

Hand Hygiene Hands-on: compliance monitoring and validation of the observers

Outline

- **Role of monitoring and feedback** in the WHO hand hygiene (HH) multimodal strategy
- **What is expected from a HH observer and from an expert**
- **Setting a plan** for education and validation of HH observers
- **Specific role of feedback**
- Possible **models of HH programs** regarding monitoring

WHO HH improvement Multimodal Strategy



Hand hygiene
**monitoring and
feedback**
are part of
component 3

Why monitoring HH compliance?

- It is the most valid **indicator of HCWs' behaviour related to HH**
- **Feedback information to the implementation action plan of HH improvement strategy**
- **Improves understanding of HH amongst 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*)



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

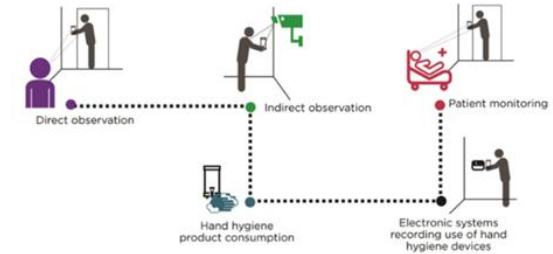
Advantages

- 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

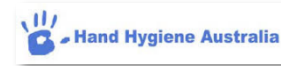
Disadvantages

- 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

Are there other ways to perform HH monitoring?



- Electronically-assisted direct observation



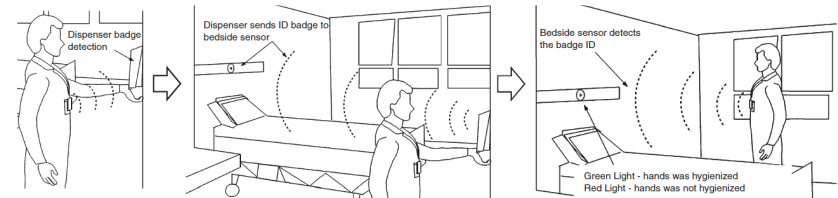
- Electronic ABHR dispenser counters (indirect)



- Video-monitoring observation



- Group monitoring systems



- HH quality monitoring



John M. Boyce. *Infect Dis Clin N Am* 2021;35: 553–73

Courtesy F. Bellissimo-Rodrigues

the future is promising...

WHO Hand Hygiene improvement Multimodal Strategy

1a. System change –
alcohol-based handrub at point of care



1b. System change – access to safe,
continuous water supply, soap and towels



2. Training and education



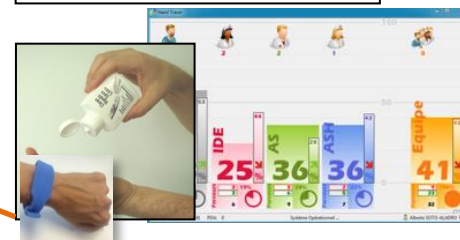
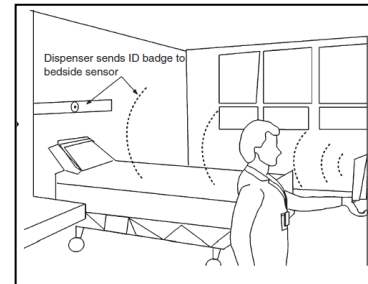
3. Evaluation and feedback



4. Reminders in the workplace

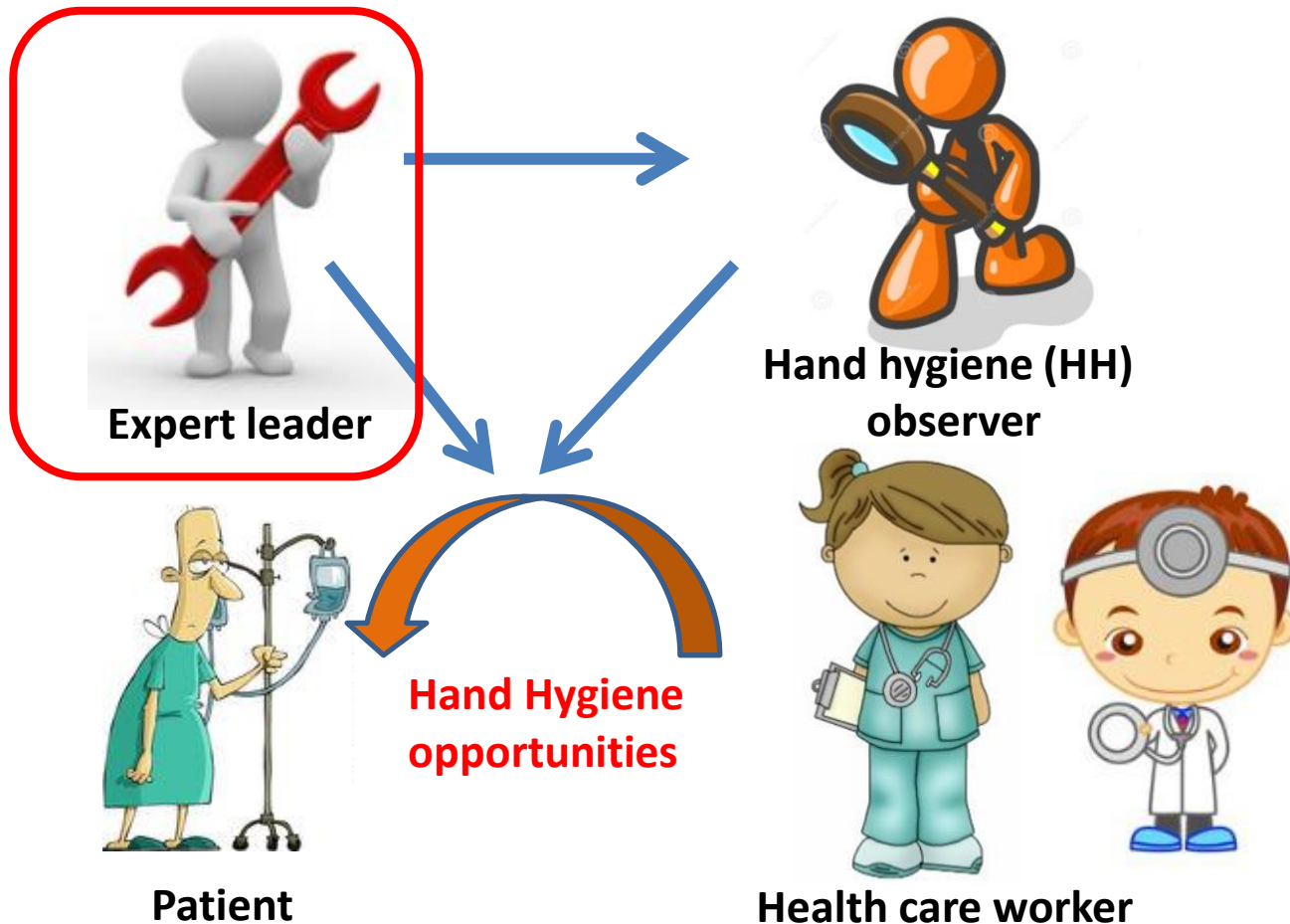


5. Institutional safety climate



WHO direct observation method is still the gold standard regarding monitoring of HH

Who are the different actors?



What is expected from a HH expert leader

Competence

Expertise (ID specialists, IPC practitioners ...)
Experience in the field

Objectivity

Fact-based observations

Integrity

relationship of trust, credibility,
and equity



Confidentiality

Respect for the trainee observer's
values

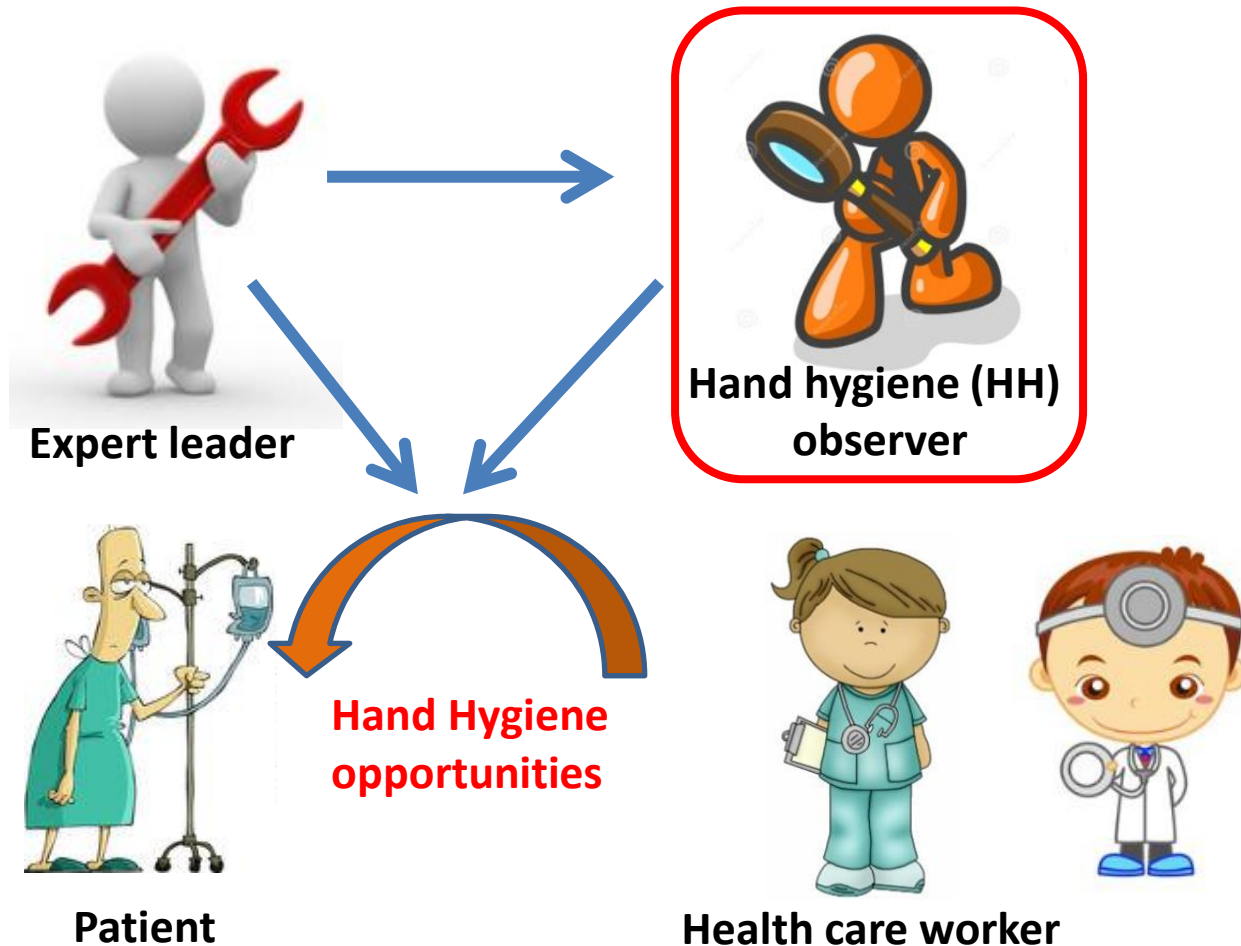
Pedagogy

How to de-dramatize the situation
Reminding HCWs of shared goals

Communicative

how they adapt themselves to the
trainee observer

Who are the different actors?



What is expected from a HH observer?

Observant

Insightful

with **solid knowledge** of the HCW's organization of care, and the patient's environment



Objective

no judgment, but a factual snapshot of what he/she sees ; “You only write down what you have observed!”

Precise

A good **communicator** and attentive **listener**

Reproducibility of observations

Reactive

What is expected from a HH observer?

Promotes good practices

Understands the paradox: An observer's presence could be seen as an intrusion for the HCW, but he/she shouldn't feel judged

Brings **attention** to specific issues



Highlights what is compliant

Measures the difference between recommended /observed practices based on the 5 indications

What is expected from a HH observer

At the beginning of the observation



Observer introduces
himself/herself to the HCW

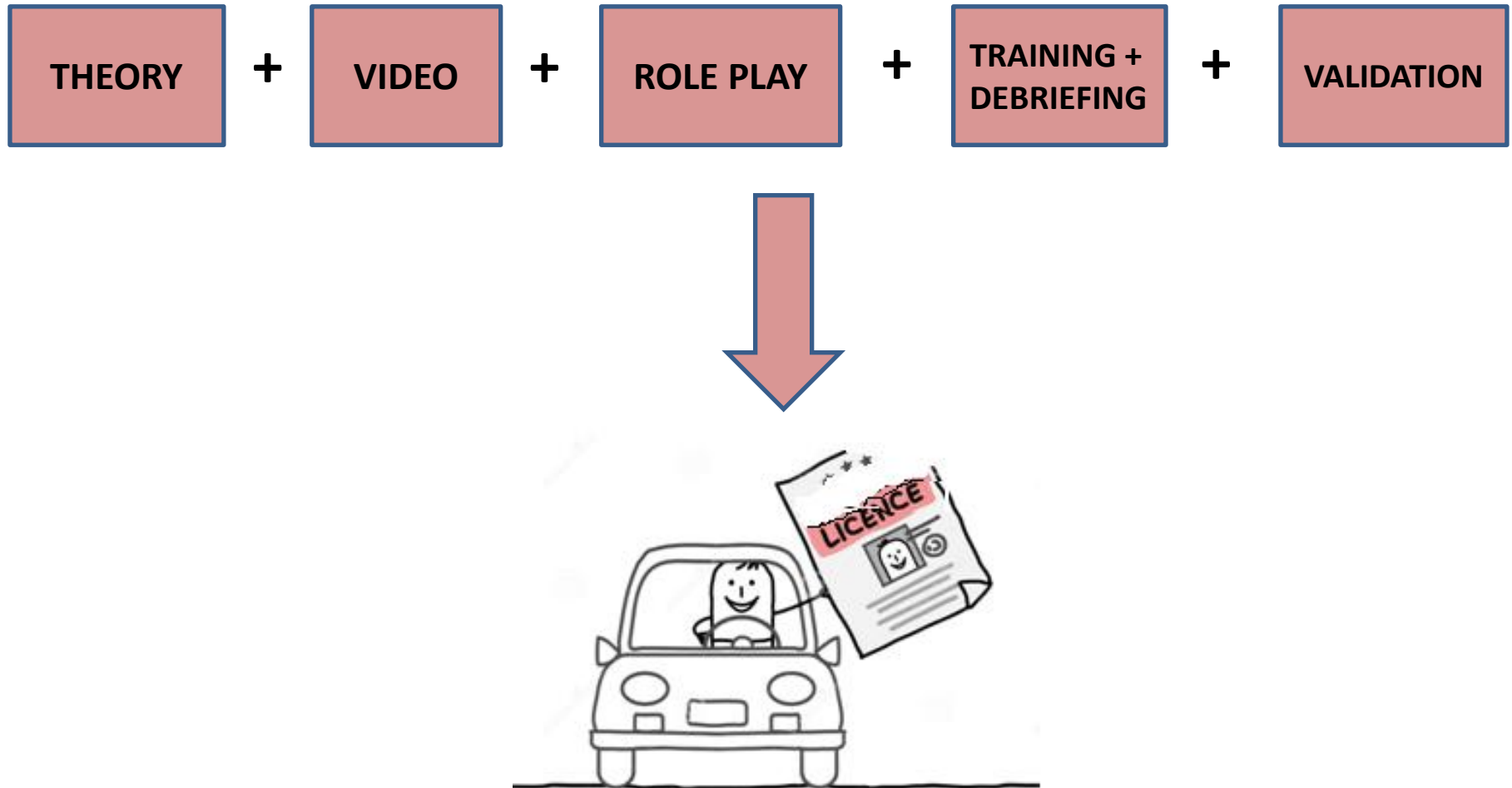
Focuses on the purpose
(observing the 5 indications)



Reminds HCWs
of the common goals
that they share with the observer
(institution)

Reminds HCWs
of the concrete objectives
of the observation (ex. over 80% compliance)

Plan for education & validation of HH observers

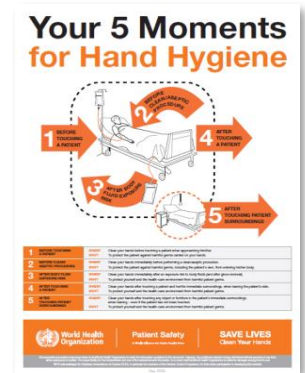


Plan for education & validation of HH observers



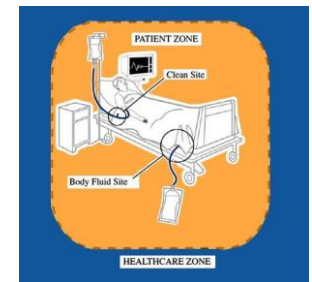
Theory

- The 5 indications for HH
(When? How?)
- Understanding of the Patient Zone
(Where?)



Hands on training

- Reviewing the videos of clinical scenarios
- Role play
- Bedside training



Plan for education & validation of HH observers

Role Play

- Based on a health care scenario
- The trainee within a group
 - will discuss and define the indications
 - will play the health care situation to another group /HCW and patient
 - will play the feedback situation



Training and Education

Simulation:

- a performance of a real-life clinical scenario
- providing a realistic learning experience,
- in an environment that is safe, structured and supportive
 - Promotes patient safety
 - Enhances critical thinking skills
 - Increases self confidence
 - Provides clinical opportunities



Plan for education & validation of HH observers

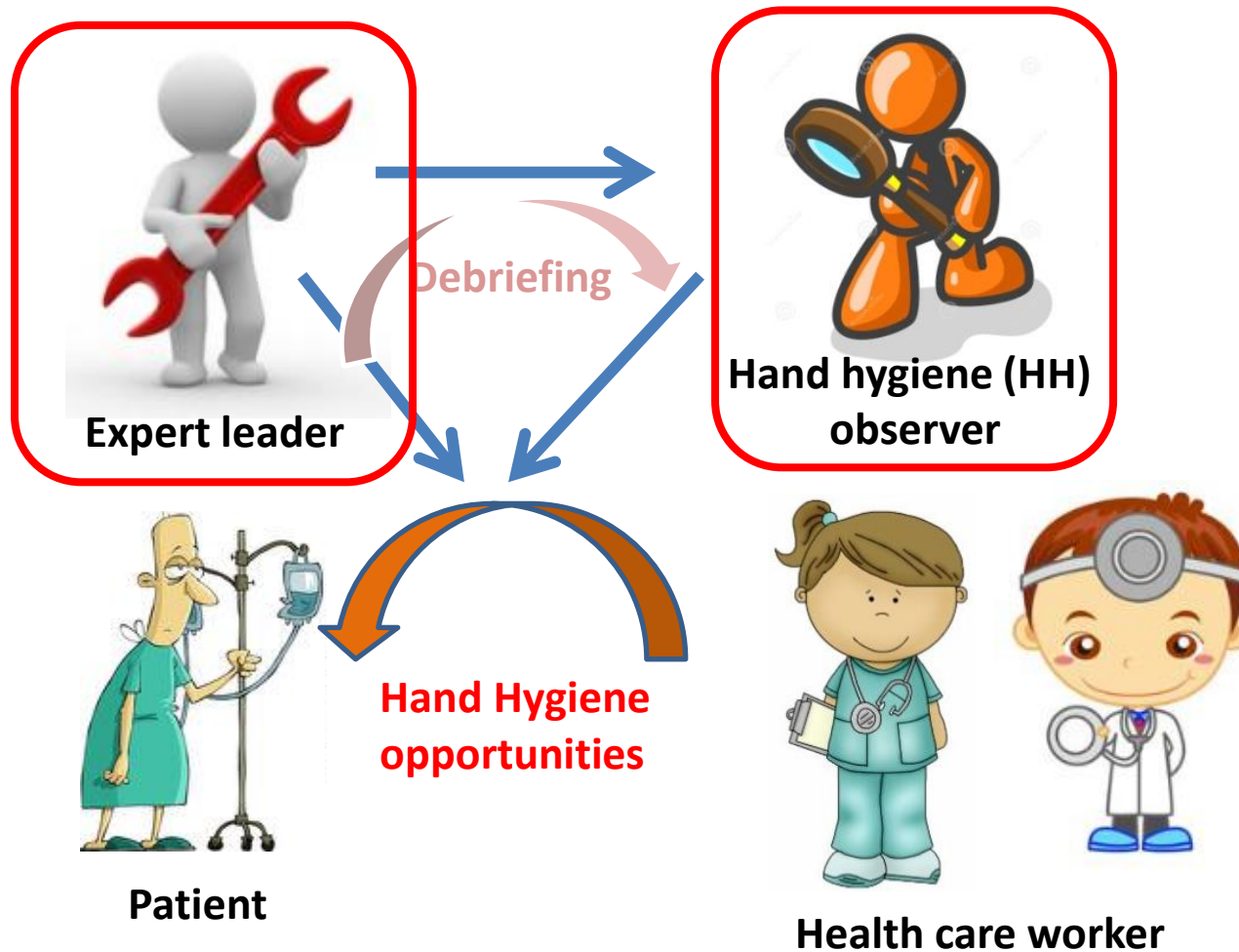


Training

➤ *Bedside*

- With an expert in groups of two
- Observation sessions (each session 20' \pm 10' and the whole observation period no longer than 2 h)
- Different types of care
- Practical learning (to begin by observing routine daily care of the patient and then tackle complex specific situations)

Debriefing (expert - observer)



Plan for education & validation of HH observers



➤ *Immediate debriefing*

- Comparison of the trainee's observations with those of the expert (immediately after the observation)
- A precise and detailed analysis
- Must take into account the environmental parameters (such as risk of infection, time, and organization of the workflow)

Plan for education & validation of HH observers



➤ ***Remote debriefing***

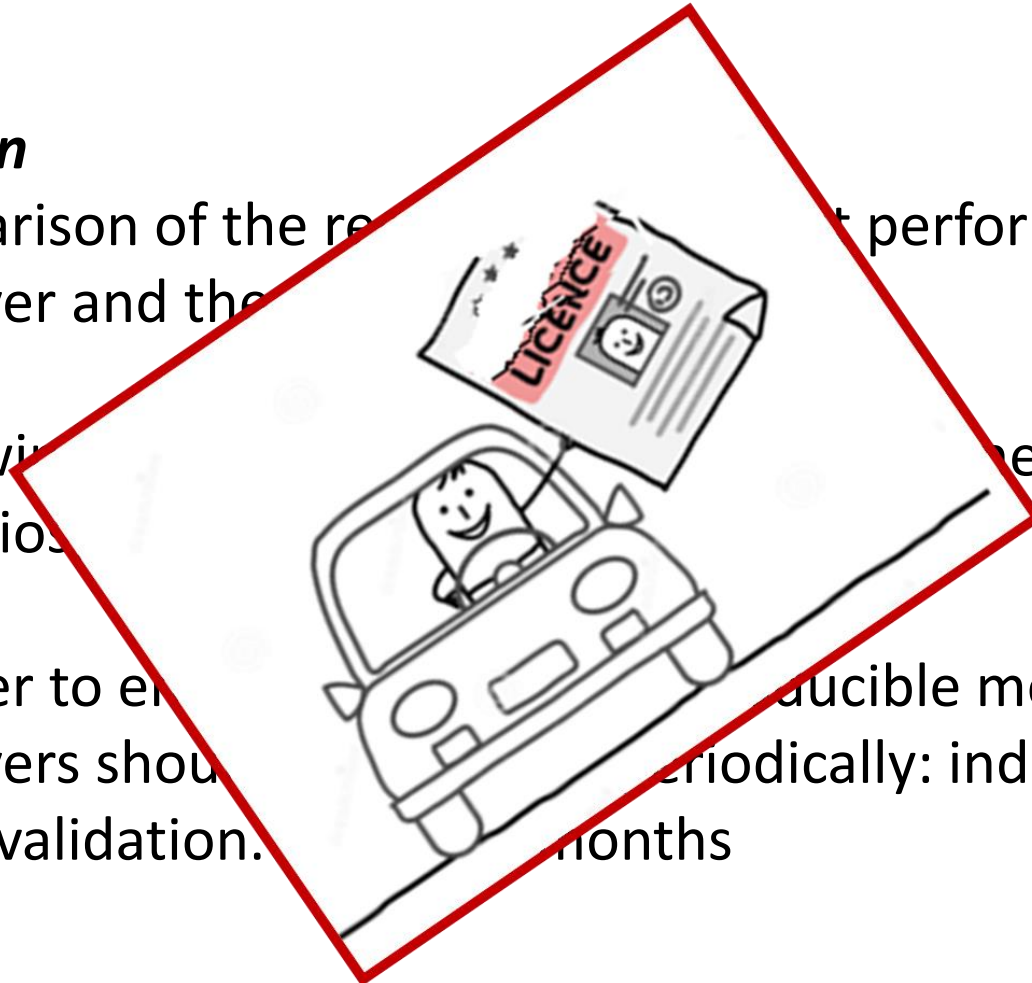
- A more general analysis that focuses on recurring problematic situations
- Comparison of the results of the trainee(s) and the expert
- More detailed discussion on the environmental parameters

Plan for education & validation of HH observers



Validation

- Comparison of the results performed by the observer and the results performed by the
- Reviewing scenarios performed with written
- In order to ensure credible monitoring, observers should be periodically: individual and group validation. months



Plan for education & validation of HH observers



Inter-rater reliability
Intra-rater reliability } **should be addressed in the validation**

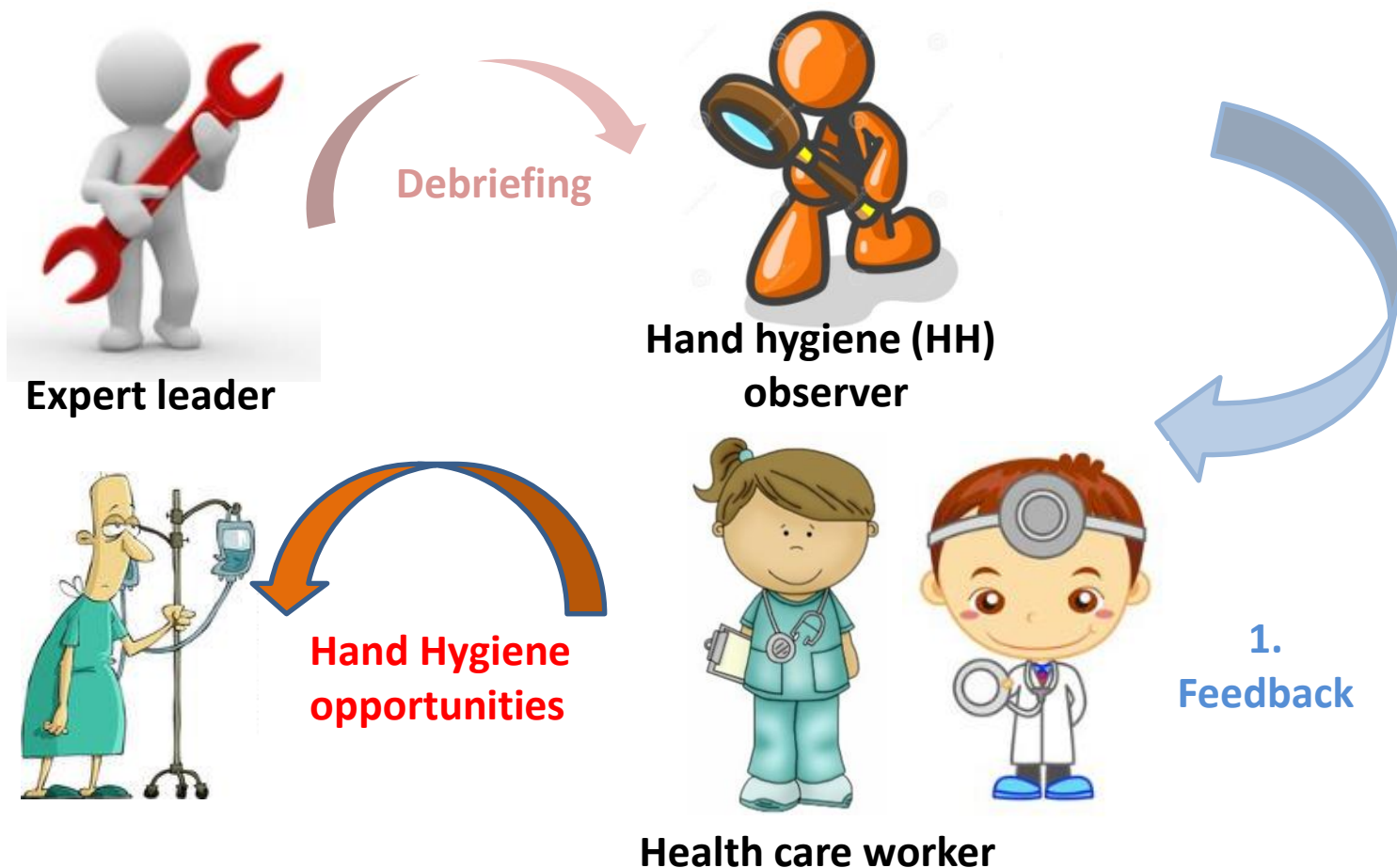
Inter-rater reliability

Rate of congruence (Kappa value) between the trainees' observations and the gold standard (expert or video)

Intra-rater reliability

The degree of agreement for the same observer (eg. viewing the video), on at least 2 occasion

The Feedback to HCWs



The Feedback to HCWs



Expert leader



Hand hygiene (HH)
observer



Hand Hygiene
opportunities



Health care worker

2.
Feed back

1.
Feedback

Specificities of the feedback to HCWs (immediate)

What?

Individualized feedback

When?

After each observation session

How?

Quick, oral or written



Specificities of the feedback to HCWs (deferred)

What?

Transmission of the monitoring results

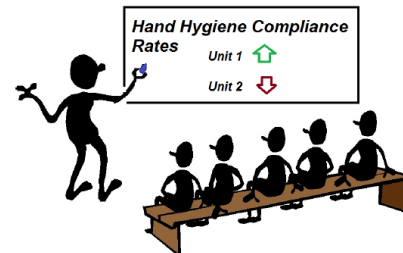
- to nurse and medical departments
- to hospital management

When?

A mutually agreed on period

How?

Oral and/or written report to the head nurse and the hospital management



Specificities of the feedback for the HCW

- Quantitative HH information - **When**
 - Opportunity: *done or not done + additional action*
- Qualitative HH information - **How**
- Guides the HCW towards compliance: **5 indications**
- **Focuses on the positive aspects** of their actions while highlighting areas for improvement
- Underscores the value of the HCW's role in patient care

Specificities of the feedback for the HCW

Performance feedback

- Helps HCWs to improve the understanding of the HH indications:
 - by showing the difference between perception and real HH behavior
- It is well accepted by HCWs (contrary to general belief)
- Feedback should be given in a manner that provides:
 - behavior change in HCWs
 - prevents HCWs give up or rationalizing away
- Goal setting (achievable) and action plan enables to optimize the impact of performance feedback

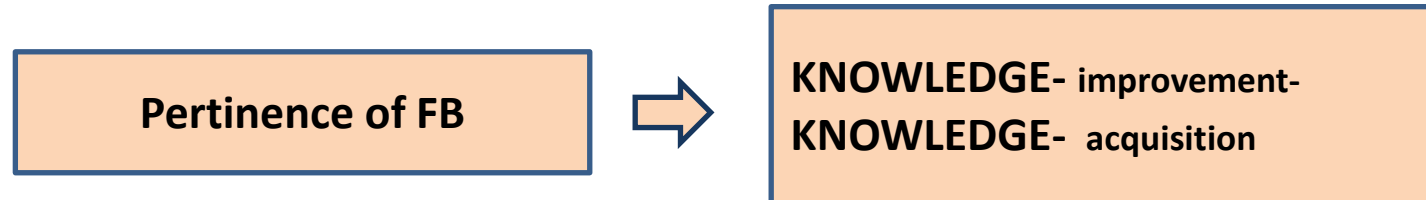
Stewardson AJ and Sax H. Performance feedback. In Pittet D., Boyce JM., Allegranzi B. eds. Hand hygiene: A handbook for medical professionals. Hoboken, NJ: Wiley Blackwell; 2017. p152-155.

Specificities of the feedback

5 characteristics were associated with the **improved effectiveness of feedback**:

1. Having a supervisor or senior colleague provide feedback (for HCWs)
2. Providing feedback at least monthly (observer team)
3. Providing feedback in both verbal and written forms (for observers and HCWs)
4. Using feedback to reduce instead of increase a particular behavior (for HCWs)
5. Setting clear goals with specific instructions for how to improve (for HCWs)

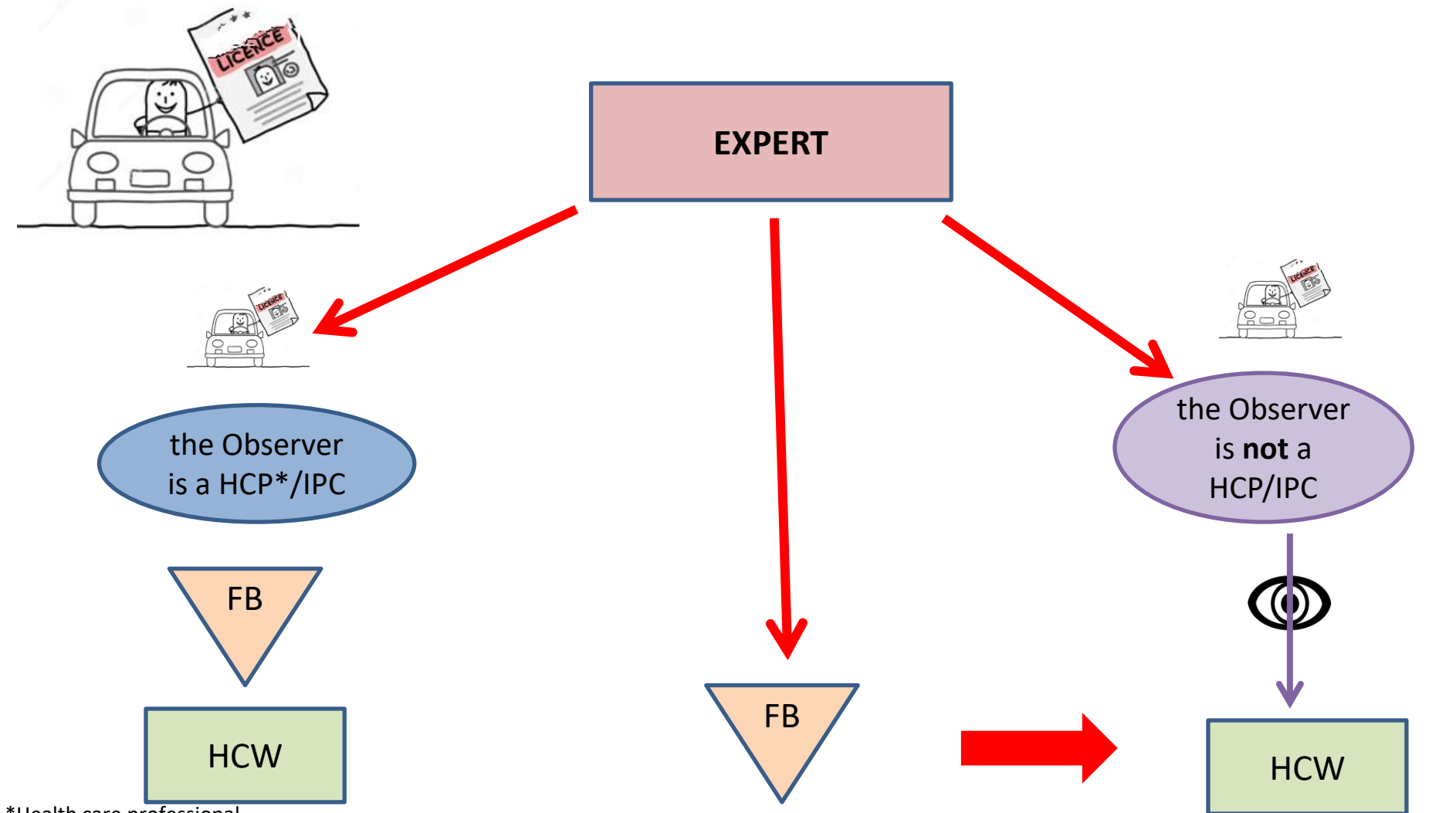
Specificities of the feedback for the observer



- To give indications in order to measure the distance between the HCWs and their objectives
- Allows for adjustment of the process and optimization of the teaching strategy
- The pertinence of FB is important for the improvement and the acquisition of knowledge

Possible models of HH programs

Permission to observe! regarding monitoring



*Health care professional

Take home messages



- All institutions should have a **plan for training and validation of HH observers**
- If institutions opt for a model with HH observers that aren't HCP with IPC background, a plan should be in place to supplement HCWs education/feedback
- **A plan to feedback** HCWs, departments and administrators should be in place

Take home messages



- **Training programs** should be planned with theoretical components, virtual trainings, direct observations and validation
- For a **reliable and reproducible monitoring**, individual and group **validation** of the HH observers should be done regularly, eg. 12-18 month
- **Inter and intra-rater reliability** of HH observers should be addressed in the observer training programs

Take home messages



- **Hand hygiene monitoring is not an end by itself.** It is a tool that:
 - Provides an outcome indicator that reflects HCW's behavior
 - Improves the understanding of HH amongst HCWs
 - Generates information for the HH improvement strategy
 - Electronic monitoring systems (EMS)
 - Ideally, should be able to reflect the **WHO 5 Moments**
 - Must be integrated in a **wider HH improvement strategy**
- ➔ Combination of EMS with direct observation method might improve quantitative and qualitative data on adherence rates

Thank you

IPC team of the University Hospitals of Geneva

