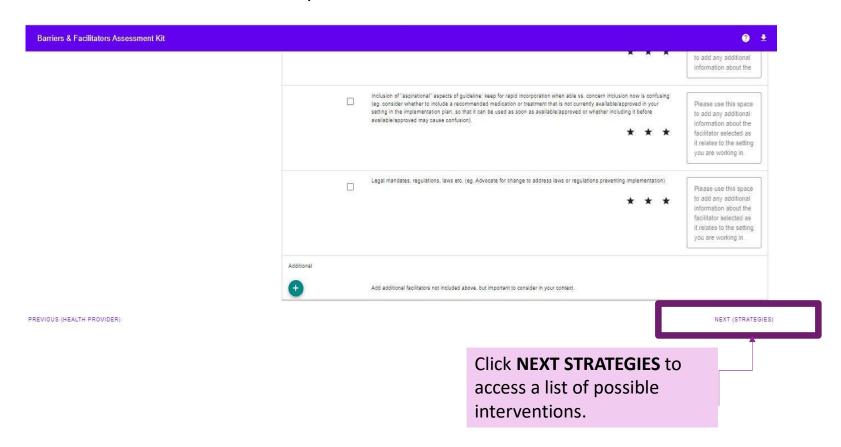
Barriers & Facilitators for this example have been assessed at the Patient/Community Level, the Health Provider and the Health Systems level. The results of this assessment are listed in the table with specific references to the handwashing example.

Barriers & Facilitators (with Rankings)				
Patient/Commun	ity Level			
Barriers:	-Lack of money to buy soap (xxx)			
	-Lack of knowledge of correct way to wash hands (xxx)			
	-Limited access to clean water, soap. (xxx)			
Health Provider L	evel			
Barriers:	-Staff not trained in handwashing skills (xx)			
	-Lack of awareness around proper hand washing technique (xxx)			
	-Hand washing practices not being monitored or audited (xx)			
Facilitators	-Early training in proper hand washing techniques (***)			
	-Educate staff on evidence for hand washing (**)			
Health Systems L	evel			
Barriers:	-Lack of easy access to fresh water (xxx)			
	-Materials needed for hand washing not adequately funded (xxx)			
	-Lack of mechanism to audit hand washing (xx)			
	-Lack of mechanism to collect data on hand washing (xx)			
	-Lack of feedback to hospital on link between hand washing and hospital acquired infection (xx)			
Facilitators:	-Monitor and share hand washing auditing system (**)			

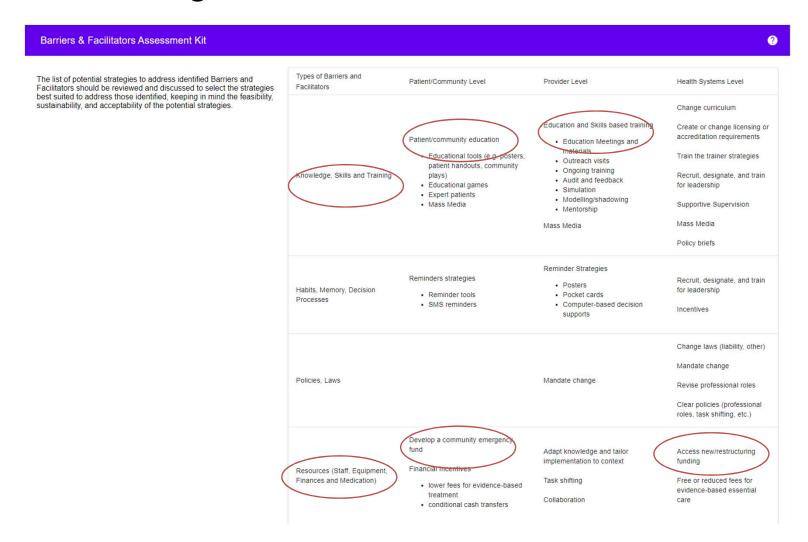
The next step is to organize these selections considering which ones will have the biggest impact on the implementation of a handwashing policy and/or guideline.

### **Step 6: Matching Barriers & Facilitators to Strategies**

After selected Barriers & Facilitators are prioritized, the strategies table at the end of the toolkit can be used to select possible interventions to address them.



#### List of potential strategies to address identified Barriers & Facilitators



# **Step 6: Matching Patient/Community Level Barriers & Facilitators to Strategies**

Barriers & Facilitators (with Rankings)		Possible Implementation Strategies			
Patient/Community Level					
Barriers:	-Lack of money to buy soap (xxx)	Develop community fund			
	-Lack of knowledge of correct way to wash hands (xxx)	Patient/community education strategies			
	-Limited access to clean water, soap. (xxx)	Advocacy or community fund			

# Step 6: Matching Health Provider Level Barriers & Facilitators to Strategies

Barriers & Facilitators (with Rankings)		Possible Implementation Strategies
Health Provider Level		
Barriers:	-Staff not trained in hand washing skills (xx)	Educate staff in proper hand washing technique
	-Lack of awareness around proper hand washing technique (xxx)	Staff education, Reminder strategies to support proper technique
	-Hand washing practices not being monitored or audited (xx)	Monitor hand washing compliance and hospital acquired infections rates
Facilitators:	-Early training in proper hand washing techniques (***)	Include training in hand washing technique in health care provider curriculum
	-Educate staff on evidence for hand washing (**)	Provide education session to introduce the guideline and outline evidence base for hand washing

# Step 6: Matching Health System Level Barriers & Facilitators to Strategies

Barriers & Facilitators (with Rankings)		Possible Implementation Strategies			
Health Systems Level					
Barriers:	-Lack of easy access to fresh water (xxx)	Advocacy for infrastructure funding			
	-Materials needed for hand washing not adequately funded	Advocacy for funding, review of local budget to ensure hygiene products considered/budgeted for			
	-Lack of mechanism to audit hand washing (xx)	Develop and implement monitoring system			
	-Lack of mechanism to collect data on hand washing (xx)	Develop and implement monitoring system			
	-Lack of feedback to hospital on link between hand washing and hospital acquired infection	Policy brief			
Facilitators:	-Monitor and share hand washing auditing system (**)	mandate and monitor change			

#### **Additional Resources to Guide Selection of Implementation Strategies**

Below are links to two resources that you may find helpful in selecting implementation strategies to address the Barriers & Facilitators identified in steps 1-5.

The **CFIR-ERIC implementation strategy mapping tool** (and associated articles) provides a list and short description of implementation strategies and is available at <a href="https://cfirguide.org/choosing-strategies/">https://cfirguide.org/choosing-strategies/</a>

The SELECT tool provides an approach to categorizing barriers and facilitators, identifying and prioritizing intervention functions and includes a list and definitions of potential implementation strategies to address identified barriers and facilitators in section 3, available at <a href="https://knowledgetranslation.net/the-select-tool/">https://knowledgetranslation.net/the-select-tool/</a>