



### WHO « My five moments for Hand Hygiene » Direct observation method

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# Outline

- The Direct Observation Method
- Take Home Messages

### WHO Hand Hygiene Technical Reference Manual

#### Hand Hygiene Technical Reference Manual

To be used by health-care workers, trainers and observers of hand hygiene practices



- For health-care workers, trainers and observers
  - The manual helps to understand:
    - the importance of HCAI
    - the dynamics of crosstransmission
    - the "My five moments for hand hygiene" approach
    - the correct procedures for handrubbing and handwashing
    - the WHO direct observation method

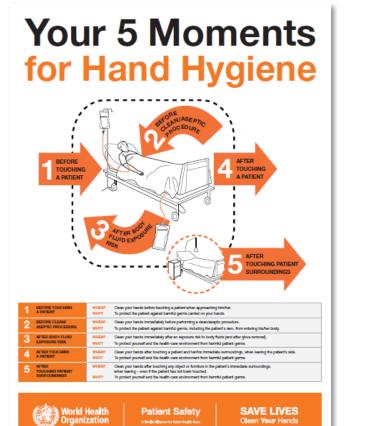
### Why monitoring hand hygiene compliance?

- It is the **most valid indicator** of HCWs' behavior related to hand hygiene
- It gives feedback information to the implementation action plan of hand hygiene improvement strategy
- It improves understanding of hand hygiene among HCWs and contributes to its promotion (performance feedback)

### WHO hand hygiene direct observation method

- insures consistency between reference concepts, definitions and tools
- allows observation of the technique (How to handrub)
- permits interaction between "the observer " & "the HCW "

(performance feedback)





### How to observe hand hygiene?

- Direct observation is the most accurate method
- The observer must familiarize him/herself with the methods and tools used in a promotion campaign
- The observer must be trained to identify and distinguish the indications for HH occurring during health care practices at the point-of-care\*

- The observer must conduct observations openly, without interfering with the ongoing work, and keep the identity of the HCWs confidential
- Compliance should be detected according to the "My 5 Moments for Hand Hygiene" approach recommended by WHO

\* Observers must be validated at the individual and group level

### The approach

- « My 5 Moments for Hand Hygiene» approach at point-of-care
- Minimizes the complexity of hand hygiene
- Logically integrates into the workflow
- Is easy to remember
- Proposes a unified vision for trainer, observer and HCW
- Is applicable in any healthcare setting

Is consistent with evidenced-based risk assessment of HCAI and spread of MDRO

# The WHO Hand Hygiene Direct Observation Method

### WHO observation method for monitoring of HH





World Health Organization						Patient Safety A World Alburce for Safer Health Care						SAVE LIVES Clean Your Hands				
Ob	se	rvati	on Fo	rm												
Facil	ity:					Period				Session Number*:						
Servi	ice:					Date: (dd/mm/yy)					Observer: (initials)					
Ward	1:					Start/End time: (hh:mm)			: / :		Page N°					
Depa	rtm	ient:				Session duration		:	C		City**:					
Cour	Country**:															
Prof.				Prof.		t		Prof.cat		Prof.ca						
Code	<u>}</u>			Code N°	•			Code			Code	•				
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<u>Opp.</u> 1		bef-pat. bef-asept aft-b.f. aft-pat. aft.p.surr.	HH Action HR HW O missed O gloves	1		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HH Action HR HW O missed O gloves	1		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.		HR HW missed	<u>Opp.</u> 1		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HR HW O missed O gloves
2		bef-pat. bef-asept aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	2		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	2		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	0	HR HW missed gloves	2		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
3		bef-pat. bef-asept aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	3		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	3		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	0	HR HW missed gloves	3		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
4		bef-pat. bef-asept aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	4		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	4		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	0	HR HW missed gloves	4		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
5		bef-pat. bef-asept aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	5		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves	5		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	0	HR HW missed gloves	5		bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves

### **Before starting**

Determine the time and scope of the observations

CHECKLIST WHY are observations conducted? WHERE they should be made? WHO should be targeted?



# Recording the information: the header of the Observation Form

Facility:	Period Number*:	Session Number*:
Service:	Date: / / (dd/mm/yy)	Observer: (initials)
Ward:	Start/End time: : / : (hh:mm)	Page N°.
Department:	Session duration: (mm)	City**:

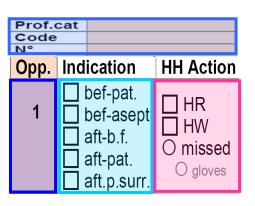
- The header allows observations to be precisely located in time and place (setting, date, session duration and observer) and the data to be classified and recorded (period, session)
- Before observing, the header should be completed
- After observing data should be complemented and checked
- Period and session numbers may be completed at the data entry moment

If the observation form is not correctly identified with date, period, location...etc, the content <u>cannot</u> be considered for the data analysis



# **Recording the information: summary of the Observation Form**

Facility:	Period Number*:				Session Number*:	
Service:	Date: (dd/mm/yy)	/	/		Observer: (initials)	
Ward:	Start/End time: (hh:mm)	:	/	:	Page N°:	
Department:	Session duration: (mm)				City**:	



- Period: the time window during which compliance is measured in a certain setting (e.g trimester, semester, pre- and post-periods before and after an implementation)
- Session: the time when the observation takes place in a precise setting (ward); it is numbered and timed (start and end times) in order to calculate its duration. It should last 20 minutes (+/-10 min)
- Setting: institution-wide, department, service, ward sectors
- Professional category: observed HCWs are classified according to four main professional categories (nurse, auxillary, doctor, other HCW)
- Number of opportunities: sample size should be sufficient to undertake stratification and compare results from different periods in the same setting reliably (a minimum of 200 opp per unit per observation period)
- Indications: one indication or multiples
- Action: hand hygiene action performed (handrubbing or handwashing) or missed

# Recording the information: the grid of the Observation Form (1)

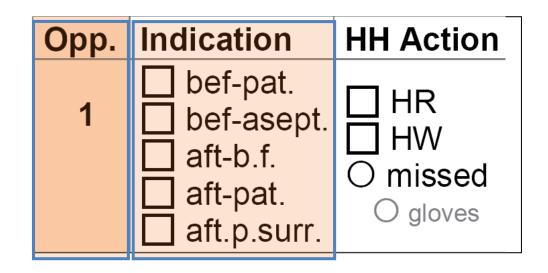
Prof.	cat	
Code	•	
N°		
Opp.	Indication	HH Action
1	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
2	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
3	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
4	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
5	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
6	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
7	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves
8	bef-pat. bef-asept. aft-b.f. aft-pat. aft.p.surr.	HR HW O missed O gloves

- Each column can be dedicated <u>either</u> to a professional category or to an individual HCW whose category is mentioned
- Where data is classified by professional category, the number of HCWs observed in each category during each session must be specified. This is done by inserting a vertical mark (I) in the item "N°" each time a new health-care worker in the category is observed
- Where data is classified by HCW, a maximum of four can be included in the same form
- Several HCWs may be observed at the same time. Do not observe simultaneously more than 3 HCWs (ideally no more than 1-2 in Intensive Care Units)
- Each column contains eight boxes. Each box corresponds to an opportunity where the indications and the positive or negative actions observed are entered

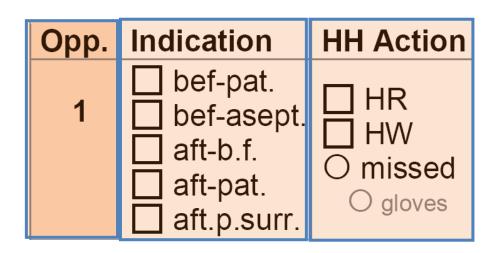
### The observer point of view Indications and opportunity for HH

The **opportunity** is <u>the number of times</u> hand hygiene is necessary during health-care activities to interrupt germ transmission by hands

- Indication: the reason why hand hygiene is necessary at a given moment.
   It is justified by a risk of germ transmission from one surface to another
- At least one indication defines the opportunity
- Multiple indications may define one opportunity



# The observer point of view Opportunity and HH action



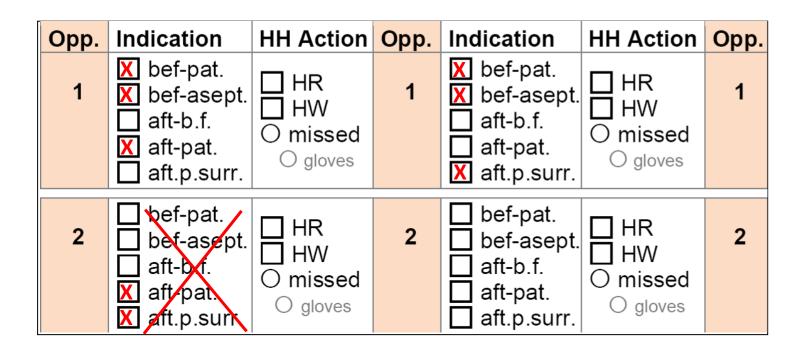
- The hand hygiene action should correspond to a counted opportunity
- The hand hygiene action is performed either by handrubbing or handwashing. If it is not performed when indicated, it must be recorded as "missed"
- An observed hand hygiene action not corresponding to an actual indication should not be recorded

# Recording the information: the grid of the Observation Form (2)

Prof.	cat			cat			Prof.cat				Prof.	cat		
Code							Code				Code	•		
N°				N°							N°			
Opp.	Indication	HH Action	Opp.	Indic	ation	HH Action	Opp.	Indi	cation	HH Action	Opp.	Indication	HH Action	
1	<ul> <li>□ bef-pat.</li> <li>□ bef-asept.</li> <li>□ aft-b.f.</li> <li>□ aft-pat.</li> <li>□ aft.p.surr.</li> </ul>		1	☐ be ☐ af ☐ af	ef-pat. ef-asept. ft-b.f. ft-pat. ft.p.surr.		1	□ b □ a □ a	ef-pat. ef-asept. ift-b.f. ift-pat. ift.p.surr.	O missed	1	<ul> <li>□ bef-pat.</li> <li>□ bef-asept</li> <li>□ aft-b.f.</li> <li>□ aft-pat.</li> <li>□ aft.p.surr.</li> </ul>	O missed	
2	<ul> <li>□ bef-pat.</li> <li>□ bef-asept.</li> <li>□ aft-b.f.</li> <li>□ aft-pat.</li> <li>□ aft.p.surr.</li> </ul>	O missed	2	☐ be ☐ af ☐ af	ef-pat. ef-asept. ft-b.f. ft-pat. ft.p.surr.		2	☐ b ☐ a ☐ a	ef-pat. ef-asept. ift-b.f. ift-pat. ift.p.surr.	O missed	2	<ul> <li>□ bef-pat.</li> <li>□ bef-asept</li> <li>□ aft-b.f.</li> <li>□ aft-pat.</li> <li>□ aft.p.surr.</li> </ul>	O missed	

- means that no item is exclusive (if several indications apply to the opportunity, they should all be marked)
- O means that the action (hand hygiene) was missed

### Key points for the observer about coincidence of indications



All double, triple, quadruple indications combinations may be observed

 Except one! The indications after patient contact and after contact with patient surroundings can never coincide in the same opportunity

# The observer point of view Compliance with hand hygiene (1)

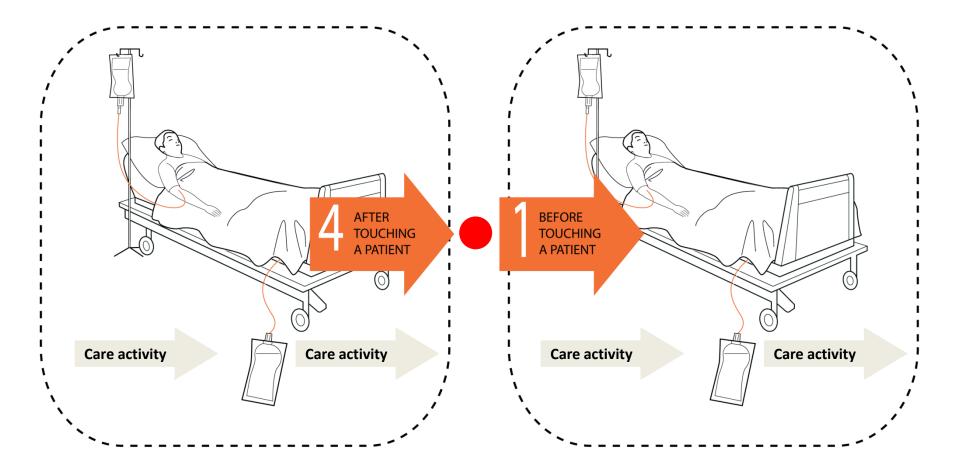
#### COMPLIANCE

#### performed hand hygiene actions (x 100)

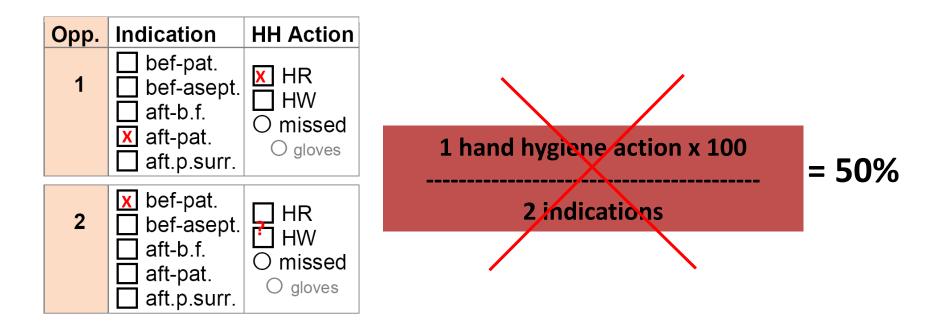
required hand hygiene actions (opportunities)



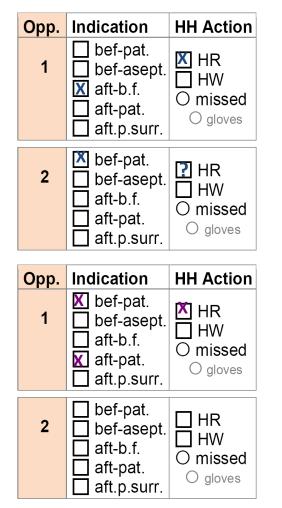
### Coincidence of two indications



# The observer point of view Compliance with hand hygiene (2)



# The observer point of view Compliance with hand hygiene (3)





1 hand hygiene action x 100

= 100%

#### **1 opportunity**

## Data validation

Data validation should be checked concerning:

- The right number of opportunities audited (at least 200 opportunities /unit /per time period)
- Observers showing higher or lower compliance rates compared to the other auditors
- A very high level of compliance either for a particular moment or HCP
- Keeping a proportion of opportunities observed according to the indications observed



# Please state whether true or false

Statements	Т	F
HH observations should be done by trained and validated observers		
HH direct observation method provides an opportunity for bedside education		
HH direct observation method cannot be used for evaluating HH technique		





GENÈVE

### Question

Which of the following statements is false?

- HH indication means why HH is neccesary at a given moment
- More than 1 indication may be recorded for the same opportunity except after patient and after patient surroundings
- Each HH action done should be recorded whether it is related to an HH indication or not
- Compliance calculated by dividing performed HH actions to required HH actions multiplied by a hundred



# Advantages and disadvantages of monitoring HH using the direct observation method

#### Box 2

Advantages and disadvantages of monitoring hand hygiene using the direct observation method

Advantages

- Ability to estimate adherence with all "My 5 Moments for Hand Hygiene"
- Identify barriers to hand hygiene
- Evaluation of hand hygiene technique
- Most widely used method for monitoring adherence
- Applicable in virtually all facilities, regardless of the level of resources

Disadvantages

- Lack of standardized methods for training observers and conducting auditing sessions
- Periodic validation of observer accuracy is often not performed
- Inadequate sampling of hand hygiene opportunities \*<1-2.5% of all observed opp
- Hawthorne effect results in exaggerated adherence rates
- Observing all indications for hand hygiene is difficult in some settings
- Conducting observations is time consuming
- Observers and frontline staff may have concerns regarding the accuracy of results





# Things to remember



When observing HH remember each of the 5 Moments and ask the question "is what I am observing an indication for HH according to the 5 Moments?"

#### A HH Moment is only documented when :

- The field observer can accurately observe the HCW *Moment* that has been completed
- If an auditor is unsure whether the observed HCW performed HH, then such *Moments* should not be recorded

### Take home messages

- Monitoring HH plays a key role in improving HH compliance and maintaining its acceptable levels
- Direct observation by a validated observer is the gold standard for monitoring HH compliance
- Direct observation method allows
  - Detection of adherence with all 5 indications
  - Evaluation of the HH technique, and the barriers to HH
  - Performance feedback



# Thank you

#### IPC team of the University Hospitals of Geneva



