Patient Participation Programs on Hand Hygiene in Canada

Summary of our experience

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Disclosures

- I have the following financial relationships to disclose:
- Consultant for: AMG Medical – Nocospray
- Speaker's bureau for
  - Merck
  - Pfizer
- Grant/ Research support from:
  - Fonds de Recherche en Santé du Québec,
  - Lady Davis Research Institute
  - Jewish General Hospital Foundation
  - AMG Medical – Nocospray

Objectives

- Present the Canadian (and Swiss) experience on Patient Engagement

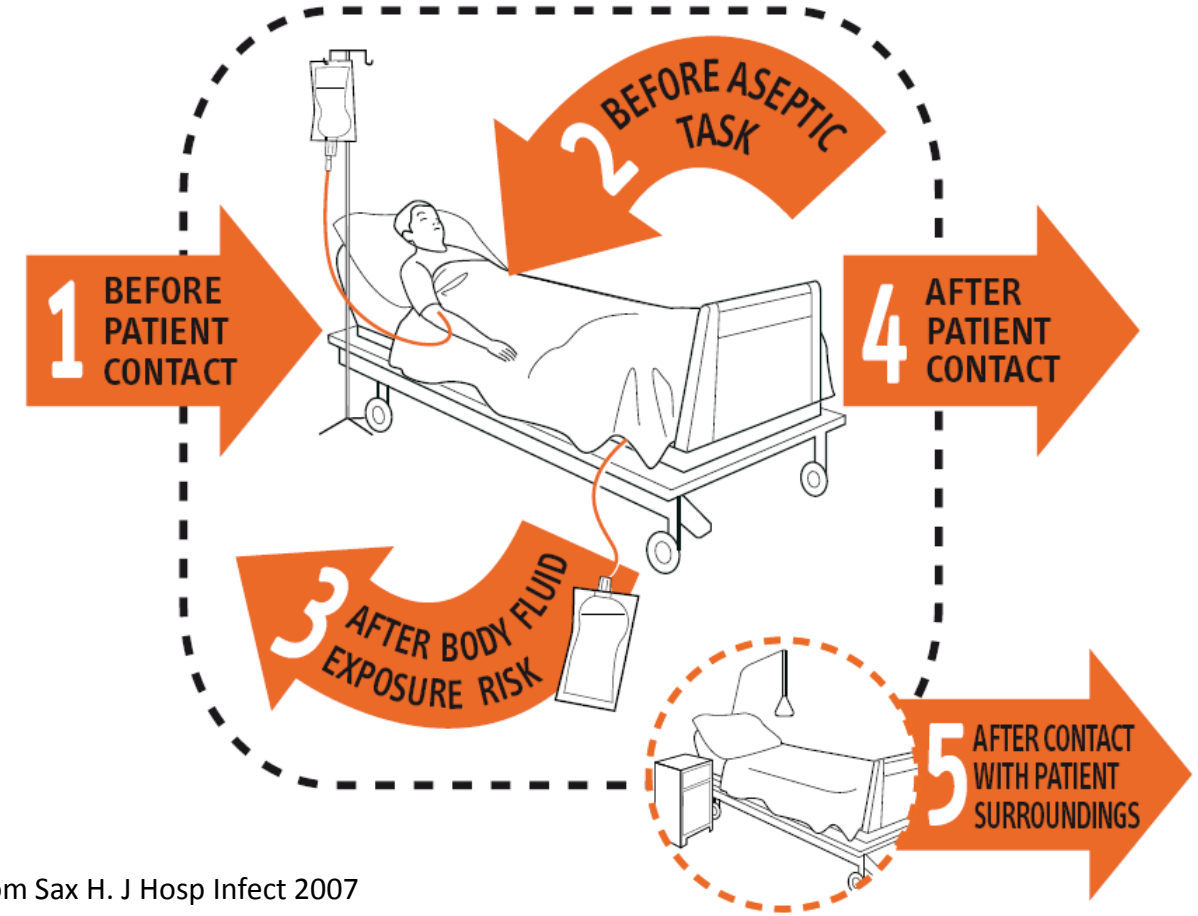
Hand Hygiene

Importance recognized

Hand hygiene, either by handwashing or hand disinfection, remains the single most important measure to prevent nosocomial infections.[1] The importance of this simple procedure is not sufficiently recognised by health-care workers (HCWs),[2] and poor compliance has been documented repeatedly.[3–5] Although some previous

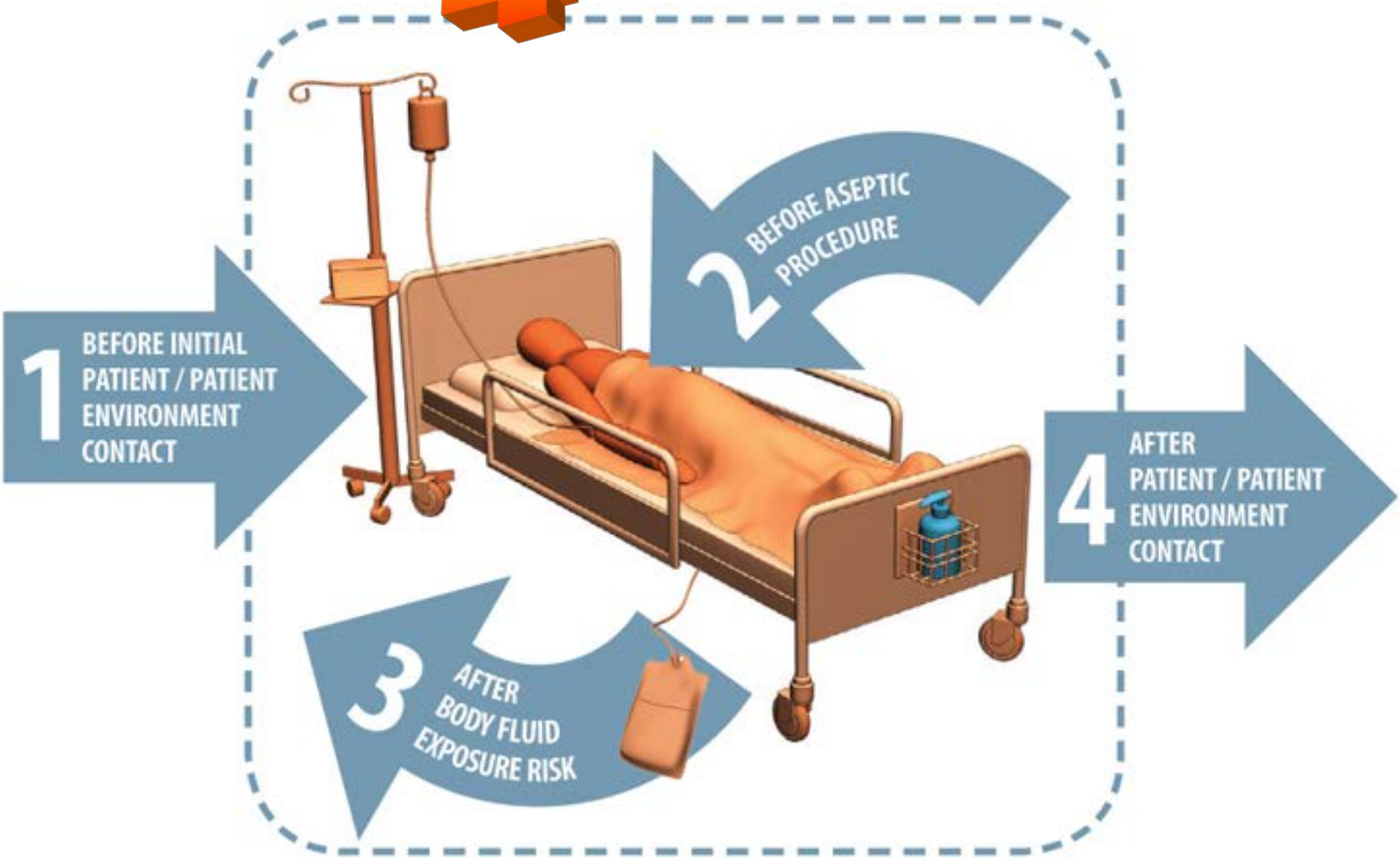
Pittet D et al., Lancet, 2000

Indications



Adapted from Sax H. J Hosp Infect 2007

The 4 indications in **Canada**



Patient Participation

The CANADIAN EXPERIENCE

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PATIENTS FOR PATIENT SAFETY CANADA | PATIENTS POUR LA SÉCURITÉ DES PATIENTS DU CANADA

Patients are your partners.
Why and how this partnership works.

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Kim Neudorf

Judy Birdsell

Ioana Popescu

Special thanks to: Bernie Weinstein, Dr. Yves Longtin, Paul Webber

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Reasons PFPSC engage:

Believe:

- We have a story to tell
- We have insights into system improvements
- When engaged we are healthier, safer
- Together we can do better

  so that,

  Every Patient is Safe

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Patient harm in Canadian hospitals: The stats

How often does it happen?

In 2014–2015,

1 in 18

hospital stays

in Canada involved at least 1 harmful event

(138,000 out of 2.5 million hospital stays).

cpsi icsp
Canadian Patient Safety Institute
Institut canadien pour la sécurité des patients
CIHI ICIS
Canadian Institute for Health Information
Institut canadien d'information sur la santé

What kinds of harmful events happen?

There are 4 categories of harmful events — 2014–2015 breakdown.

Note
All numbers exclude Quebec and selected mental health diagnoses.

What can be done about this?

We are collecting data on how often these events are happening, using a new hospital harm measure. And we are providing information on how these events can be prevented. Hospitals, along with patients and families, have a hand in helping make care safer for all.

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Healthcare Acquired Infection

- >200,000 Canadians suffer from HAI/year
- 4th leading cause of death

Who: Funding Partners

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Policy

Consultation

- Presentations http://www.patientsafetyinstitute.ca/en/toolsResources/Pages/You-are-kidding-right-Patients-to-hel with-antimicrobial-resistance-2016-11.aspx
- Campaigns https://www.canada.ca/en/public-health/services/antibiotic-antimicrobial-resistance/true-stories/mary.html
- Briefs to Government http://parlvu.parl.gc.ca/XRender/en/PowerBrowser/PowerBrowserV2/20171107/-1/28306?Language=English&Stream=Video&useragent=Mozilla/5.0
- Multi-media (video – where have your hands been)

Involvement

- Publish https://doi.org/10.1108/IJHG-02-2016-0008
- Citizen voice

Partnership

- CPSI
- Regulatory body: public rep

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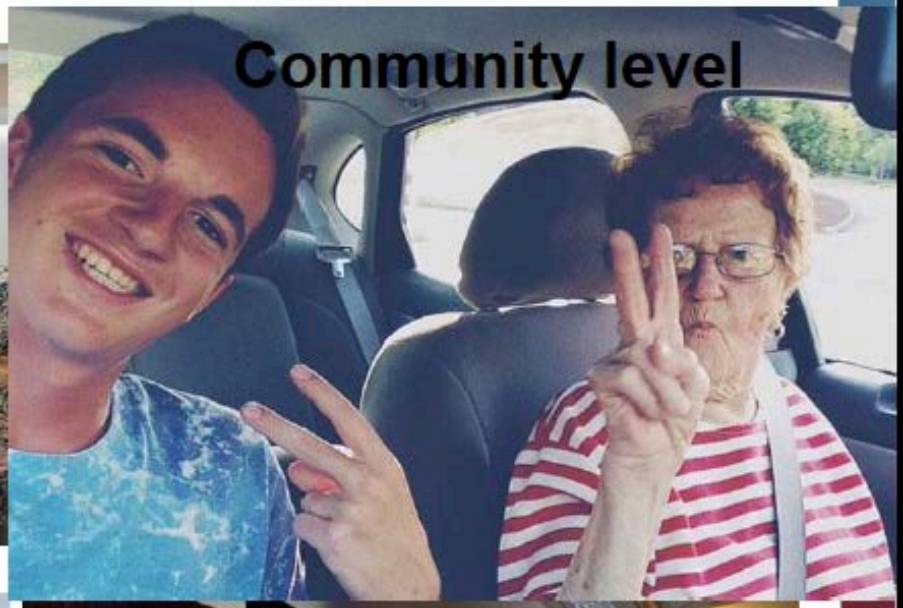
"Nothing About Me Without Me"



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Membership

- Membership: clear criteria, interview by peers
- Orientation: about patient safety, key stakeholders
  - » initial
  - » ongoing

http://www.patientsafetyinstitute.ca/en/About/Programs/PPSC/Membership/pages/default.aspx

Patients for Patient Safety Canada
Membership Criteria

Interested patients, families and caregivers can apply to become members of PFPSC.

Completed applications will be reviewed by the Membership Group of PFPSC to ensure that individuals seeking membership meet the following criteria:

1. Prospective members should support the PFPSC Charter, including our Vision, Mission and Goals.
2. Prospective members should have:
   a. Direct experience with an adverse event or harm as a patient, family member or friend; and/or
   b. Significant experience interacting with healthcare providers as a patient or the caregiver of a patient; and/or
   c. Experience in working to improve patient safety and/or quality of care[1].
3. Prospective members should:
   a. Be willing to work locally but also with regional, provincial, national, and international groups to address patient safety issues;
   b. Be prepared to serve on PFPSC committees and work groups;
   c. Be willing to work in partnership with governments, healthcare organizations, healthcare providers, and or policy makers to advance patient safety;
   d. If able, be willing to tell their own patient safety story publicly and identify its lessons for others;
   e. Be committed to advancing the PFPSC agenda rather than a personal agenda;
   f. Declare any potential or perceived conflicts of interest that might interfere with the work or reputation of PFPSC;
   g. Be prepared to offer a minimum time commitment of 2 hours per month to the work of PFPSC.

See if membership is right for you and what our members do, please click here to apply

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Requests management

- Best fit between patient and initiative
- Initial and on demand support to all parties
- Evaluation

About the requesting organization	
Name of organization and department/ project	
Contact person name, position, email, phone	

About the collaboration			
WHY Aim of collaboration	*Why is it important to have a patient/family representative contribute to this initiative? (Include outcomes/objectives if known at this time.)*		
WHAT	*Provide enough information so the patient/family volunteers can understand the type and amount of work required, what their role is, and if specific skills are needed*		
WHO	*Describe the audience/ customers*		
WHEN	*Date, time, duration of collaboration*		
WHERE	*Location*		
Classification Highlight the best of the 4 options in each category	*Type of participation* ☐ Speaking engagement (e.g. panel, plenary, video) ☐ Committee/ board/ group member ☐ Product/ policy design, development or implementation (e.g. strategy, standards, tool, campaign, research) ☐ Other	*Degree of collaboration* ☐ Consult (e.g. share experience, provide input via focus group, surveys, etc) ☐ Involve (e.g. advisor, influence decisions, priorities) ☐ Partner (e.g. co-lead, contribute to direction, decisions and/or resource allocation) ☐ Other	*System level* ☐ Care delivery organization or system ☐ Provincial/territorial ☐ Canadian ☐ Other

A few more details:	Yes	No	Details
Has this group worked with a patient representative before?			
Is there a preferred patient representative?			Name(s):
Is a local (e.g. within province) representative a must?			
Is there an honorarium available for the volunteer?			
Confirm expense reimbursement (travel, accommodation, meals)			It is expected to offer reimbursement
By when is a response expected?			Date:
Are supporting documents available (TOR, charter, agenda)?			Attach to email

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Partnership outcomes

- 100% of programs developed/ delivered in partnership with patients
- Key corporate functions (CEO, staff recruitment, strategic and operational planning)
- The National Patient Safety Consortium including the Infection Prevention and Control Action Plan

http://www.patientsafetyinstitute.ca/en/About/PatientSafetyForwardWith4/Pages/Infection-Prevention-and-Control.aspx

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Patients for Patient Safety Canada

www.patientsforpatientsafety.ca

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Service Design: Partnering to prevent harm

Examples - where patients are involved

- Co-designing educational materials and approaches
- Discharge planning processes
- Process improvement teams
- Educate providers

What engagement specialists can do

- Learn about and champion good PE practices
- Build coalitions, seek feedback, get support
- Support patient partners and team members
- Create safe spaces for all

What leaders can do

- Create expectations
- Communicate about patient safety inside and out
- Provide organizational framework, training and support

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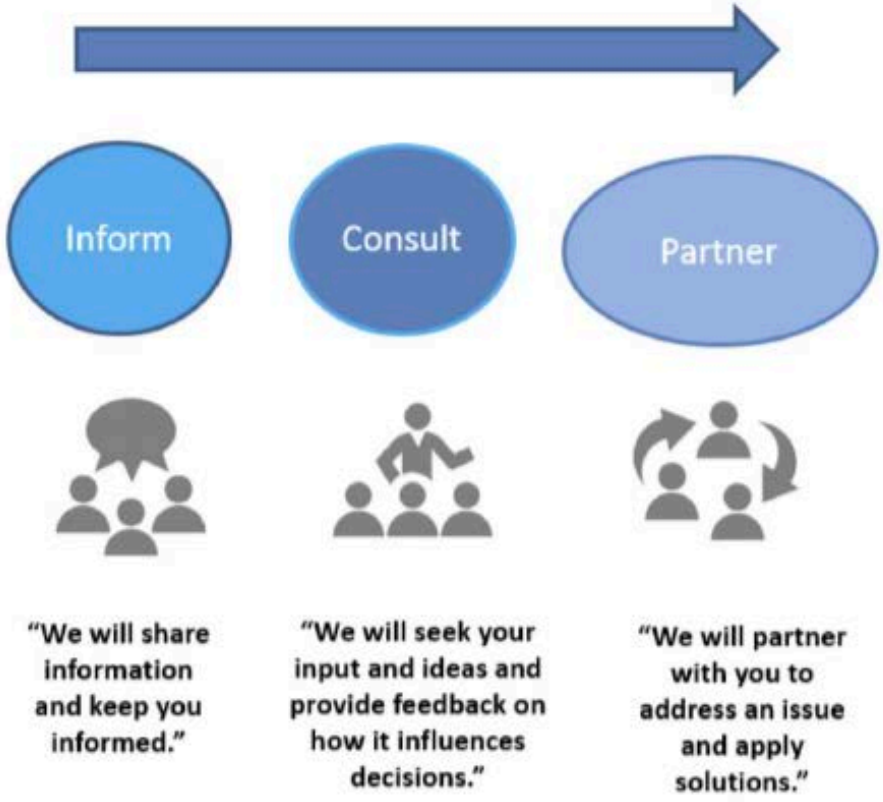
Partnering is more than asking

Levels of engagement

- Direct care
- Organization
  - Service Design
  - Governance
- Health system
  - Policies
  - Priorities

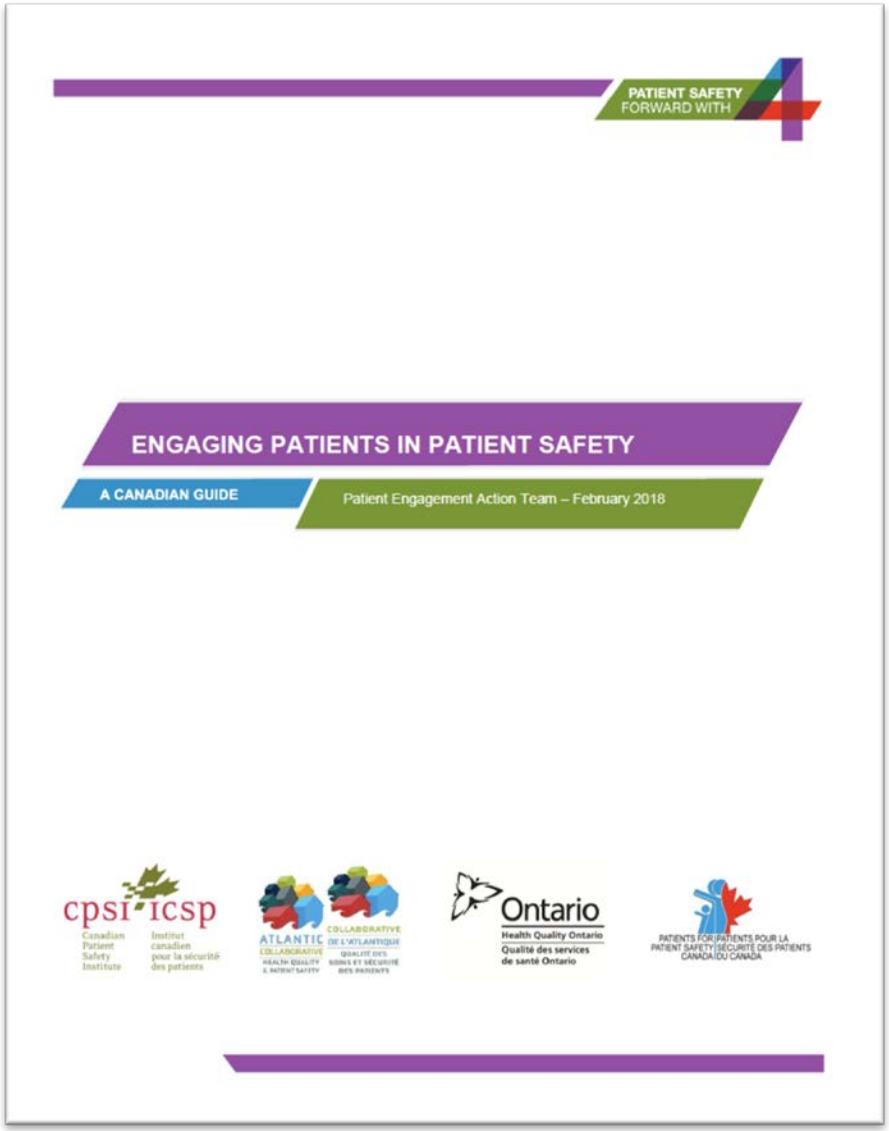
Promise to patient

Continuum of engagement



Canadian guidance

- To help HCWs, managers, patients and other stakeholders work together effectively to improve patient safety
- 76 pages!
- For all types of individuals
  - HCWs,
  - Managers
  - Patients
  - Families
  - Anyone else



www.patientsafetyinstitute.ca/engagingpatients

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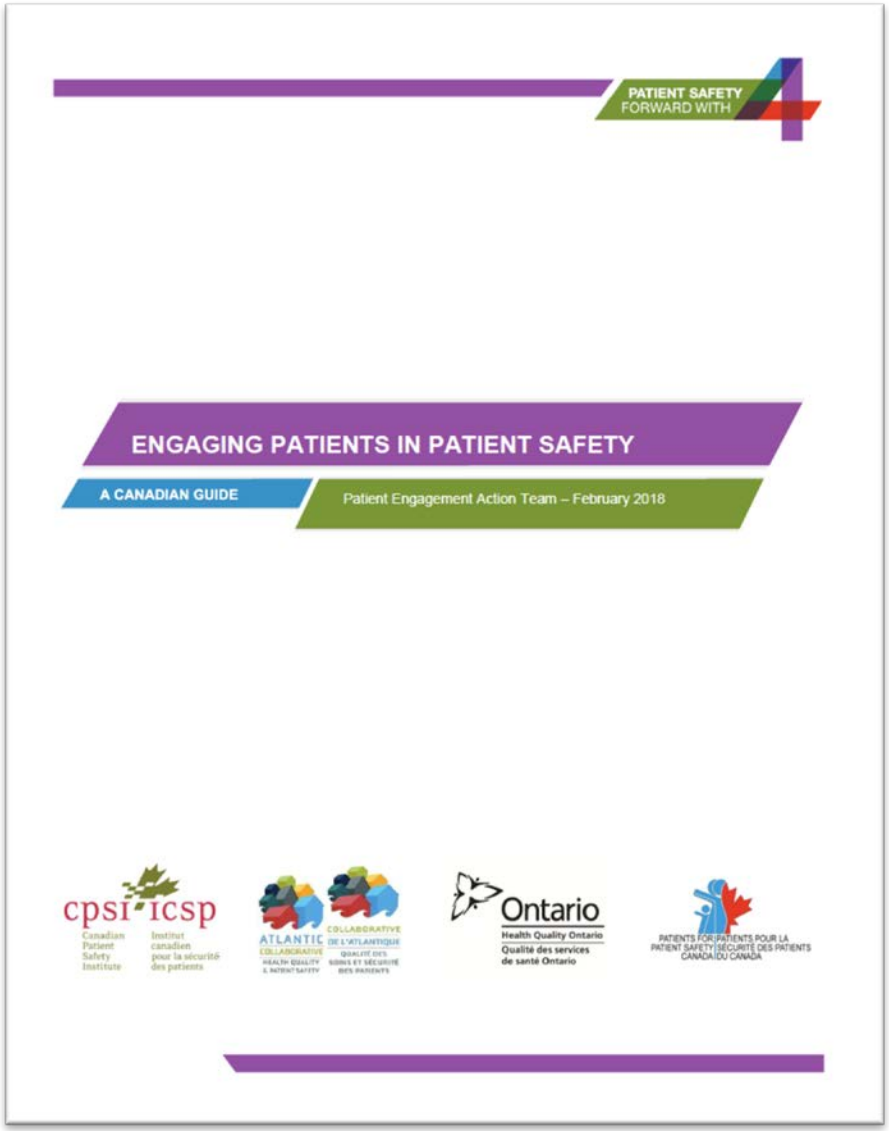
Canadian guidance

Components

Evidence-based GUIDANCE on:

- Practical patient engagement practices
-
- Consolidated information, resources, and tools
- Supporting evidence and examples from across Canada
- Experiences from patients and families, providers, and leaders
- Outstanding questions about how to strengthen current approaches
- Strategies and policies to meet standards and organizational practice requirements

www.patientsafetyinstitute.ca/engagingpatients



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Patient Engagement in Policy

- Kingston General Hospital
  - 60 patient Experience Advisors
    - 5000 hours of work/year

- Involving patients from the beginning of a project
  - E.g. initiative to reduce specimen collection errors
  - Reduce patient falls
  - Improve HH
  - Improve patient identification

http://www.patientsafetyinstitute.ca/en/newsalerts/news/pages/kingston-general-hospital-wins-patient-safety-champion-organization-award-for-2014.aspx

McGill University Health Network

- Patient representatives on committees since 2010
- Patients are members of the quality improvement teams
- Led to co-development of solutions such as whiteboards to improve communication and improved nursing hand-offs
- Overall perceived benefit from staff of getting patient input

Centre universitaire de santé McGill
McGill University Health Centre

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ACCREDITATION CANADA

- Increase patient and family involvement in:
  - Medication safety
  - Surgical care safety
  - **Infection Prevention and Control**
  - Patient-provider communication
  - Patient identity
  - Transition of care
  - Family presence

Accrediation Canada Standards – infection prevention and control

- **6.0 The organization engages clients and families in infection prevention and control practices.**
  - **6.1** The organization provides clients and families with information about routine practices and additional precautions as appropriate in a format that is easy to understand.
  - **6.2** The organization provides client, families and visitors with access to hand hygiene resources and PPE based on risk of transmission of microorganisms.
- **14.3** The organization seeks input from staff, services providers, volunteers, and clients and families on components of the IPAC program.
  - Surveys, focus groups, interviews, meetings, etc.
- **14.5** The organization shares evaluation results with staff, service providers, volunteers, clients, and families.

Patient Hand Hygiene

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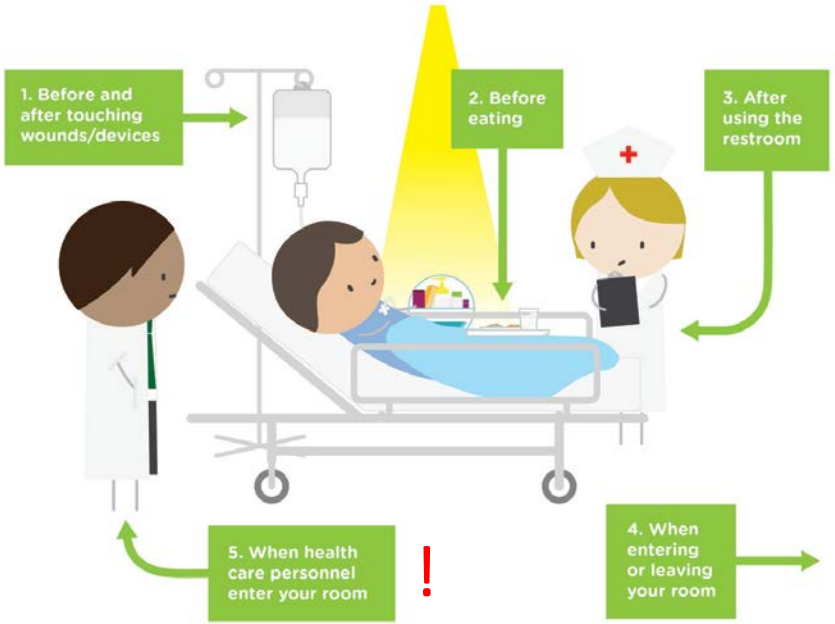
Patient Hand Hygiene

4 Moments



5 Moments

http://www.fitsihealth.com/mainblog/winwin

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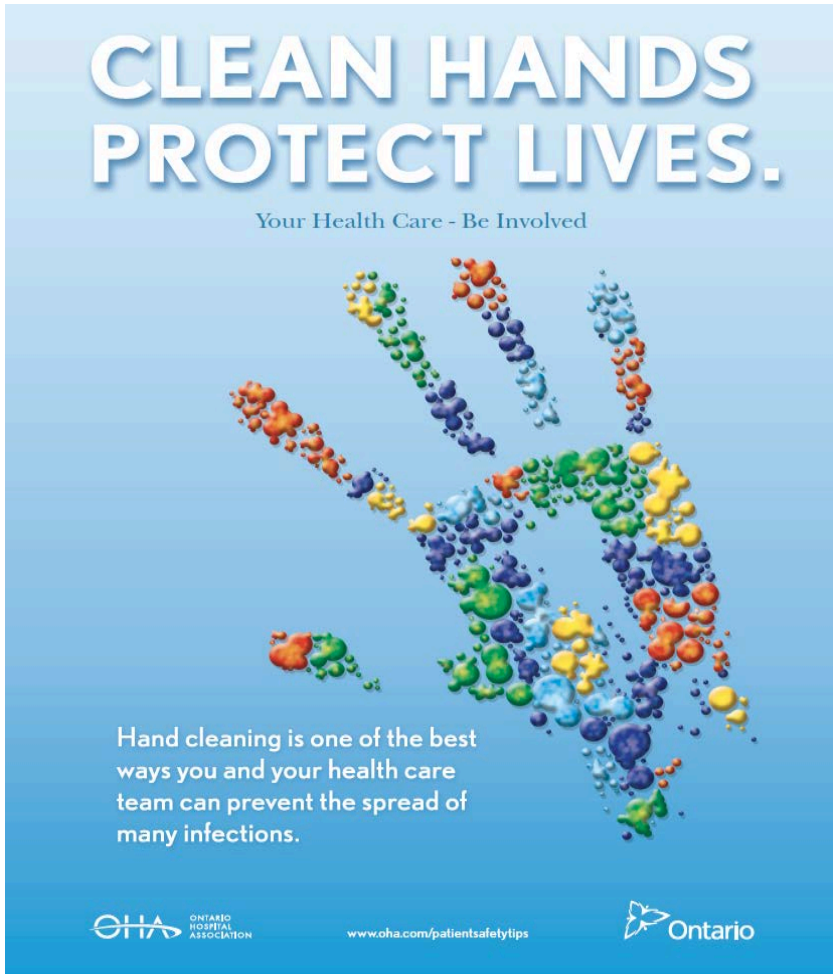
Patient Hand Hygiene

- Reframing the message to include patient HH



https://www.oha.com/Documents/English%20-%20Poster.pdf

Patient Hand Hygiene

HH technique for patients

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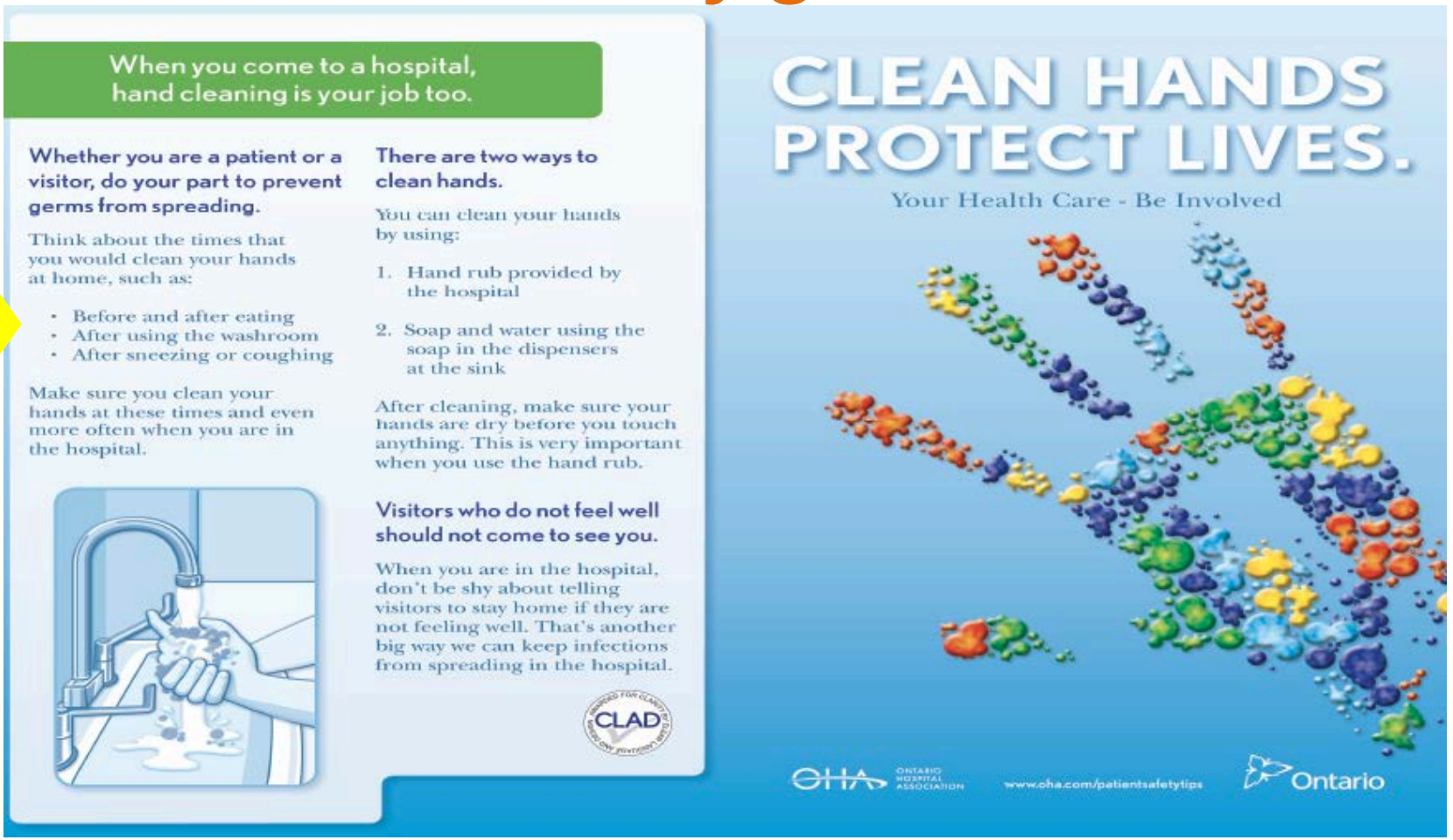
https://www.oha.com/Documents/English%20-%20Cards.pdf

Patient Hand Hygiene

3 MOMENTS



HH education

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Patient Hand Hygiene

Hand cleaning is one of the best ways you and your health care team can prevent infections from spreading.

Did you know that the main way germs can spread is by hand?

Keeping hands clean is the best thing you and your health care team can do to prevent infections from spreading to others. That's so important in hospitals and other places where the risk of infection is high.

In Canada, one in nine patients gets an infection while in hospital.

Sometimes patients get infections when they are in the hospital.

Thousands of times a day, members of your health care team handle things that could have harmful germs. Without good hand cleaning, these germs can spread to patients and cause infection.

Your health care team works hard to keep their hands clean.

Your health care team plays a big role in preventing the spread of infection. They are committed to giving you clean, safe care.

There are important moments when your health care team should clean their hands, such as:

- After touching objects in a patient's room and going to another room
- Before and after treating patients
- Before and after special procedures, such as giving a needle
- After contact with body fluids, such as blood or urine

When should your health care team wear gloves?

Wearing gloves does not prevent germs from spreading from patient to patient. So, don't expect your health care team to always wear gloves. But do expect them to clean their hands at the right time and in the right way.

There are times when your health care team should wear gloves. For instance, they wear gloves when they are treating open wounds or taking blood.

They may also wear gloves when taking care of a patient in isolation (in a room by themselves). These patients need special care and protection. If you are visiting a patient in isolation, you may also have to wear special protection, such as gloves, a mask, or a gown.

Once your health care team is finished with a task, they will throw the gloves away. They clean their hands carefully both before and after using the gloves.

HH education

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Measurement of Patient Hand Hygiene in Multiorgan Transplant Units Using a Novel Technology: An Observational Study

Jocelyn A. Srigley, MD, MSc;[1] Colin D. Furness, PhD, MPH;[2] Michael Gardam, MD, MSc[3]

- 279 patients, Canadian hospital
- Automatic electronic monitoring of patient HH behavior

Patient hand hygiene compliance

Indication	Compliance
Mealtime	39.1%
Upon room entry	2.9%
Upon room exit	6.7%
After bathroom visit	29.7%

Srigley JA et al. Infect Control Hosp Epidemiol. 2014 Nov;35(11):1336-41.

Measurement of Patient Hand Hygiene in Multiorgan Transplant Units Using a Novel Technology: An Observational Study

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TABLE 2. Descriptive Statistics and Hand Hygiene Rates by Sex for Bathroom Visits

Variable	All patients	Females	Males
No.	222	96	126
No. of bathroom visits	12,649	6,428	6,221
Proportion of visits associated with hand hygiene, %	29.7	35.6[a]	23.6[a]
Proportion of soap use (vs ABHR), %	92.0	94.6[b]	87.9[b]

NOTE. ABHR, alcohol-based hand rub.

[a] $P < .001$.

[b] $P < .001$.

Srigley JA et al. Infect Control Hosp Epidemiol. 2014 Nov;35(11):1336-41.

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Jewish General Hospital

DIANE NDAHAAYO, B.SC.N. STUDENT, U.VICTORIA

ROSE CARMEL EXANTUS, RN., M.SC.,IPAC CONSULTANT

IN COLLABORATION WITH

SABINE CAINER, B.SC., IPAC CONSULTANT

Patient Hand Hygiene in Rehab

GOAL OF REHABILITATION SETTINGS

- ❑ Relieve disease process (post acute care)
- ❑ Restore function
- ❑ Reestablish self-care/ independence
- ❑ Help patient to return back into the community

(APIC,2014)

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CHALLENGES in REHAB

• Administrative and organizational measures

- ❑ Patients interact with many healthcare personnel throughout the day.
- ❑ Healthcare personnel are in contact with multiple patients that can be carrier of antibiotics resistant organisms (ARO), which significantly increase the chances for cross-contamination.
- ❑ Multiple colonized patients with different bacteria (VRE, CRO/CRE, MRSA, ESBL etc.) on the same unit.
- ❑ Can't isolate the patients because they need rehabilitation time.
- ❑ Multiple referring hospitals and multiple follow up in different hospital or clinics

APIC, 2014

• Environmental and engineering measures

- ❑ Many shared areas, as:
  - Room (2-4 beds/rooms)
  - Common bathroom and showers
  - Lounges
  - Rehabilitation department
- ❑ Limited space (room, rehab department)
- ❑ Not adapted for caring multiple colonized patients
- ❑ Limited equipment (BP machine, parallele bar, steps, walkers, commode etc.)
- ❑ Equipment not always cleanable

(CBH and JRH data)

Ndahaayo D, Exantus R IPAC Canada 2018

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Centre intégré universitaire de santé et de services sociaux du Centre-Ouest-de-l'Île-de-Montréal
Québec
Integrated Health and Social Services University Network for West-Central Montreal

LA PRÉVENTION ET LE CONTRÔLE DES INFECTIONS
INFECTION PREVENTION AND CONTROL

PATIENT MOMENTS FOR HAND HYGIENE
THE MAIN 4 MOMENTS

BEFORE CONTACT WITH AN ENVIRONMENT OF CARE

Moment 1

Moment 2

BEFORE EATING

AFTER CONTACT WITH AN ENVIRONMENT OF CARE

Moment 4

Moment 3

AFTER USING THE RESTROOM, COMMODE, BEDPAN, URINAL AND ANY OTHER FLUID EXPOSURE

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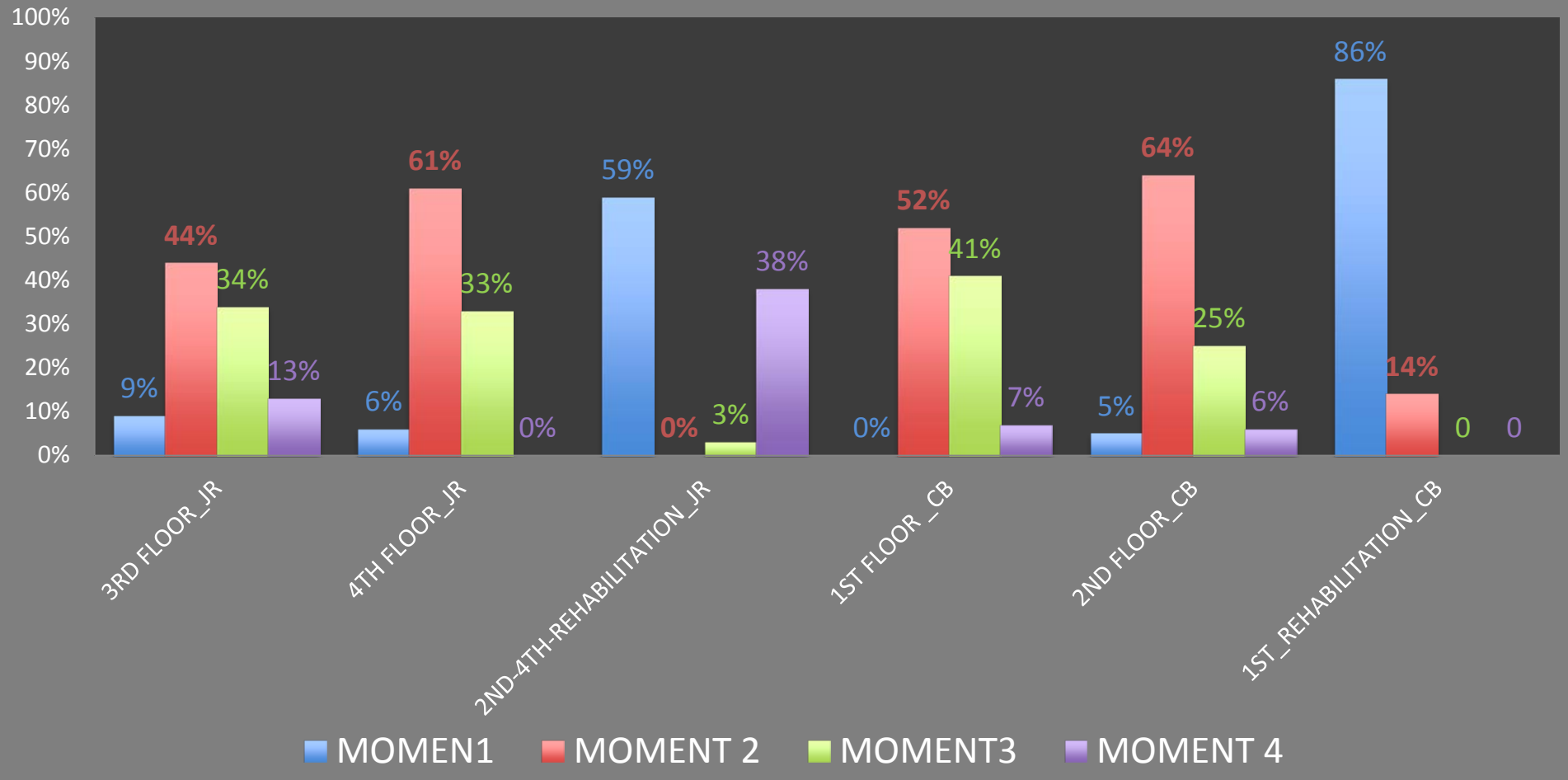
RESULTS OF PATIENTS HAND HYGIENE AT J-RICHARDSON AND C-BOOTH (BY MOMENT)



Moment 1 The Lowest – Except in Rehab Clinic

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BARRIERS TO PATIENT HAND HYGIENE- questionnaire

PATIENT RELATED

- Inaccessibility to hand hygiene products
- heavy patients who need assistance
- Ignorance, laziness

STAFF RELATED

- Heavy work load- patients who need assist and reminding
- Lack of enough staff
- Limited time with too many patients to be cared for
- Staff unable to monitor the patients all the time

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Patient Engagement in Reminding Staff to perform HH

The Swiss Experience

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cpsi icsp Canadian Patient Safety Institute
Institut canadien pour la sécurité des patients

Si vous êtes suivi par un professionnel de la santé, n'hésitez pas à lui dtemander de se nettoyer les mains avant de vous examiner.

Les patients, les membres de leur famille et les travailleurs de la santé ont tous un rôle à jouer dans la réduction des infections nosocomiales. En tant que patient, en plus de veiller à vous laver souvent les mains, n'hésitez pas à demander à votre professionnel de la santé de faire de même avant de vous prodiguer des soins. Ensemble, nous pouvons changer les choses et réduire les infections en adoptant pour de bon une hygiène des mains optimale.

Patients
as reminders

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http://www.saferhealthcarenow.ca

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

Andrew James Stewardson, Hugo Sax*, Angèle Gayet-Ageron, Sylvie Touveneau, Yves Longtin, Walter Zingg, Didier Pittet*

Summary

Background **Hand hygiene compliance of health-care workers remains suboptimal despite standard multimodal promotion, and evidence for the effectiveness of novel interventions is urgently needed. We aimed to assess the effect of enhanced performance feedback and patient participation on hand hygiene compliance in the setting of multimodal promotion.**

Lancet Infect Dis 2016

Published Online September 2, 2016

http://dx.doi.org/10.1016/S1473-3099(16)30256-0

- The Swiss Experience
- Large scale study to evaluate efficacy of patient reminders to improve HH

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

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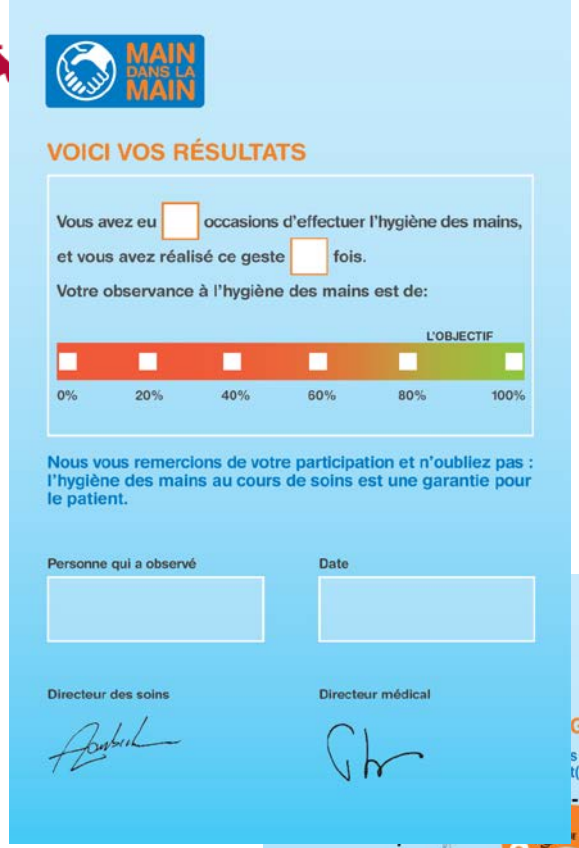
Lancet Infect Dis 2016

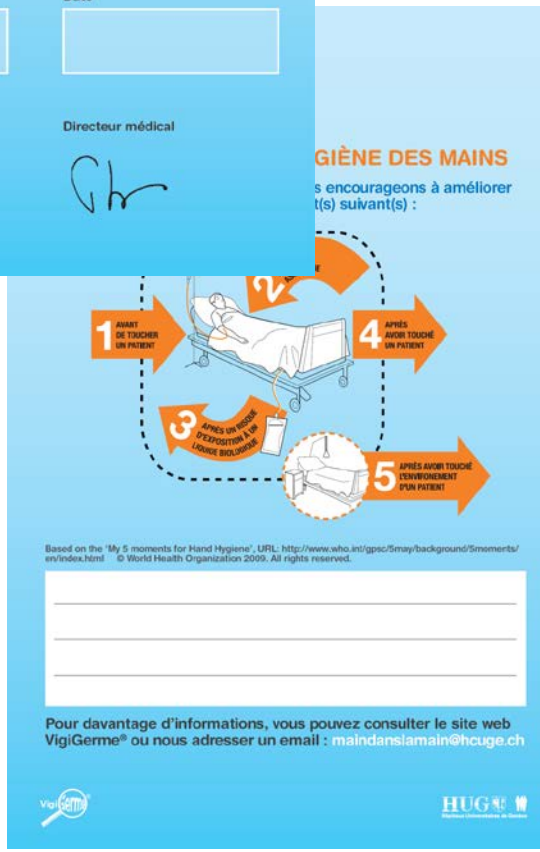
Published Online
September 2, 2016
http://dx.doi.org/10.1016/S1473-3099(16)30256-0

- Single-center Cluster RCT
- 3 groups:
  - ① Control (n=21 wards)
  - ② Enhanced Performance Feedback (EPF) (n=24)
  - ③ EPF + **PP** (n=22)
- 15 months baseline and 2 year intervention

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

- Enhanced Performance Feedback
  - Immediate Feedback on HH compliance at the end of each session to HCWs present on ward
  - Individualized report cards





611 cards distributed (34% of all HCWs audited)

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Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

- Enhanced Performance Feedback
  - Immediate Feedback on HH compliance at the end of each session to HCWs present on ward
  - Individualized report cards
  - Reports and Posters q 3 months
  - Reports emailed to head nurses and senior medical staff

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Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

Patient Participation

- Emphasizes HCW-Patient partnership
- Welcome pack on admission
  - Brochure
  - ABHRS bottle
- Patient HH indications
- Patient Education by Ward Staff
  - About HCW HH and Patient HH
- Patients invited to remind Staff about HH
- HCWs invited to remind Patients about HH

Patient indications for hand hygiene

1. Before and after eating
2. After going to the toilet
3. After blowing your nose
4. When you leave and return to your space

33% of patients received a welcome pack

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Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

- **Patient Participation**
  - Posters displayed promoting PP
  - HCWs invited to wear promotional badges
  - Information sessions to HCWs at beginning of study
  - HCWs determined if patient was “eligible” to PP
    - Excluded for the duration if incapacity

VOS INDICATIONS À L'HYGIÈNE DES MAINS

Pour vous protéger contre les infections, pratiquez l'hygiène des mains en les frictionnant avec une solution hydro-alcoolique ou en les lavant à l'eau et au savon.

1. Avant et après les repas
2. Après être allé aux WC (*avec de l'eau et du savon*)
3. Après vous être mouché
4. Lorsque vous quittez et regagnez votre espace (*lit et table de nuit*)

NOS INDICATIONS À L'HYGIÈNE DES MAINS

Si l'un d'entre nous oublie l'hygiène des mains avant de vous toucher, dites-lui !

1. Avant de toucher le patient
2. Avant un geste aseptique
3. Après un contact avec des liquides biologiques
4. Après avoir touché le patient
5. Après avoir touché l'environnement du patient

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

– RESULTS

- 1367 Observation sessions
- 12,579 HH opportunities found
- Inter-observer agreement: 0.94
- Median No. observed HCWs per session: 3 (IQR, 2-4)

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

Overall HH

Increased HH compliance in all 3 groups (p<0.0001)

No group met the a priori threshold for clinical significance of 15% increase

	Number of hand hygiene actions	Number of hand hygiene opportunities	Mean compliance* (95% CI)	Absolute change*† (95% CI)	Odds ratio* (95% CI)
Overall hand hygiene					
Control					
Baseline	935	1430	66% (62–70)	..	1
Intervention	1631	2239	73% (70–77)	7% (4–10)	1·41 (1·21–1·63)
Follow-up	631	949	70% (66–75)	4% (0–8)	1·21 (1·00–1·47)
Enhanced performance feedback					
Baseline	1040	1629	65% (62–69)	..	
Intervention	2160	2920	75% (72–77)	10% (7–13)	3% ↑ Attributable P=0.19
Follow-up	1356	1956	72% (68–75)	7% (4–10)	
Enhanced performance feedback plus patient participation					N.S.
Baseline	1024	1594	66% (62–70)	..	
Intervention	2107	2767	77% (74–80)	11% (8–14)	4% ↑ Attributable P=0.048
Follow-up	1485	2100	72% (69–76)	6% (4–10)	

F/Up: 2 year period post intervention

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

Moment 1 only

Increased M1 HH compliance in all 3 groups (p<0.0001)

Increase PFE+PP significantly superior to control arm (but only 10% increase)

	Number of hand hygiene actions	Number of hand hygiene opportunities	Mean compliance* (95% CI)	Absolute change*† (95% CI)	Odds ratio* (95% CI)
WHO Moment 1—before patient contact					
Control					
Baseline	216	424	54% (46–61)	..	1
Intervention	355	604	61% (54–67)	7% (1–14)	1·34 (1·03–1·75)
Follow-up	135	236	63% (54–71)	9% (0–17)	1·45 (1·02–2·06)
Enhanced performance feedback					
Baseline	244	494	51% (44–58)	..	
Intervention	473	750	65% (59–71)	14% (8–20)	
Follow-up	301	481	65% (58–71)	14% (9–20)	
Enhanced performance feedback plus patient participation					
Baseline	199	432	48% (41–55)	..	
Intervention	470	743	65% (59–70)	17% (11–23)	
Follow-up	325	543	62% (56–68)	14% (7–20)	

*Obtained from a generalised linear mixed-effects model with ward included as a random effect. †Absolute percentage point difference between baseline and intervention period, and from baseline to follow-up.

Table 2: **Hand hygiene compliance overall and with WHO Moment 1**

7% Attributable P=0.099

N.S.

10% Attributable P=0.035

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Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

"Observers witnessed no episodes of patients reminding HCWs to perform HH during HH opportunities before patient contact"

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Jewish General Hospital

Enhanced performance feedback and patient participation to improve hand hygiene compliance of health-care workers in the setting of established multimodal promotion: a single-centre, cluster randomised controlled trial

Monthly mean requisition for ABHRS (L per 1000 patient-days)

	Baseline	Intervention
Control group	31.8	27.8
Enhanced feedback	30.4	29.8
Enhanced feedback and PP	27.9	30.5

Requisition was high at baseline b/c H1N1 pandemic (2009)

	Coefficient (95% CI), L per 1000 patient-days	p value
Change in monthly requisition of alcohol-based handrub during the intervention period		
Control	0·0003 (–0·0064 to 0·0070)	0·93
Enhanced performance feedback	0·0025 (–0·0040 to 0·0091)	0·45
Enhanced performance feedback plus patient participation	0·0079 (0·00013 to 0·0140)	0·02
Change in monthly requisition of alcohol-based handrub explained by the interventions		
Enhanced performance feedback alone vs control	0·0022 (–0·0025 to 0·0070)	0·35
Enhanced performance feedback plus patient participation vs control	0·0076 (0·0028 to 0·0123)	0·002
Patient participation vs enhanced performance feedback	0·0053 (0·0008 to 0·0099)	0·02
Change in monthly requisition of alcohol-based handrub between baseline and intervention periods*	–0·0014 (–0·0057 to 0·003)	0·54

*Centred on the start of the intervention period.

Table 3: Effect of the intervention on monthly requisition of alcohol-based handrub

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Help yourself, help others!

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Jewish General Hospital

Help yourslef, help others

- A single patient enquiry can induce long-lasting change in HCW behaviour
  - 81% of HCWs reminded to perform hand hygiene by a patient were more careful about it during subsequent patient care activities

Julian KG et al Infect Control Hosp Epidemiol 2008;29:781–782.

Patient as Staff HH Observers

Compliance measurement

Required Organizational Practice

Standardized by WHO

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Hand Hygiene Monitoring

- Main strategies
  - Self-report
  - Direct observation
    - Usually trained HCWs (The Gold Standard)
  - Indirect methods
    - Product consumption
    - Electronic monitoring

DIRECT OBSERVATIONS

Observations made by trained nurses who scout wards to (1) identify HH opportunity and (2) whether the HCW performed HH as indicated

PROs	CONs
Standardized Methodology	Labor-intensive
Distinguishes among HH indications	Requires training and certification
Recognizes the “patient zone”	Limited scaling-up potential
Can collect additional information (type of HCW, glove use, time of day, etc.)	Impossible in some settings (outpatient, homecare, “drawn curtain”)
	Disruptive to care
	Hawthorne Effect

WHO: new strategies are needed

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Impact of covert vs. overt observers

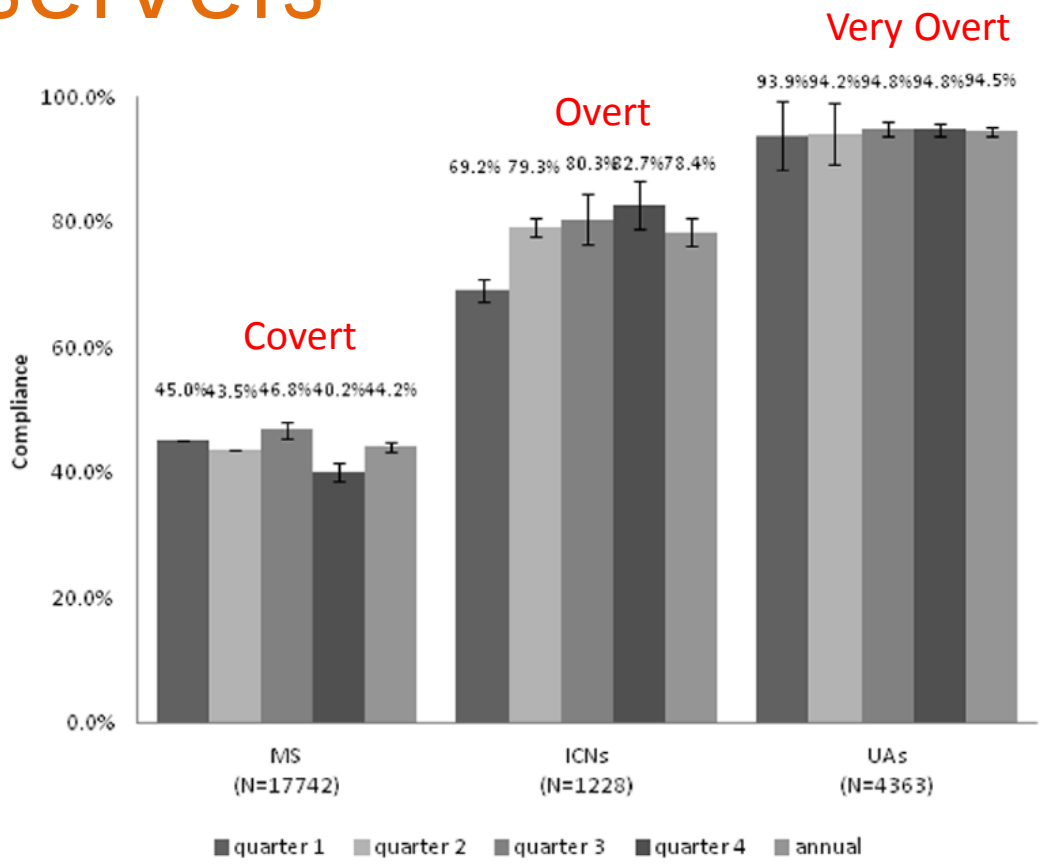

Figure 1. Hand hygiene compliance rates by type of observers and quarter. The compliance rates observed by medical students (MS) were significantly lower than those by infection control nurses (ICNs) and unit HH ambassadors (UAs) in each quarter (all the *P* value <0.001). The numbers in parenthesis represented hand hygiene opportunities observed. T-bar represented one standard deviation.
doi:10.1371/journal.pone.0053746.g001

Electronic Monitoring

INFECTION CONTROL & HOSPITAL EPIDEMIOLOGY

ORIGINAL ARTICLE

Quantifying the Hawthorne Effect in Hand Hygiene Compliance Through Comparing Direct Observation With Automated Hand Hygiene Monitoring

Stefan Hagel, MD;[1,2] Jana Reischke;[1] Miriam Kesselmeier, Dipl Math;[2,3] Johannes Winning, MD;[4] Petra Gastmeier, MD;[5] Frank M. Brunkhorst, MD;[2,4,6,7] André Scherag;[2,3] Mathias W. Pletz, MD[1]

Assessing concordance

- Comparing HH compliance by direct observation and electronic monitoring
- Comparator: HH Episodes per hour
- Duration observation:
  - 96 h direct + electronic
  - 384 h electronic only

Hagel F et al. Infect Control Hosp Epidemiol 2015;00(0):1–6

Concordance during double observation

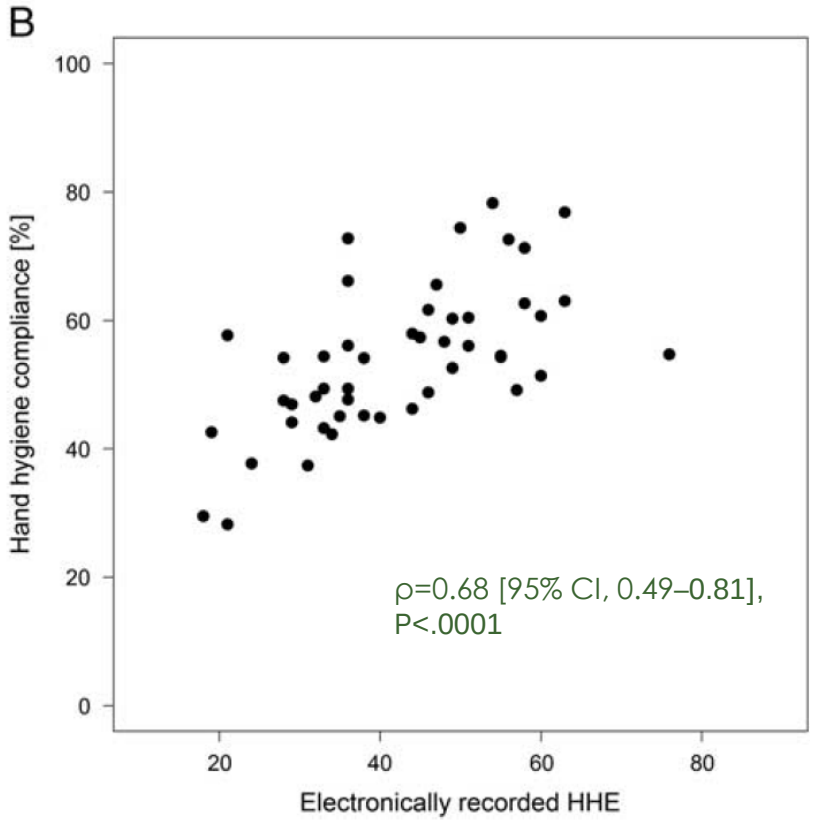

FIGURE 1. *A*, Hand hygiene compliance versus directly recorded hand hygiene events (HHEs) during the 2-hour direct observation period. *B*, Hand hygiene compliance versus electronically recorded HHEs during the 2-hour direct observation period.

N=2,029 observations (96 h)

Compliance = 51% (95% CI, 49%–53%)

HH activity = 21 HH/h

Hagel F et al. Infect Control Hosp Epidemiol 2015;00(0):1–6

McGill Faculty of Medicine Faculté de médecine

Estimating Hawthorne Effect

- RESULTS
  - HH activity in PRESENCE of observer:
    21 HH Episodes/ h
  - HH activity WITHOUT observer :
    8 HH Episodes/ h

Hagel F et al. Infect Control Hosp Epidemiol 2015;00(0):1–6

Concordance dual observation (direct and electronic)

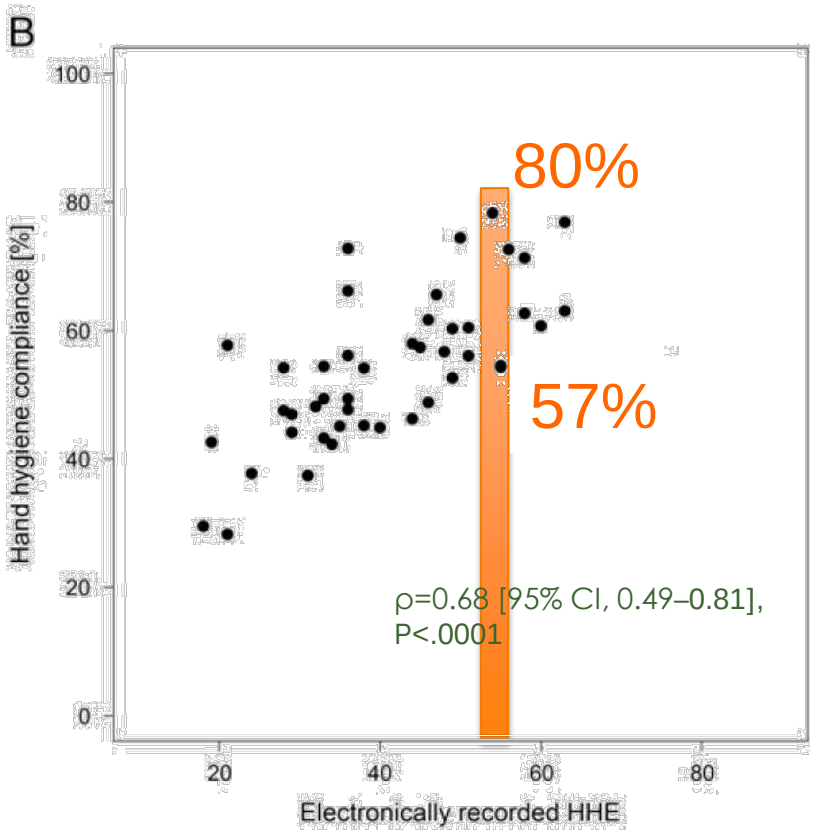

FIGURE 1. *A*, Hand hygiene compliance versus directly recorded hand hygiene events (HHEs) during the 2-hour direct observation period. *B*, Hand hygiene compliance versus electronically recorded HHEs during the 2-hour direct observation period.

55 HH per hour: **good** or **bad** compliance?

Hagel F et al. Infect Control Hosp Epidemiol 2015;00(0):1–6

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So correlation is not perfect between electronic and direct observation by certified professionals…

… But the presence of certified professionals skews results

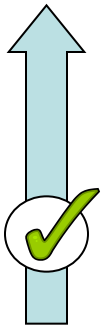
Could we perform "valid" observations while limiting the Hawthorne effect?


Moving on to a DIFFERENT

Patient Participation in their care

Various Types of Patient Participation

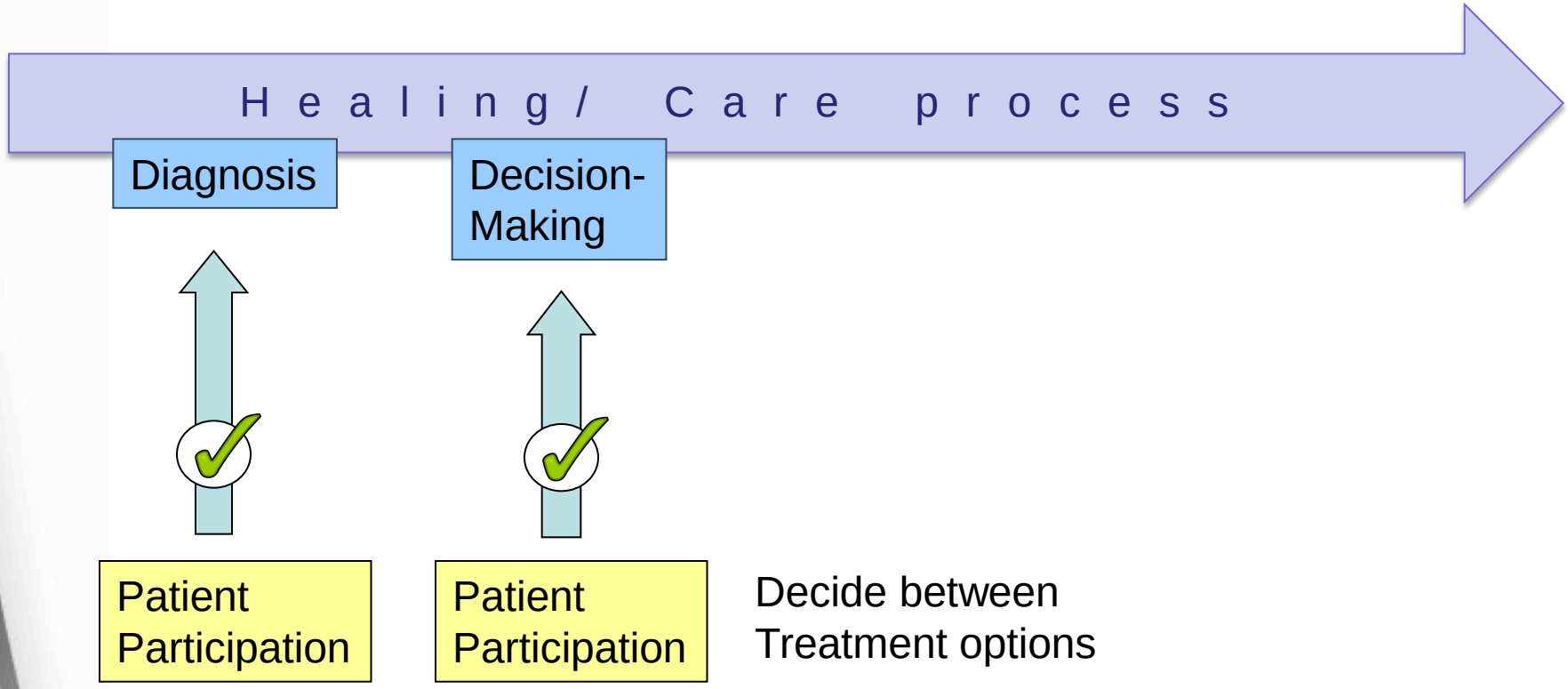
Diagnosis



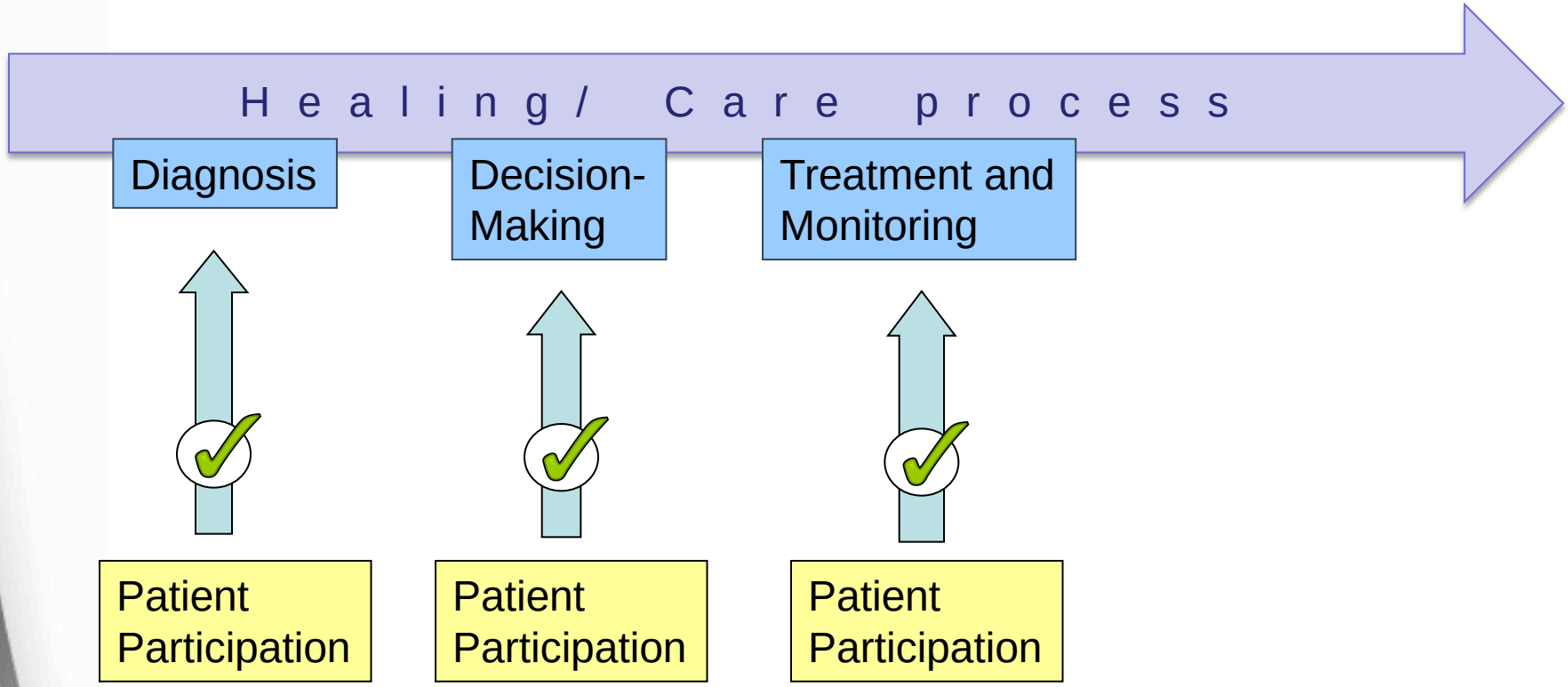
Patient Participation

Explain symptoms
Undergo physical exam
Undergo diagnostic tests

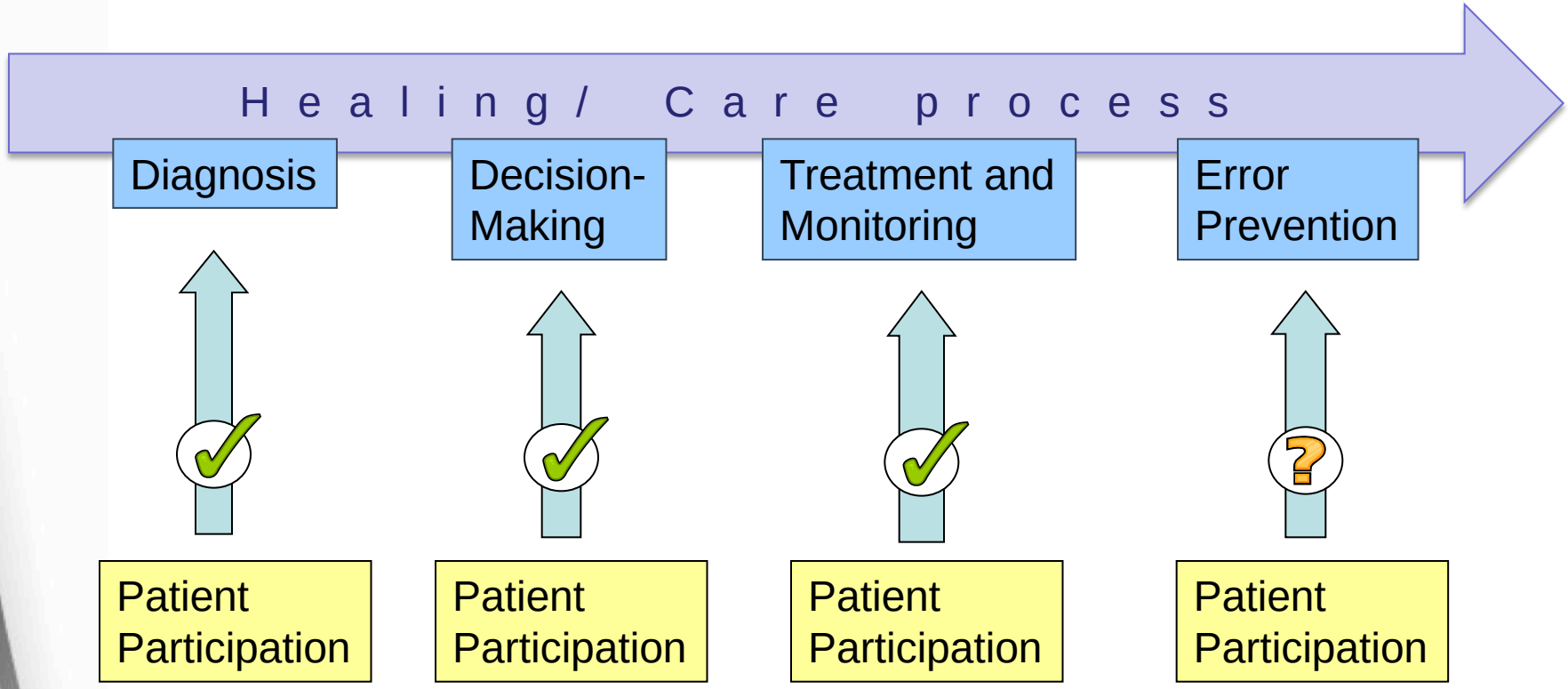
Various Types of Patient Participation



Various Types of Patient Participation



Various Types of Patient Participation



Patient Participation to Prevent Medical Errors

- Strong patient desire to ↓ medical errors[1]
  - Heavy media coverage
  - 91% believe that patients can help prevent medical errors
  - 98% believe that hospitals should train patients how to prevent errors

1.Waterman, A.D., et al., J Gen Intern Med, 2006. 21(4): p. 367-70.

Patient Participation in the Evaluation of the quality of care

Already accepted in the form of Patient Satisfaction Surveys

1. Hampton T. 7-country survey of patients: US adults most unhappy with health care. Jama 2007;298:2730-1

2. Howell E et al. Comparison of patients' assessments of the quality of stroke care with audit findings. Qual Saf Health Care 2007;16:450-5

3. Durieux P et al. Comparison of health care professionals' self-assessments of standards of care and patients' opinions on the care they received in hospital: observational study. Qual Saf Health Care 2004;13:198-202

4. Idvall E et al. Patient and nurse assessment of quality of care in postoperative pain management. Qual Saf Health Care 2002;11:327-34

Patient Participation in the Evaluation of the quality of care

- Limitations of patient satisfaction surveys
  - Reliability of patient assessment?
    - Patients not trained
    - Limited medical knowledge
    - Retrospective evaluation
  - Capacity to assess outcomes other than “satisfaction”?

Cite this article as: BMJ, doi:10.1136/bmj.38874.499167.7C (published 22 June 2006)

Research

BMJ

Patients' own assessments of quality of primary care compared with objective records based measures of technical quality of care: cross sectional study

Mala Rao, Aileen Clarke, Colin Sanderson, Richard Hammersley

- Relationship between patient assessment of technical quality of care (medical knowledge, thoroughness of physical examination, arrangement of tests when needed, making the right diagnosis, and prescribing the right treatment)

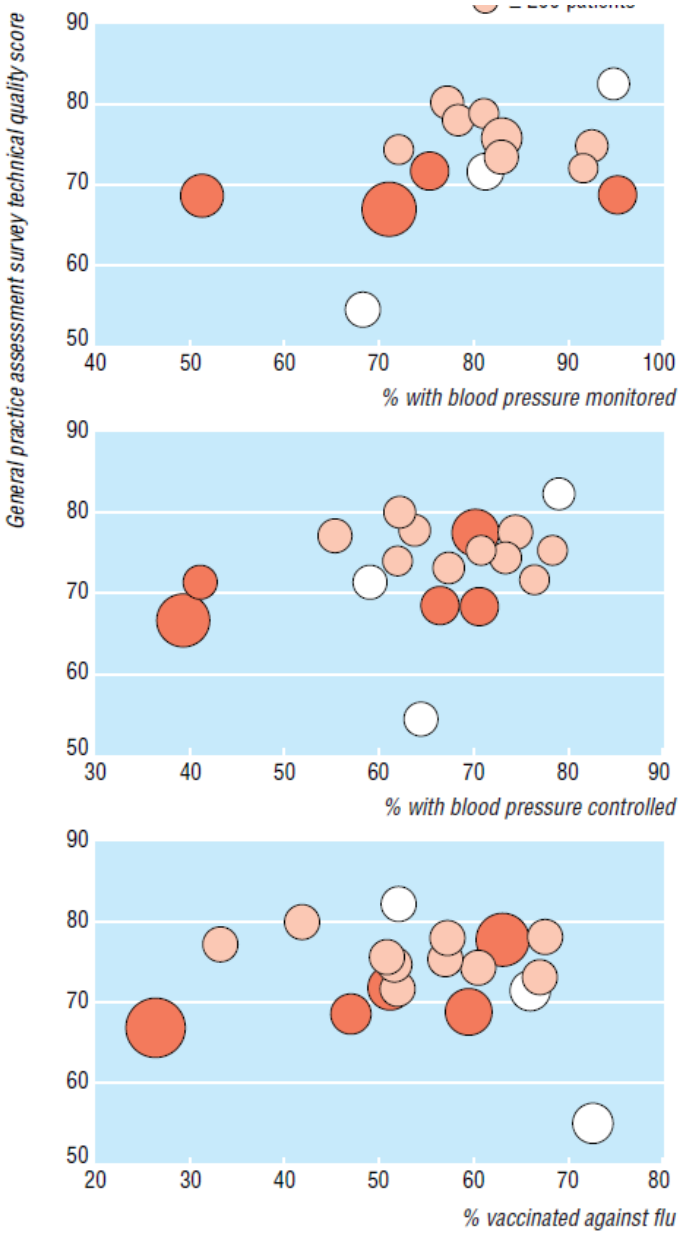
  and

- 3 indicators of technical quality:

  1. Monitoring of BP
  2. Control of BP
  3. Influenza vaccination coverage of patients

23 clinical practices (3487 patients) evaluated

No relationship between patient assessment of the quality of care and 3 indicators of quality



< 150 patients
150-199 patients
≥ 200 patients

Scatter plots for general practice assessment survey scores for technical quality compared with three records based measures. Size of marker indicates confidence interval around survey score estimate

Rao M et al. BMJ 2006

Annals of Internal Medicine | IMPROVING PATIENT CARE

Patients' Global Ratings of Their Health Care Are Not Associated with the Technical Quality of Their Care

John T. Chang, MD, MPH; Ron D. Hays, PhD; Paul G. Shekelle, MD, PhD; Catherine H. MacLean, MD, PhD; David H. Solomon, MD; David B. Reuben, MD; Carol P. Roth, RN, MPH; Caren J. Kamberg, MSPH; John Adams, PhD; Roy T. Young, MD; and Neil S. Wenger, MD, MPH

Background: Patient global ratings of care are commonly used to assess health care. However, the extent to which these assessments of care are related to the technical quality of care received is not well understood.

Objective: To investigate the relationship between patient-reported global ratings of health care and the quality of providers' communication and technical quality of care.

Design: Observational cohort study.

Setting: 2 managed care organizations.

Patients: Vulnerable older patients identified by brief interviews of a random sample of community-dwelling adults 65 years of age or older who received care in 2 managed care organizations during a 13-month period.

Measurements: Survey questions from the second stage of the Consumer Assessment of Healthcare Providers and Systems program were used to determine patients' global rating of health care and provider communication. A set of 236 quality indicators, defined by the Assessing Care of Vulnerable Elders project, were used to measure technical quality of care given for 22 clinical conditions; 207 quality indicators were evaluated by using data from chart abstraction or patient interview.

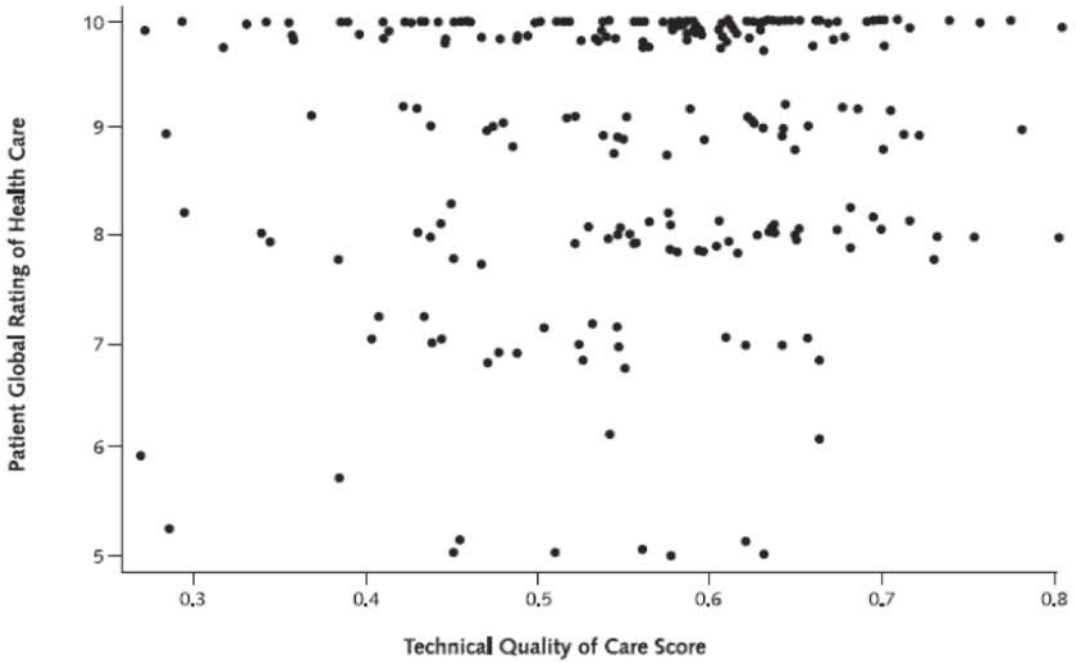
Results: Data on the global rating item, communication scale, and technical quality of care score were available for 236 vulnerable older patients. In a multivariate logistic regression model that included patient and clinical factors, better communication was associated with higher global ratings of health care. Technical quality of care was not significantly associated with the global rating of care.

Limitations: Findings were limited to vulnerable elders who were enrolled in managed care organizations and may not be generalizable to other age groups or types of insurance coverage.

Conclusions: Vulnerable elders' global ratings of care should not be used as a marker of technical quality of care. Assessments of quality of care should include both patient evaluations and independent assessments of technical quality.

Ann Intern Med. 2006;144:665-672. www.annals.org
For author affiliations, see end of text.

Figure 2. **Relationship of patient global rating of care to technical quality of care.**



Each dot represents a data point for a participant. To help visualize overlapping data points, a small amount of random jitter is added to each global care rating so that patients with identical ratings on both scales are not superimposed.

Elderly Patient Satisfaction

Everybody is very satisfied!

236 objective quality indicators
Assessing Care of Vulnerable Elders

Chang JT *Ann Intern Med.* 2006;144:665-672.


Need to be taught!!!

Patient evaluation of quality of care

- Retrospective evaluation of technical quality of care = not reliable
  - Reasons
    - Lack of training?
    - Lack of expertise?
    - Patient do not pay attention
      - Easy to miss something you are not looking for
      - Assume it is correctly done
    - Delay between events and survey/ recall bias?

HOWEVER

We must not conclude that patients are too weak and vulnerable

Some patients MUST BE ABLE to evaluate care process!

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We must stop seeing our patients as weak and vulnerable





Patients CAN evaluate care process!

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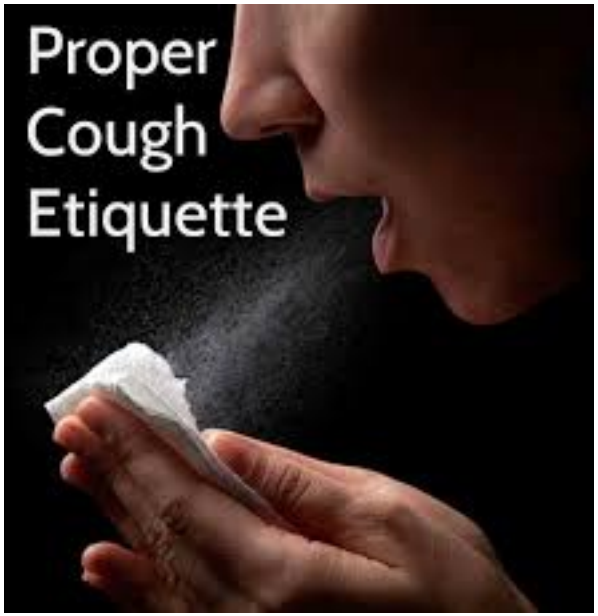
Jewish General Hospital

Assessment of Compliance with Cough Etiquette in the Emergency Room Using a Patient-Based Survey



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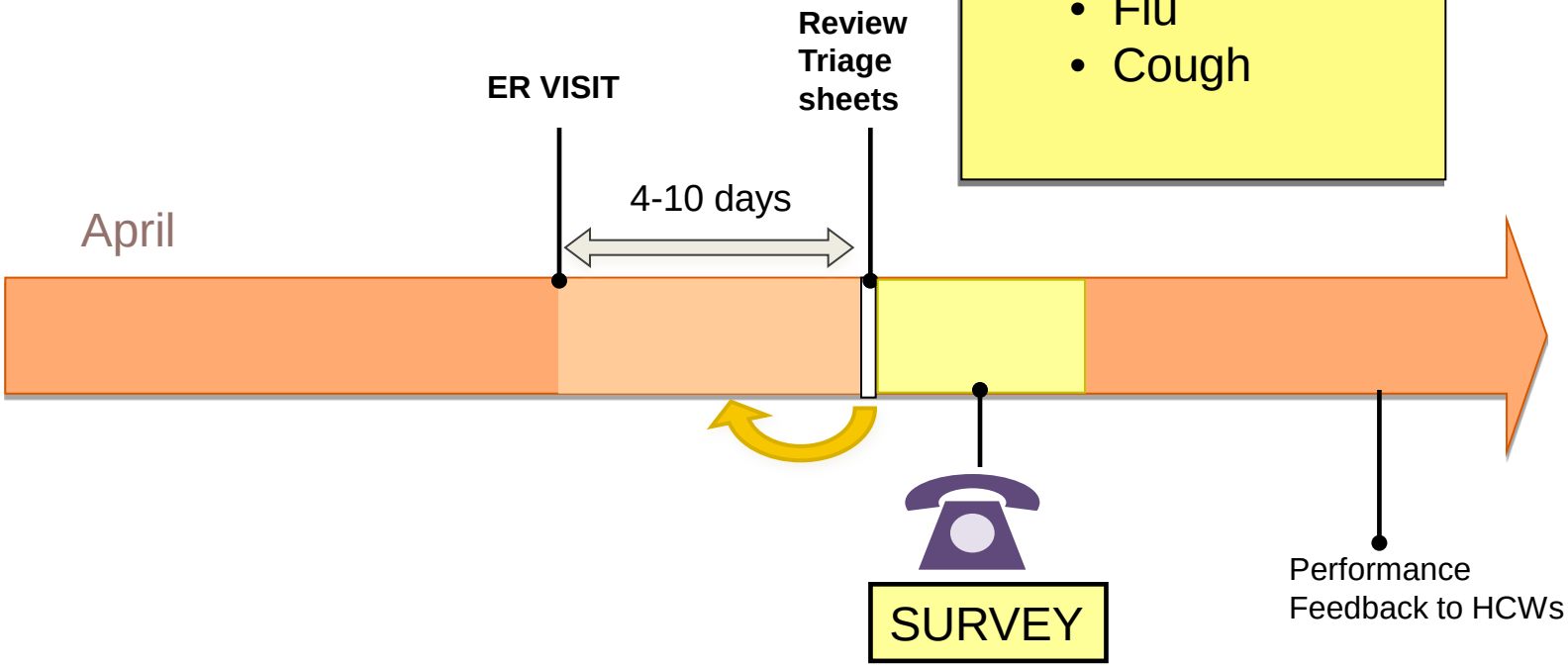
METHODS

I.D. of Patients Presenting

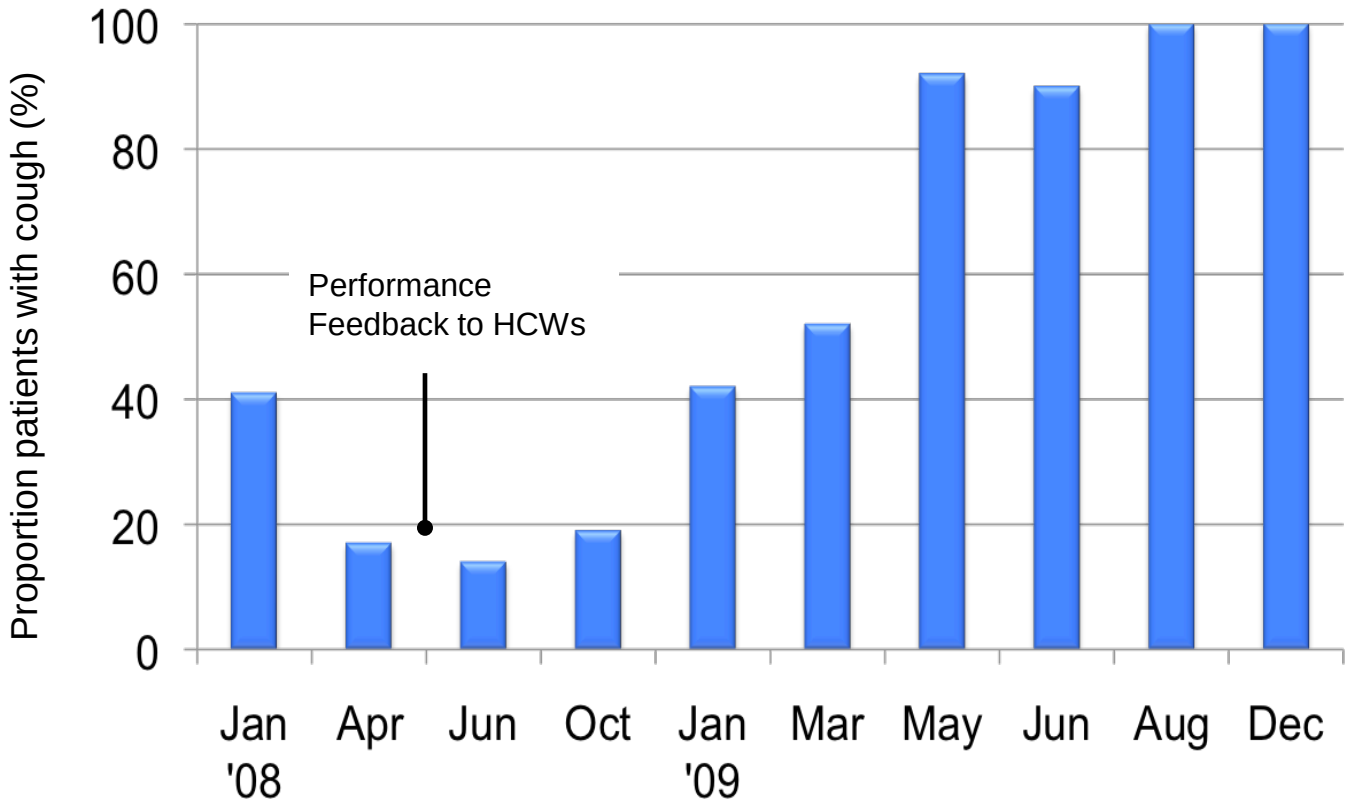
- Cold
- Flu
- Cough



Hôpital général juif
Jewish General Hospital

Longtin Y et al. Infect Control Hosp Epidemiol. 2009 Sep;30(9):904-8.

Proportion who received Cough Etiquette Kit



p<0.001

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Jewish General Hospital

Longtin Y et al. Infect Control Hosp Epidemiol. 2009 Sep;30(9):904-8.

Professional organizations and patient involvement in hand hygiene evaluation

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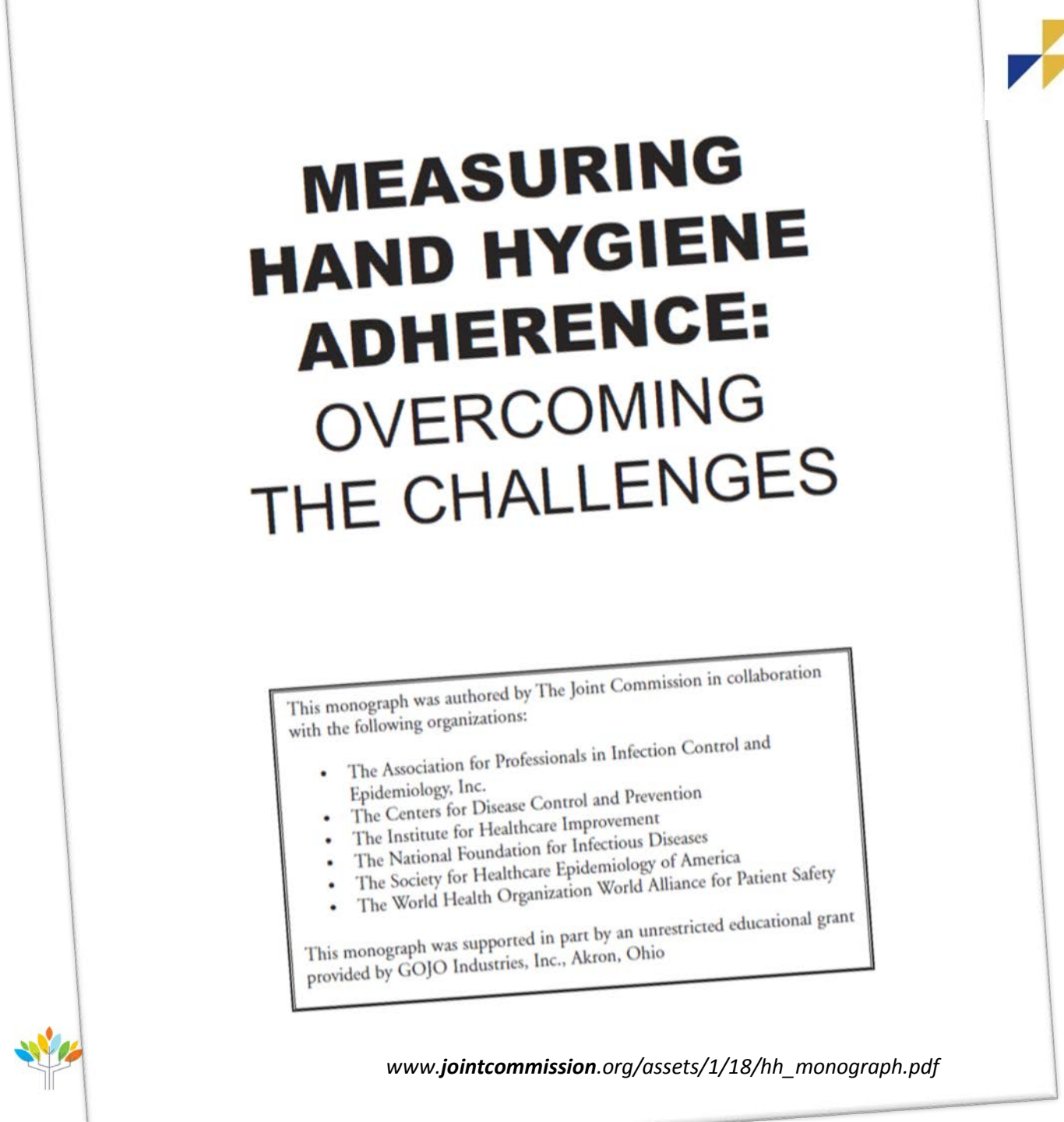

The Joint Commission

CDC
Centers for Disease Control and Prevention

SHEA
The Society for Healthcare Epidemiology of America

Institute for Healthcare Improvement

*www.**jointcommission**.org/assets/1/18/hh_monograph.pdf*

The Joint Commission

Patients

In some organizations, patients are asked to provide information on health care worker hand hygiene. (Using patients as observers is not the same as using patients to remind health care workers to perform hand hygiene, which is a commonly used strategy for improvement; that strategy is described in more detail in Chapter 9.) Using patients as observers may be most effective in settings such as ambulatory care, in which patients are relatively healthy and where independent observers are rarely used. Keep in mind that staff need to know they should perform hand hygiene in front of a patient; the patient will not see hands being cleansed if it is done outside a patient's field of vision.

*www.**jointcommission**.org/assets/1/18/hh_monograph.pdf*

Hôpital général juif
Jewish General Hospital

ACCREDITATION CANADA

- **Client and Family-centered care requirements:**
  - Partner with patients and families in planning, assessing, and delivering their care
  - Include patient partners on advisory boards and planning groups
  - Monitor and evaluate services and quality with input from patients and families

Accreditation Canada

- Standard 4.5
  - The organization monitors compliance with IPC policies and procedures and makes improvements to the policies and procedures and/or education program based on the results
  - Observation can be done by a trained observer within an organization, or by patients/families within an organization or in the community
  - Organizations providing services in client homes who find direct observation not possible can consider alternative methods, such as Questions on client satisfactions surveys that ask about staff's hand hygiene compliance.
- Standard 8.2
  - Hospitals must implement processes for clients and families to report non-compliance with IPC policies and Procedures

On what evidence are these recommendations based?

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Jewish General Hospital

Patient evaluation of Hand Hygiene compliance

- Semmelweis Hand Hygiene Project
  - Published as abstract only (AJIC 2008)
  - Tripler Medical Army Center, Honolulu, HI
  - Single Hospital outpatient clinic
  - Intervention:
    - Patients handed a 3x5'' card upon registering
    - Patients invited to fill out and drop in designated receptacle

Yamada SM AJIC 2008:36(5);E114-E115

Patient information card

Be Involved in Your Care!

- Using soap and water or alcohol rubs is one of the ways that helps us to prevent the spread of germs.
- Please observe our health care provider to see if they wash or use the alcohol rub before providing your care.
- Take an active part in your care by completing the reverse side of this card and placing it in the receptacle in the reception area.

Name of clinic:_____ Date:_____

Type of healthcare worker

Physician ☐
Nurse ☐
Other ☐

Performed Hand Hygiene? Yes ☐ No ☐

Yamada SM AJIC 2008:36(5);E114-E115

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Semmelweis Hand Hygiene Project

Table 1. Number and Percent Observation Tools Returned

Patient Surveys	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
# Distributed	NA	NDC	150	NDC	NDC	348	331	298	NDC	365
# Returned	65	NDC	65	NDC	NDC	212	165	165	NDC	272
% Return	NA	NDC	43.3%	NDC	NDC	60.9%	49.8%	55.4%	NDC	74.5%

NA = Not available
NDC = No Data Collection
Overall monthly compliance for all providers varied from 87% to 99%.

Table 2. Monthly Compliance Data by Provider

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Physician	99.2%	NDC	92.4%	NDC	NDC	91.3%	91.4%	94.4%	NDC	96.9%
Nurse	100.0%	NDC	100%	NDC	NDC	100%	90.0%	100%	NDC	94.4%
Other	100.0%	NDC	100%	NDC	NDC	96.6%	80.0%	90.0%	NDC	100%
Overall	99.7%	NDC	97.5%	NDC	NDC	96.0%	87.1%	94.8%	NDC	97.1%

NDC = No Data Collection

Yamada SM AJIC 2008:36(5);E114-E115

The Joint Commission Journal on Quality and Patient Safety

National Patient Safety Goals

Engaging the Patient as Observer to Promote Hand Hygiene Compliance in Ambulatory Care

Mark J. Bittle, Dr.P.H., M.B.A.; Suzanne LaMarche, M.B.A.

- Johns Hopkins Hospital
- Switch in HH policy:
  - HH upon entering and leaving patient room
- Baseline HH compliance rate (trained nurses):
  - 68% (range, 63-78%)
- Need: extend compliance to outpatient clinics

Bittle MJ *et al*. Jt Comm J Qual Patient Saf. 2009;35(10):519-25.

The Joint Commission Journal on Quality and Patient Safety

National Patient Safety Goals

Engaging the Patient as Observer to Promote Hand Hygiene Compliance in Ambulatory Care

Mark J. Bittle, Dr.P.H., M.B.A.; Suzanne LaMarche, M.B.A.

- Methods
  - Patients recruited upon registering at outpatient clinic
  - If patient accepts
    - Scoring card (yellow) + pencil
  - Patient drops card in ballot box upon leaving clinic

"Engaging the patient to report on hand hygiene compliance was found to be efficient and acceptable to patients and providers, and the results of the observations were representative of actual provider behavior."

* The card is issued to the patient at check-in. The patient receives a small pencil to complete the card and places the card in a yellow drop box on leaving the clinical practice.

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Jewish General Hospital

The Joint Commission Journal on Quality and Patient Safety

National Patient Safety Goals

Engaging the Patient as Observer to Promote Hand Hygiene Compliance in Ambulatory Care

Mark J. Bittle, Dr.P.H., M.B.A.; Suzanne LaMarche, M.B.A.

- Results
  - Number enrolled patients: ?
  - Response rate: 22% (range, 12-77%)
  - Observed compliance: 88%
  - Validation of accuracy of observation (n=65)
    - Independent observer in room
    - Concordance: 100%

Bittle MJ *et al*. Jt Comm J Qual Patient Saf. 2009;35(10):519-25.

The Joint Commission Journal on Quality and Patient Safety

National Patient Safety Goals

Engaging the Patient as Observer to Promote Hand Hygiene Compliance in Ambulatory Care

Mark J. Bittle, Dr.P.H., M.B.A.; Suzanne LaMarche, M.B.A.

- Number of patients enrolled?
- Ethical approval?

Women's College Hospital

- Pilot project, 10 months
- Outpatient clinics
- Survey card handed upon registration
- " A great tool for keeping up with HH routine" a physician

WOMEN'S COLLEGE HOSPITAL
Health care for women | REVOLUTIONIZED

BE A PARTNER IN YOUR H

Clinic: Family Practice Health Clinic – Yellov

Date: _____

Healthcare provider	Cleaned hands befor	
	Not applicable	Yes
☐ Staff physician	☐	☐
☐ Resident	☐	☐
☐ Nurse	☐	☐

We always welcome your fe

Comments: _____

_____

Please drop off your completed survey car
the receptionist.

Thank you!

WOMEN'S COLLEGE HOSPITAL
Health care for women | REVOLUTIONIZED

BE A PARTNER IN YOUR HEALTHCARE!

Background:

- At Women's College Hospital, our goal is to provide you with safe and high quality healthcare.
- We use soap and water or hand sanitizer to clean our hands and help prevent the spread of germs.
- Be a partner in your healthcare and let us know how well we are doing.

Instructions:

- Please observe your healthcare providers while you are in clinic today to see if they are cleaning their hands before physical contact with you.
- Complete the reverse side of this card and drop it off in the drop box near the receptionist.

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Women's College Hospital

- Direct observation is challenging in outpatient setting
- 11-month pilot project in ambulatory care clinics at the Women's College Hospital (Ontario, Canada)
- 75% (381/507) cards returned
- 97% hand hygiene compliance before direct contact with a patient
- 87% concordance between patients & nurse auditor

WOMEN'S COLLEGE HOSPITAL
Health care for women | REVOLUTIONIZED

BE A PARTNER IN YOUR HEALTHCARE!

Clinic: Family Practice Health Clinic – Yellow A Team

Date: _____

Healthcare provider	Cleaned hands before physical contact (√)			
	Not applicable	Yes	No	Don't know
☐ Staff physician	☐	☐	☐	☐

"…practical, accurate, and cost-effective…

…supports the education, engagement & empowerment of patients"

Le-Abuyen et al. American Journal of Infection Control. 2014;42:439.

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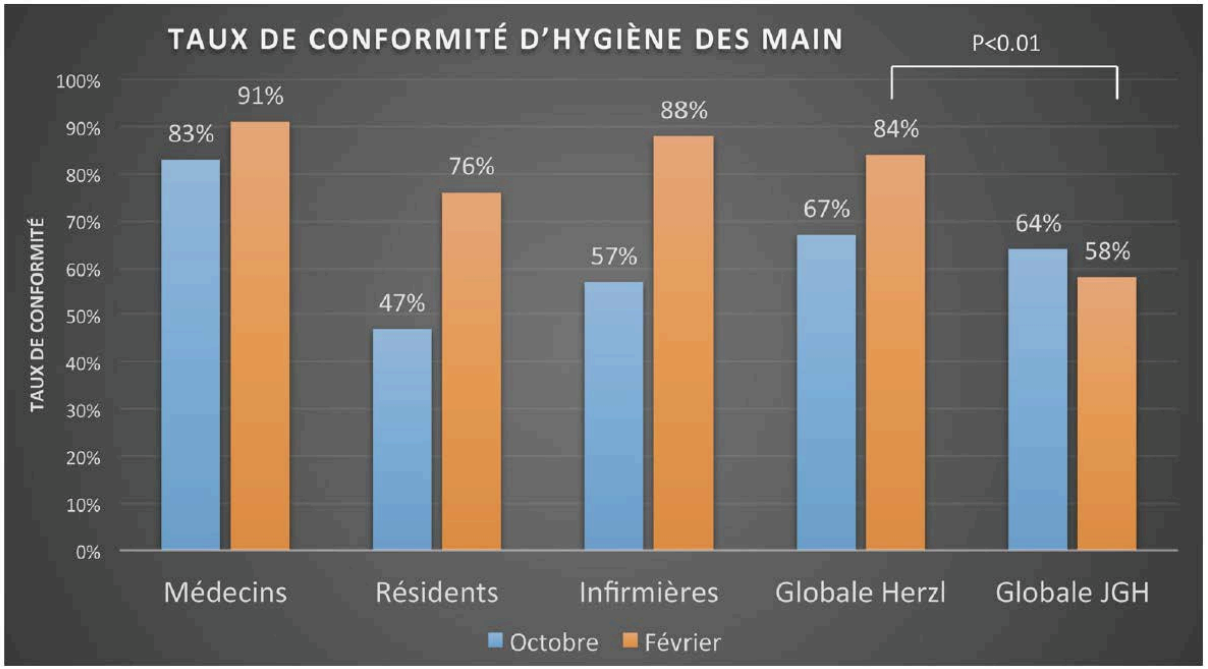
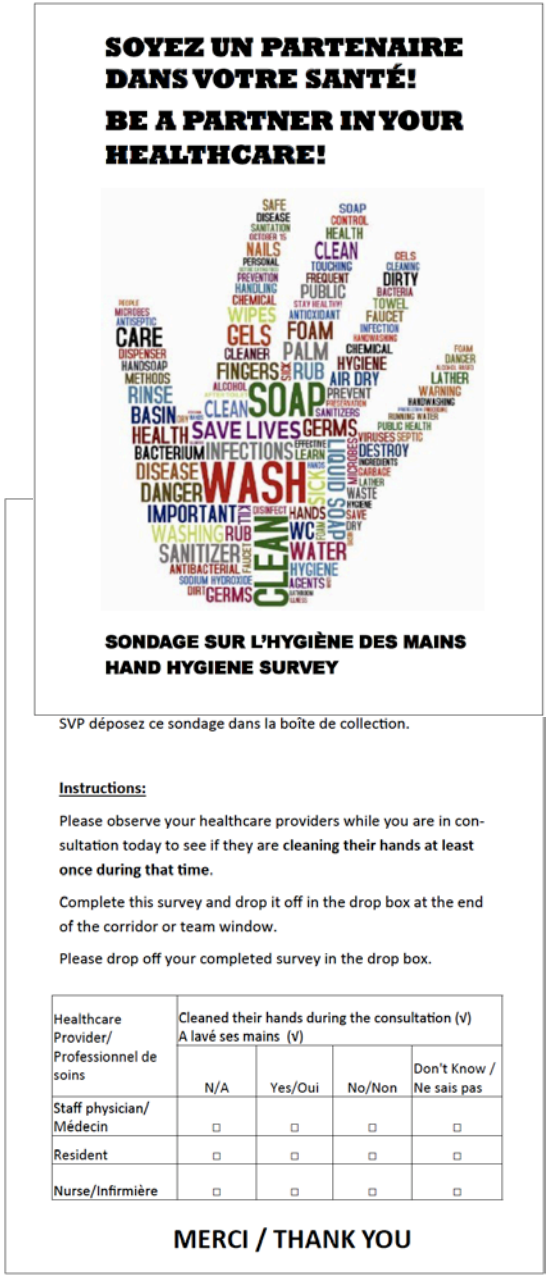
Figure 1 : Taux de conformité d'hygiène des mains rapportés par les patients.



At the request of Fam Medicine Outpatient Clinic
Patient invited to report on staff HH practice
Reported whether HCW performed HH at least once
2 audits and performance feedback
54% participation rate
Significant increase in HH compliance



SOYEZ UN PARTENAIRE DANS VOTRE SANTÉ!

BE A PARTNER IN YOUR HEALTHCARE!

SONDAGE SUR L'HYGIÈNE DES MAINS
HAND HYGIENE SURVEY

SVP déposez ce sondage dans la boîte de collection.

Instructions:

Please observe your healthcare providers while you are in consultation today to see if they are **cleaning their hands at least once during that time.**

Complete this survey and drop it off in the drop box at the end of the corridor or team window.

Please drop off your completed survey in the drop box.

Healthcare Provider/ Professionnel de soins	Cleaned their hands during the consultation (√) A lavé ses mains (√)			
	N/A	Yes/Oui	No/Non	Don't Know / Ne sais pas
Staff physician/ Médecin	□	□	□	□
Resident	□	□	□	□
Nurse/Infirmière	□	□	□	□

MERCI / THANK YOU

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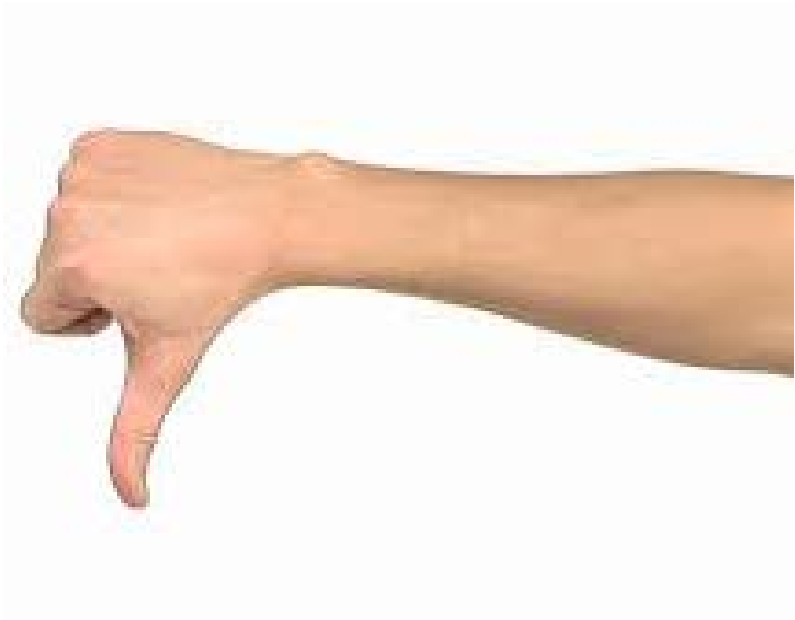
Patient Involvement in HH observation

- Logical step in the involvement of patients
- Recommended by many organizations (CDC, Accreditation Canada)
- However, many questions remain unanswered:
  - Reliability, Validity
  - Patient acceptance
  - HCW perception
  - Impact on patient-HCW relationship
  - Support from organizations
  - Ethical considerations

Risks and Benefits

- **Potential disadvantages – the patient's perspective**
  - Could cause anxiety to patients if they witness suboptimal quality of care
  - Could modify patient-caregiver relationship negatively
    - Relationship could become more confrontational
  - Once trained, a patient cannot be "detrained"
  - Possible bias:
    - Desire to please HCW/desire to take "revenge"
    - Fear of reprisals
  - Places more responsibility onto vulnerable patients
  - Share responsibility in case of adverse event?



Risks and Benefits

- **Potential disadvantages – the HCW's perspective**
  - Could be victim of bad observations or bad observers
  - Could be perceived as healthcare institutions asking patients to "work" for free
    - Unions could be hostile.
  - Fear of lawsuits and bad publicity
  - Health institutions could lose control over the dissemination of results
    - In case of excellent compliance, this could help boost the institution's image. However, this could have a negative impact if patients observe sub-standard practices.

Ethical considerations

- Have been almost entirely overlooked
  - Even though the proposed project transforms a >2000 year-old contract between patients and HCWs
    - NOT trivial considerations!

Patient Observer Study (POST)

Engaging <u>hospitalized</u> patients in the evaluation of staff hand hygiene compliance – a prospective study

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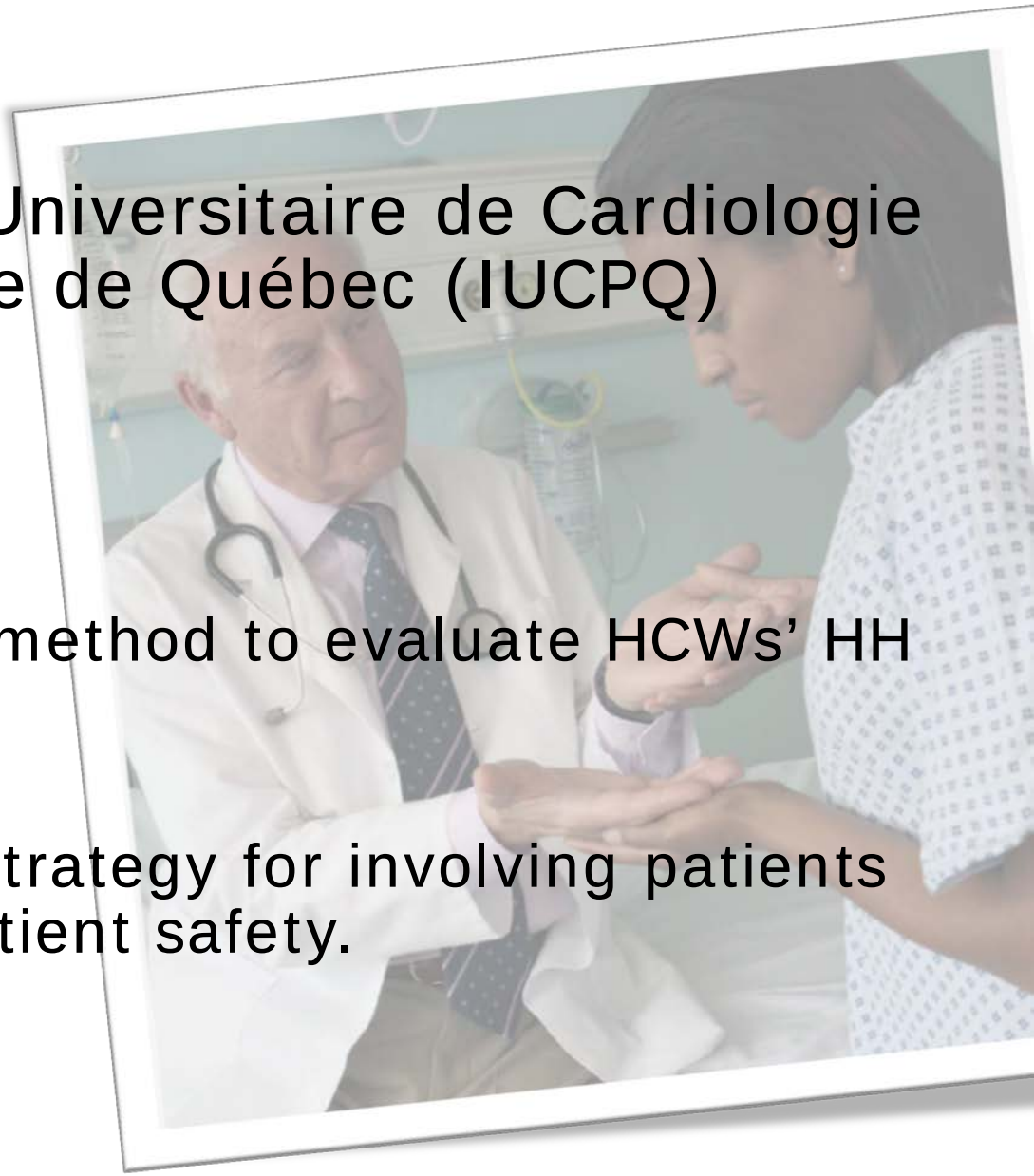
POST

- Initiated Institut Universitaire de Cardiologie et de Pneumologie de Québec (IUCPQ)

- Objectives

  1. Develop a new method to evaluate HCWs' HH compliance

  2. Explore a new strategy for involving patients in improving patient safety.



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POST

- Principal research question
  - Can patients be engaged to evaluate prospectively staff HH compliance?
- Primary hypothesis
  - A sizeable proportion of patients will accept to participate, be able to correctly recognize indications for HH and appreciate whether HH occurred according to institutional recommendations, and appreciate their experience

Methodology

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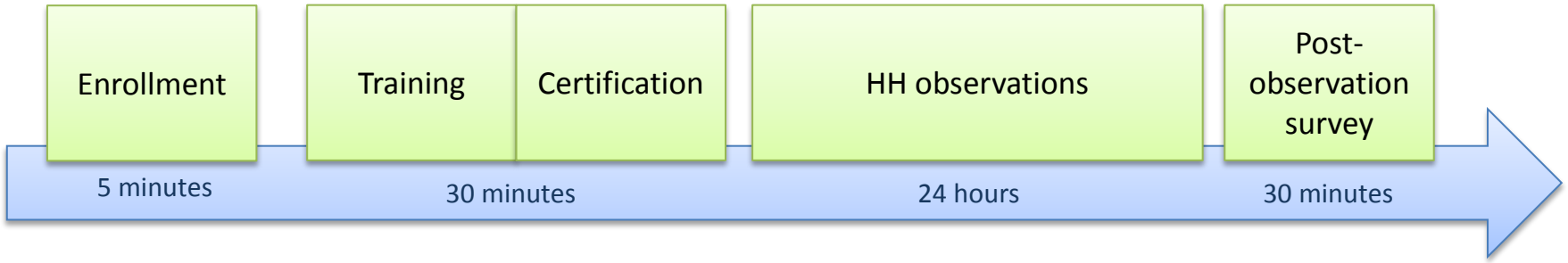
Methodology

- Study design
  - Interventional, uncontrolled prospective study
    - “proof-of-principle” pilot study
- Population
  - Patients from bariatric surgery unit, IUCPQ
    - 32-bed unit
- Collaborators
  - Maria-Cecilia Gallani RN, PhD
    - Laval University Faculty of Medicine
  - Lori Côté RN IPC cert.
    - Msc candidate

Methodology



Timeline. Patient recruitment and observation

Methodology

- Eligibility criteria
  - Recovering from bariatric surgery (24h post-op)
  - No acute or life-threatening condition
  - Absence of additional precautions
  - Adequate language and writing skills
  - >18 years old

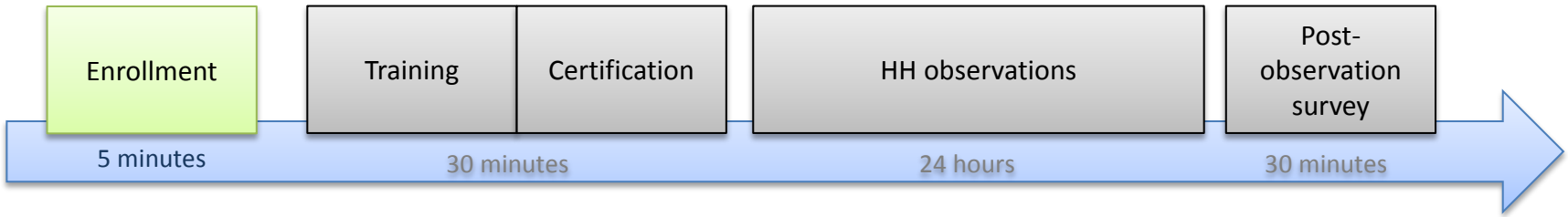
Methodology

- Identification of potential participants
  - Research nurse in conjunction with head nurse/assistant head nurse

- Pre-enrollment questionnaire

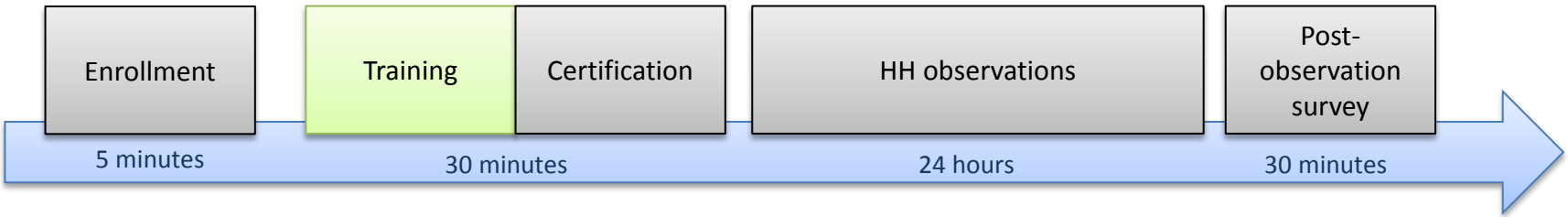
  - Objectives

    1. Determine proportion who accept to participate
    2. Understand the reasons for declining to participate
    3. Collect very limited demographic information



Methodology

- Training
  - Required to provide the patient with sufficient knowledge
  - Given by research team
  - Objective: teach HH Moment #1
    - Patient Zone
    - Recognize opportunities for HH
    - Determine whether HH was performed as required
    - Record observations in form



Training of patients

20-30 minutes

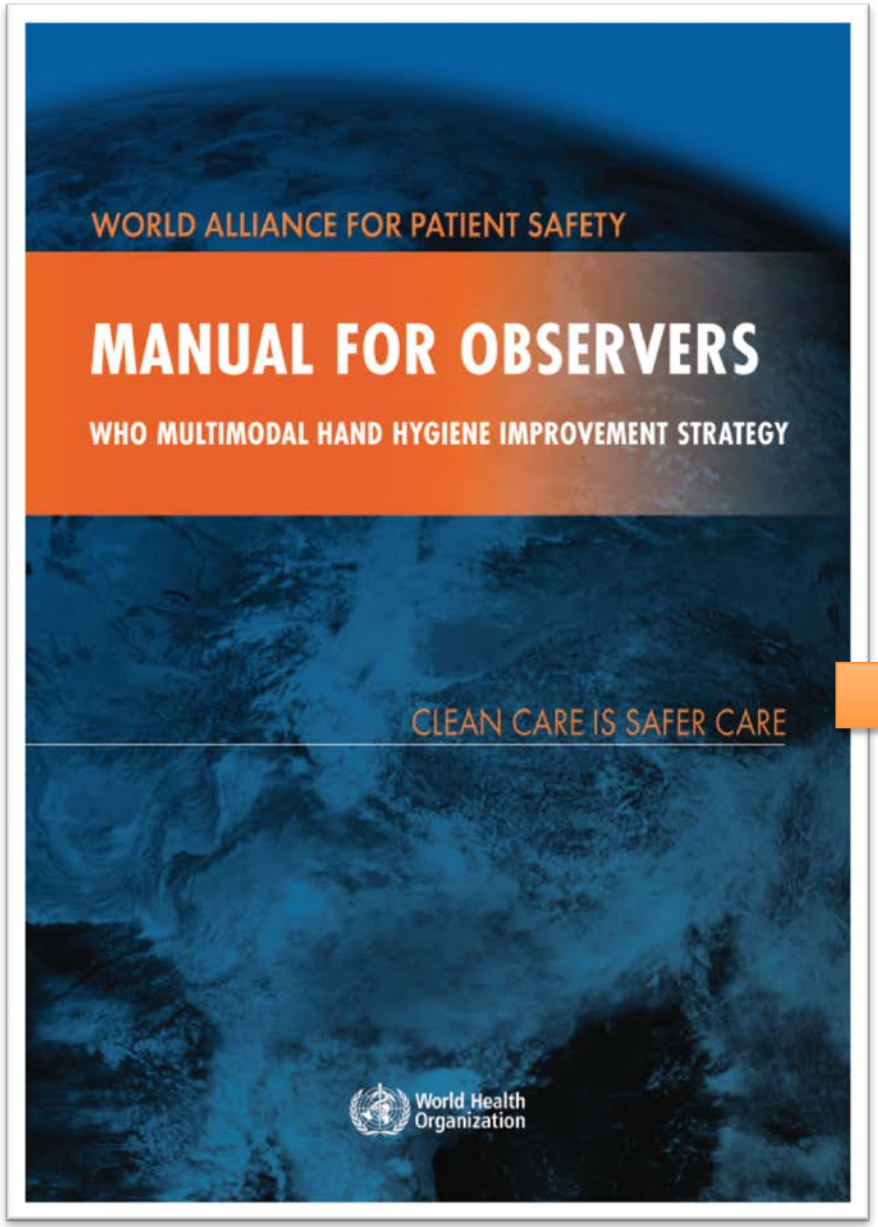
Section 1: theoretical basis

- Role of hands in transmission of microbes and infections : importance of hand hygiene to prevent nosocomial infections in the community and in healthcare settings;
- 2 hand hygiene techniques (hand rubbing and hand washing);
- Notion of « patient zone »
- 4 Moments to hand hygiene (in particular Moment No. 1)
- Concept of hand hygiene opportunity
  - Only encounters in which there was an opportunity to perform HH may be evaluated;
  - Only HCW who touch either the patient or a surface within the patient zone must be evaluated
  - Some encounters are « not evaluable » if cannot assess whether the HCW has touched a surface outside of the patient zone;
- Significance of not witnessing HH
  - May have been conducted in the corridor so care may still be safe.
- Observations only concerns HCWs, not patients or visitors.

Section 2 : Practical training

- Scenarios of encounters between patients and healthcare workers and are enacted by the research nurse.
- The subject is invited to fill out the observation booklet. Any uncertainty or error is corrected by the research nurse.
-
  - Moment No. 1 correctly performed (nurse touches object outside of Patient Zone and then touches the patient)
  - Moment No. 1 correctly perfomed but non evaluable (observer cannot see HCW touch object outside of Patient Zone)
  - Moment No. 1 not respected (HCW comes directly from corridor and touches the bed without performing HH)
  - Moment No. 1 respected (HCW places cup on bedside table, performs HH and touches the patient)
  - Moment No. 1 not respected (HCW touches the bedside table before HH)
  - Superfluous HH (HCW performs HH but does not touch the patient or the patient zone)
  - Moment No. 1 missed (HCW puts on gloves instead of perfoming HH)

- Miscellaneous information
- Observations must be discreet but not hidden;
  - If HCW asks about HH, answer that you are participating in a study to see whether patients can evaluate quality of care
  - Remember: HCWs are aware of this project and posters have been placed to explain the objectives
- Anonymous observations (do not identify the HCW)
- DO not present results to HCW (data will be aggregated before restitution)
- Keep booklet in the room. Research assistant will pickup booklet in 24h



WORLD ALLIANCE for PATIENT SAFETY

World Health Organization

ANNEX 34

OBSERVATION FORM

Country	City	Hospital	Site ID

Observer (initials)
Date (dd.mm.yyyy) . .
Start/End time (hh:mm) : / :
Session duration (mm)

Period No.
Session No.
Form No.

Department
Service name
Ward name

Prof.cat.
Code
Number

Opp	Indication	Action
1	☐ bef-pat. ☐ bef-asept. ☐ aft-bfluid ☐ aft-pat. ☐ aft-surr.	☐ rub ☐ wash ○ missed
2	☐ bef-pat. ☐ bef-asept. ☐ aft-bfluid ☐ aft-pat. ☐ aft-surr.	☐ rub ☐ wash ○ missed

WHO observation tools:
too complicated for patients

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Hand Hygiene Observation Forms

1. Did the healthcare worker **touch the patient or an object** within the patient zone ?

No → Do not fill out form

Yes ☐

2. Did you see the healthcare worker **touch an object or a surface outside of the Patient Zone** before entering the Patient Zone of the patient ?

No ☐
Yes ☐
I don't know ☐

3. Did you see the healthcare worker perform **hand hygiene before** touching the patient or a surface within the Patient Zone ?

No ☐
Yes ☐
I don't know ☐

4. Type of Healthcare worker

Nurse ☐
Physician ☐
Other ☐
I don't know/unsure ☐

Date :_____ **Time :**_____ ☐ **AM** ☐ **PM**

YYYY/MM/DD

Research Assistant:

Ms. X

For any question/comment :

- Dial XXXX on the phone in the patient room. You can leave a message if no answer.

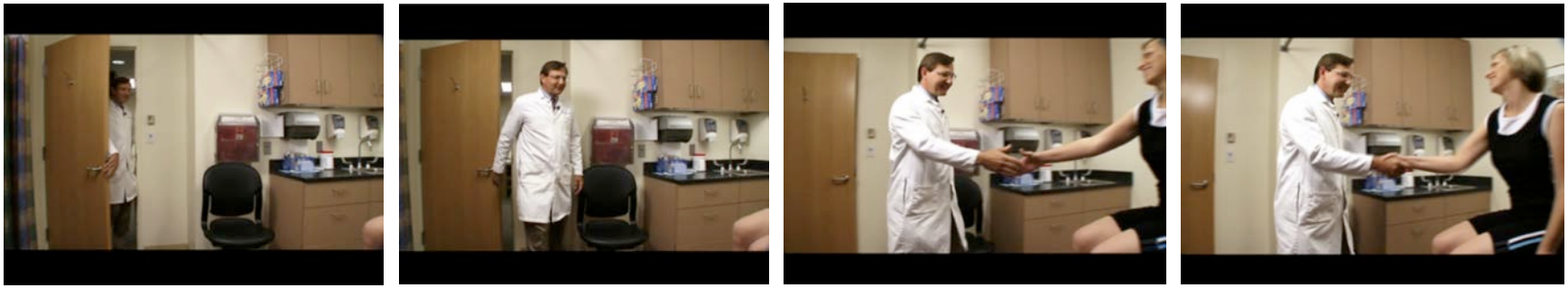
OR

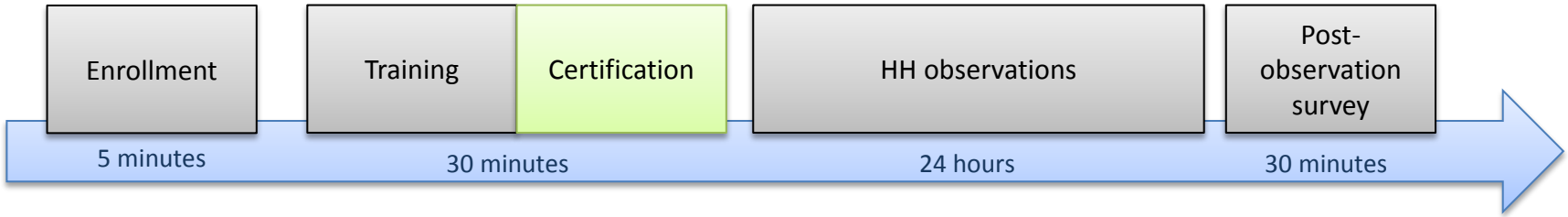
- Dial XXX-XXXX (pager) and enter the number to call back after the beep. The research nurse will call you back as soon as possible.

Patient observation tools:
- Focusing only on moment #1

Certification of participants

- Essential prior to actual observations
- Only certified patients will proceed to actual observations
- Methods: 6 HH videos from WHO
  - Used to certify IPC nurses to conduct HH observations
- Passing mark: 100% (6/6)





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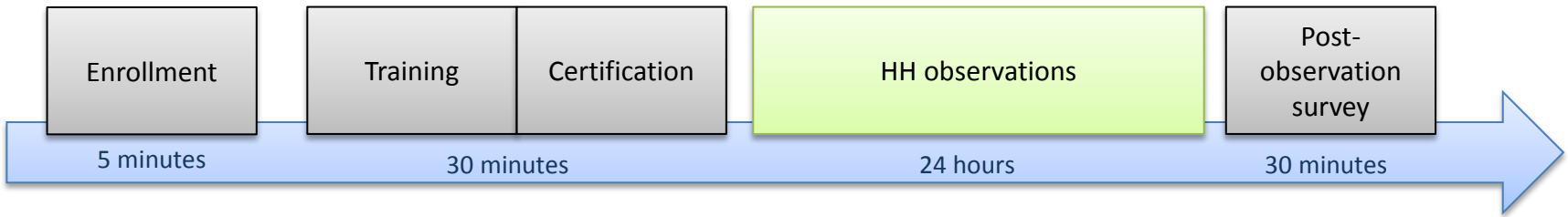
Methodology

- Observation sessions
  - Patients invited to systematically collect HH observations during 24-hour period
  - Record their observations in booklet



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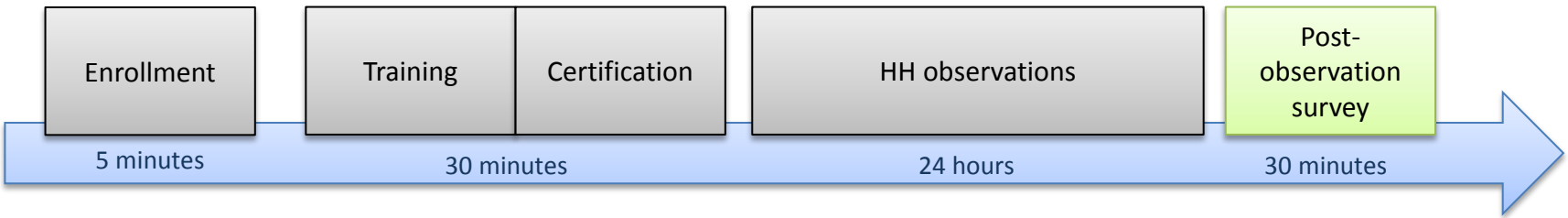
Methodology

- Post-observation survey
  - Objective: collect participants' experiences and perceptions
  - 20-minute verbal survey
    - >30 items + sociodemographic information
    - Based on Theory of Planned Behavior (TPB) + Health Action Process Approach (HAPA)
  - Open questions and Likert scales



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Methodology

- **Post-observation survey – Key Elements**
  - General perception of the experience
  - Perception of being sufficiently competent to conduct observations
  - Trust in one's observations
  - Technical difficulty
  - Unforeseen difficulties/challenges
  - Comments from HCWs
  - Uneasiness to perform observations
  - Modification of perception of quality of care
  - Modification of relationship with HCWs
  - Whether observer has witnessed non-compliance
  - Whether observations were anxiety-provoking
  - Would accept to evaluate other aspects of care

Support from Institution

- Support obtained from CEO of IUCPQ with **ONE CONDITION**:
  - Should not start study before obtaining support from all stakeholders
    - Ethical Committee and Scientific Committee
    - CEO
    - DSI
    - DSP
    - CMDP (Medical Executive)
    - HR
    - Unions
    - Head nurse + nurses on bariatric surgery unit
    - All bariatric surgeons
  - Funded by the Foundation of IUCPQ
  - Research focusing on patient rather than the HCW
    - Ask HCWs to help patients succeed and asked to let us know if any adverse events

INSTITUT UNIVERSITAIRE DE CARDIOLOGIE ET DE PNEUMOLOGIE DE QUÉBEC

AFFILIÉ À UNIVERSITÉ LAVAL

Hôpital général juif
Jewish General Hospital

Information signs

CENTRE DE RECHERCHE
INSTITUT UNIVERSITAIRE
DE CARDIOLOGIE
ET DE PNEUMOLOGIE
DE QUÉBEC

AFFILIÉ À UNIVERSITÉ LAVAL

Projet pilote au 2e Notre-Dame :

Implication des usagers dans la mesure de l'hygiène des mains des soignants

MISE EN CONTEXTE

- L'hygiène des mains est la principale mesure pour prévenir les infections nosocomiales.
- Mesurer le respect de l'hygiène des mains des soignants est obligatoire dans tous les centres hospitaliers canadiens (exigence d'Agrément Canada)[1].
- Les usagers sont encouragés à participer activement à leurs soins de santé.
- Les usagers ont un rôle à jouer en ce qui concerne la sécurité et la prévention des événements indésirables[1].

PROBLÉMATIQUE

L'observation directe de l'hygiène des mains des soignants par les infirmières en prévention des infections comporte plusieurs limites.

OBJECTIF DU PROJET

Vérifier si certains usagers hospitalisés, spécialement identifiés et formés, peuvent participer à mesurer de façon anonyme l'hygiène des mains des soignants.

DÉROULEMENT DU PROJET

- Huit (8) usagers seront recrutés à chaque mois, pour une période de 9 mois consécutifs (total 72 usagers).
- Les usagers seront recrutés 48 à 72 h postopératoire, s'ils rencontrent les critères d'inclusion.
- Les usagers recrutés, formés et validés, rempliront 10 fiches de mesure, sur une période de 24 h.
- Les données récoltées seront totalement anonymes : elles ne permettront pas de connaître l'identité des travailleurs.
- Les usagers mesureront le moment #1 pour l'hygiène des mains: « Avant de toucher à l'usager ou à son environnement ».
- Le vécu des usagers et des soignants sera collecté durant le projet.
- Lorsqu'il sera en cours, le projet sera bien annoncé à l'unité de soins.

PARTENAIRES

Madame Mélanie Lemelin, infirmière-chef du 2e Notre-Dame, Équipe soignante du 2e Notre-Dame, Équipe des chirurgiens bariatriques, Fondation de l'IUCPQ, Direction générale, Direction des soins infirmiers, Direction des ressources humaines, Conseil des infirmières et infirmiers, Conseil des médecins, dentistes et pharmaciens, Conseil multidisciplinaire, Comité de prévention des infections, Programme de prévention des infections, Syndicat interprofessionnel de la santé de l'IUCPQ, Alliance du personnel professionnel et technique de la santé et des services sociaux-IUCPQ, Syndicat canadien de la fonction publique-IUCPQ.

Ce projet a été approuvé par le Comité de révision scientifique (axe obésité et métabolisme) et par le Comité d'éthique de la recherche de l'IUCPQ.

CONTACT

Questions, commentaires ou suggestions?
Veuillez contactez Lori Côté, Conseillère en prévention des infections, étudiante à la maîtrise et responsable du projet.
Téléavertisseur : **418-684-7240**
Téléphone : **418-656-8711 poste 5605**

RÉFÉRENCES

1 Agrément Canada. 2011. *Le programme d'agrément : Pratiques organisationnelles requises.* Consulté en ligne : **http://accreditation.ca/programmes-d-agrements/qmentum/pratiques-organisationnelles-requises/**

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Results

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RESULTS

- Recruitment period: August 2014- March 2015
- No. eligible patients: 71
- No. patients not available: 25
  - Main Reasons: sleep 17/25 (68%)
    - Other reasons: Visitors, Other HCWs
- No. patients approached:
  - 46
  - Accepted: 25 (54%)
  - Age: average = 44 (range, 23-67)
  - 64% female

Reasons for refusing to participate

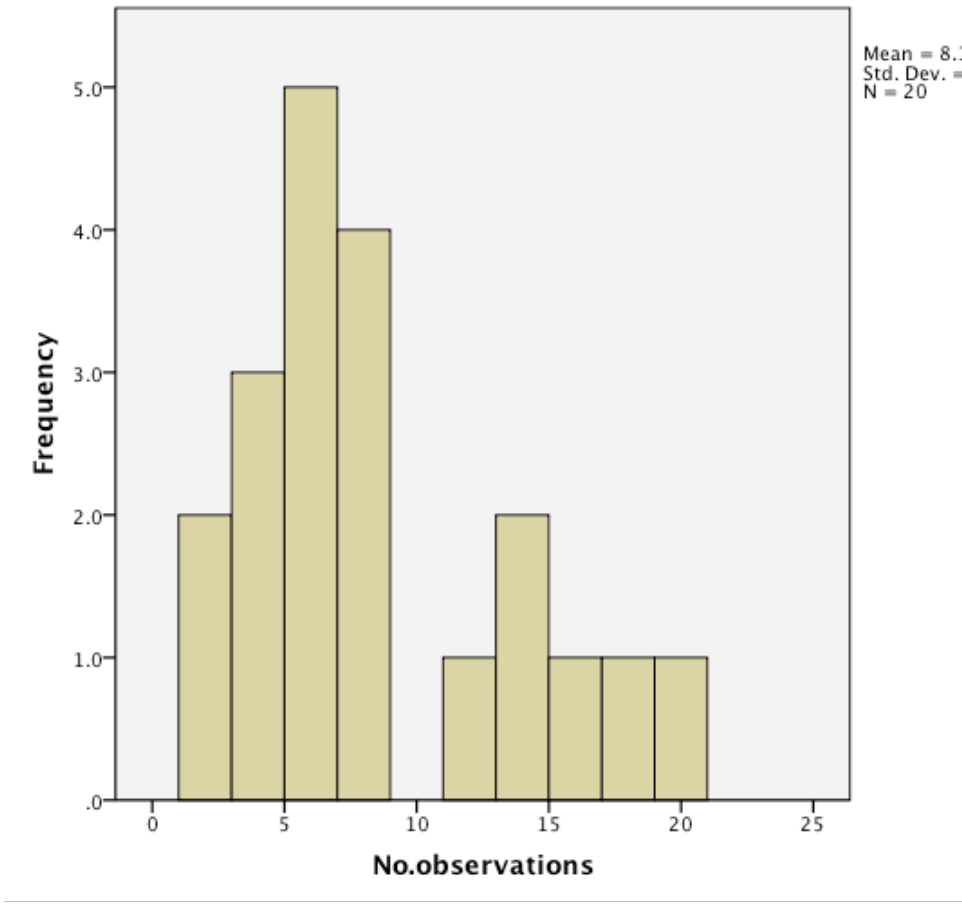
- Physically unwell, pain, nauseated (n=6)
- Not interested (n=5)
- Tired (n=3)
- Need to receive care (HD, therapy) (n=2)
- Will soon be discharged (n=1)
- Visitors (n=1)
- Fear of annoying HCWs (n=1)

Training

- Average duration training:
  - 19 minutes (range, 13-40)
- Average duration validation:
  - 11 minutes (range, 10-20)
- Score:
  - 100% 7/25
  - 80% 12/25
  - 60% 5/25
  - 40% 1/25

OBSERVATIONS

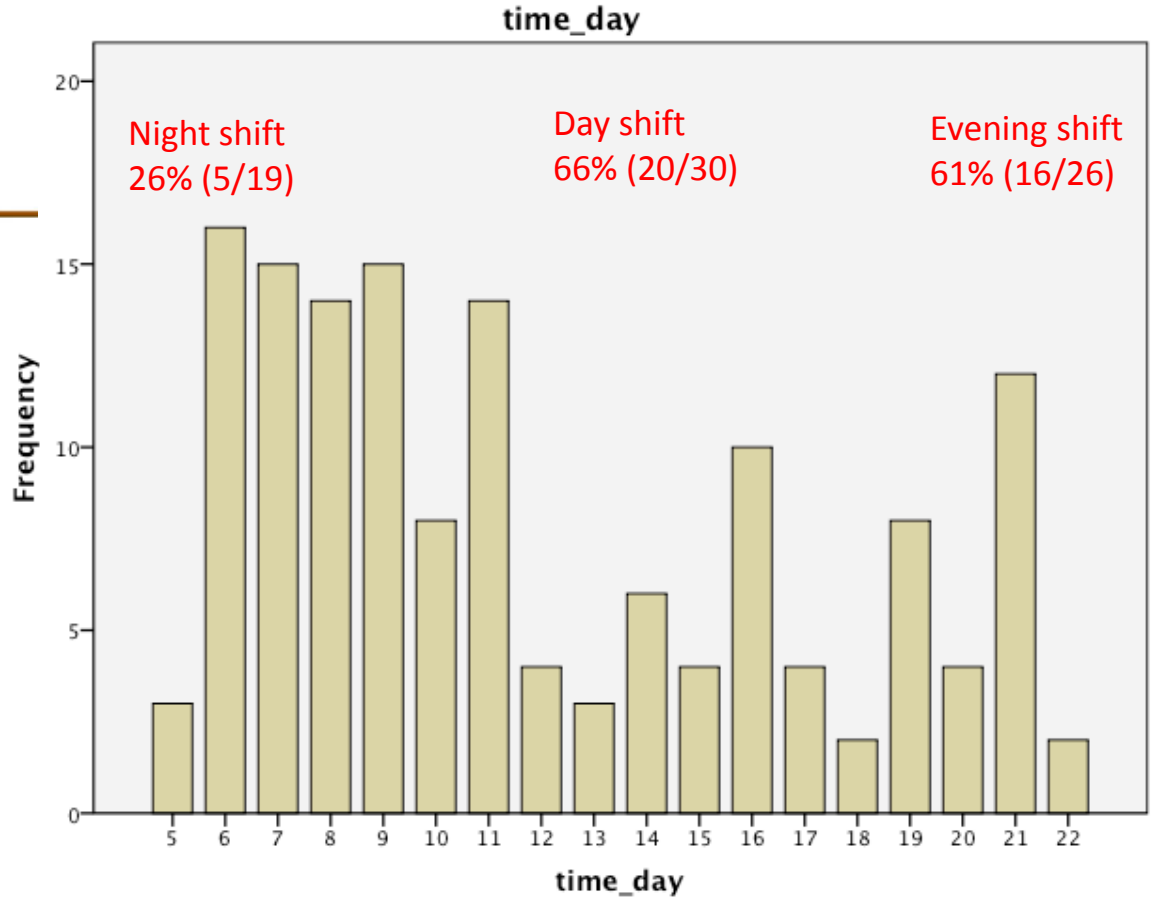
- No. observations: 167
  - 83 (49%) excluded because patient had not seen HCW touch a surface outside patient zone
- Average: 8 obs/24h



Type HCW observed

- Nurses 57%
- MD 6%
- Orderlies 21%
- Other/unknown: 15%

Time of the day vs. observations



Hand hygiene compliance

Patients' experience

- Qualitative assessment
  - Positive experience: 23/25

- Funny
- easy
- not a burden
- happy to collaborate
- feel useful
- kills time

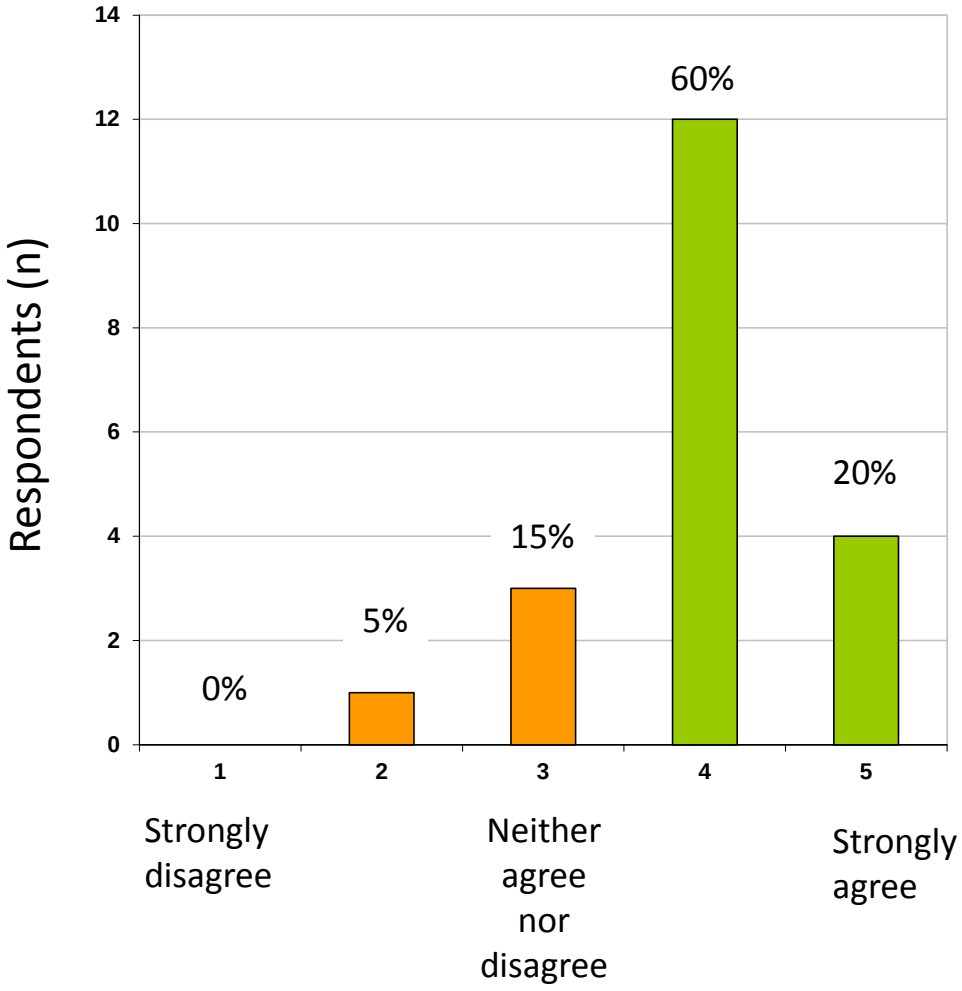
- important study
- will help improve HH
- not a burden
- not afraid to be judged by HCW
- Helps you realize importance of HH

Patients' experience

- Qualitative assessment
  - Negative experience: 2/25

    - Surprised to witness such low HH compliance
    - Afraid will affect relation with MD
    - Have other priorities

How **easy** were the observations to perform?



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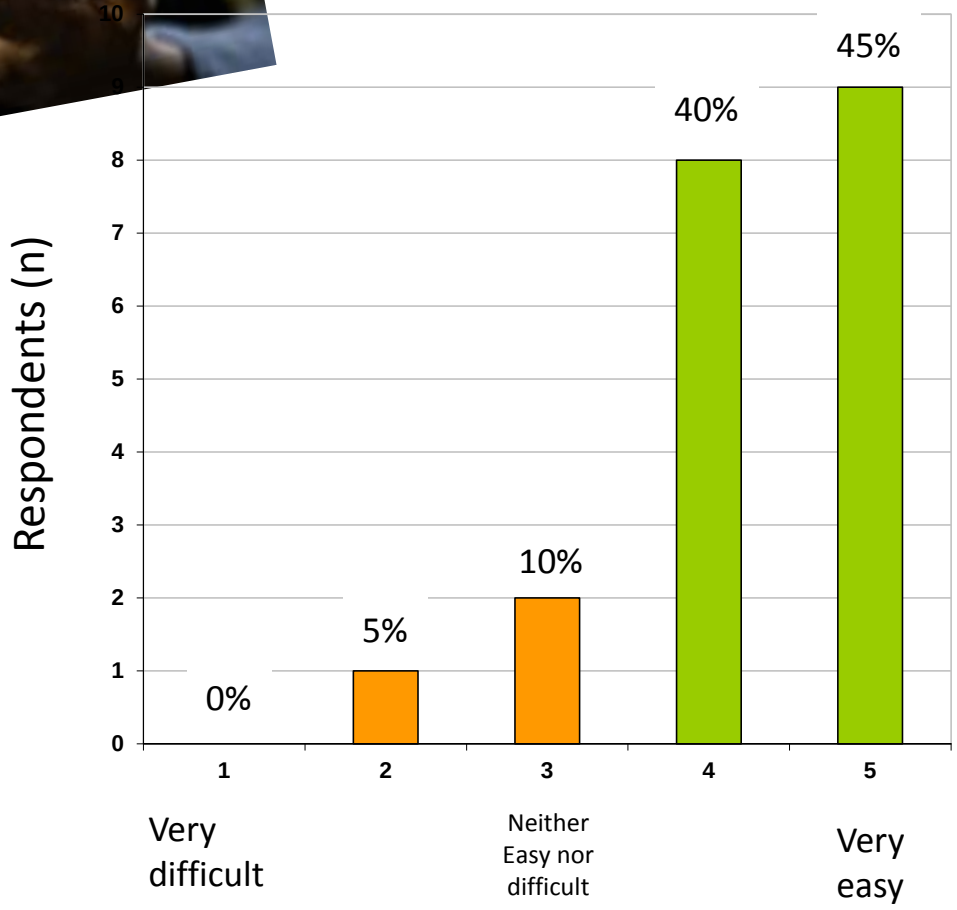
How easy was it to **record** the observations?



Main difficulty: not seeing properly

- Curtains drawn
- Cannot see what happens in the corridor
- Not paying attention
- Darkness at night
- Distributors outside of the curtains

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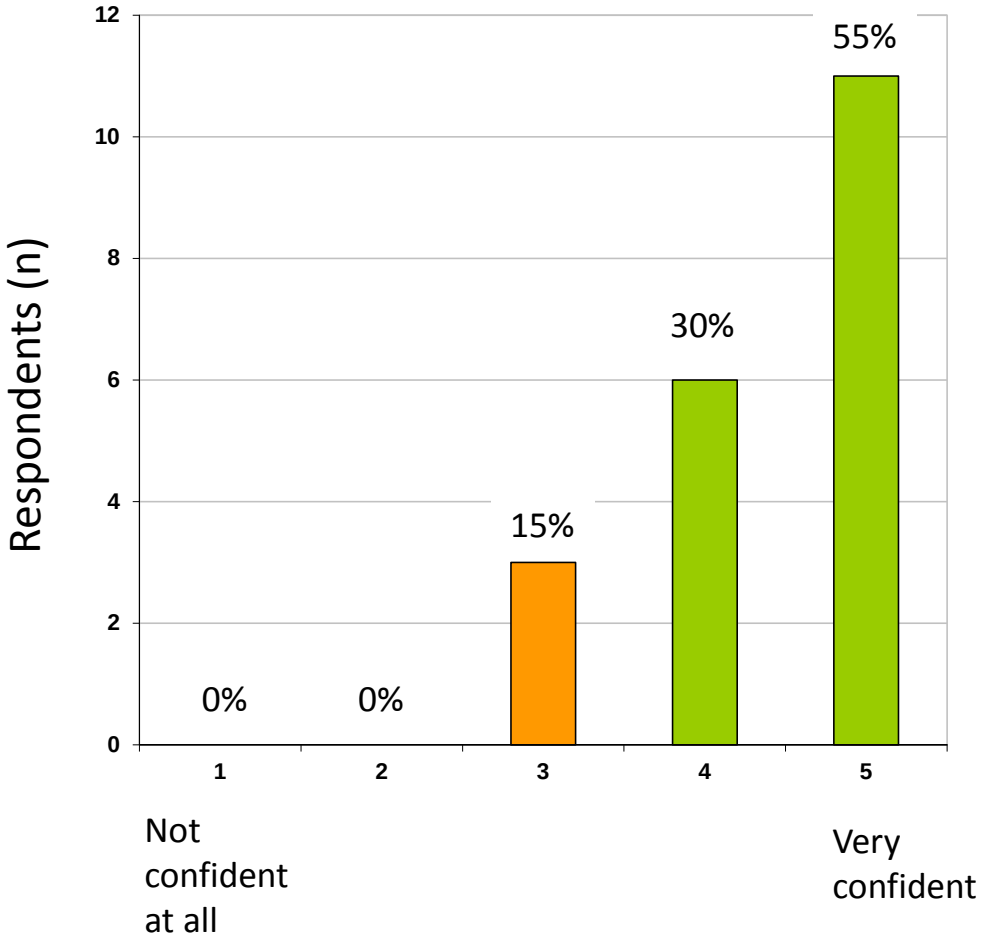
Jewish General Hospital

How **confident** are you in the quality of your observations?



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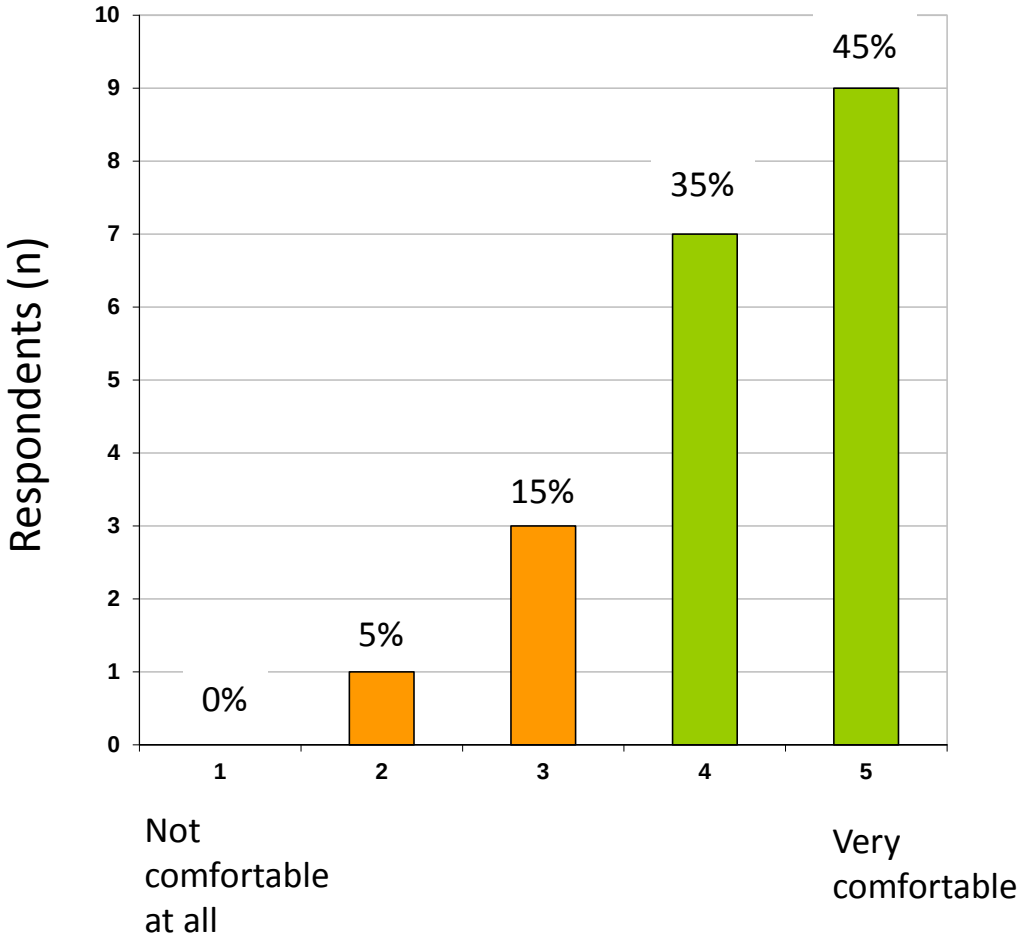
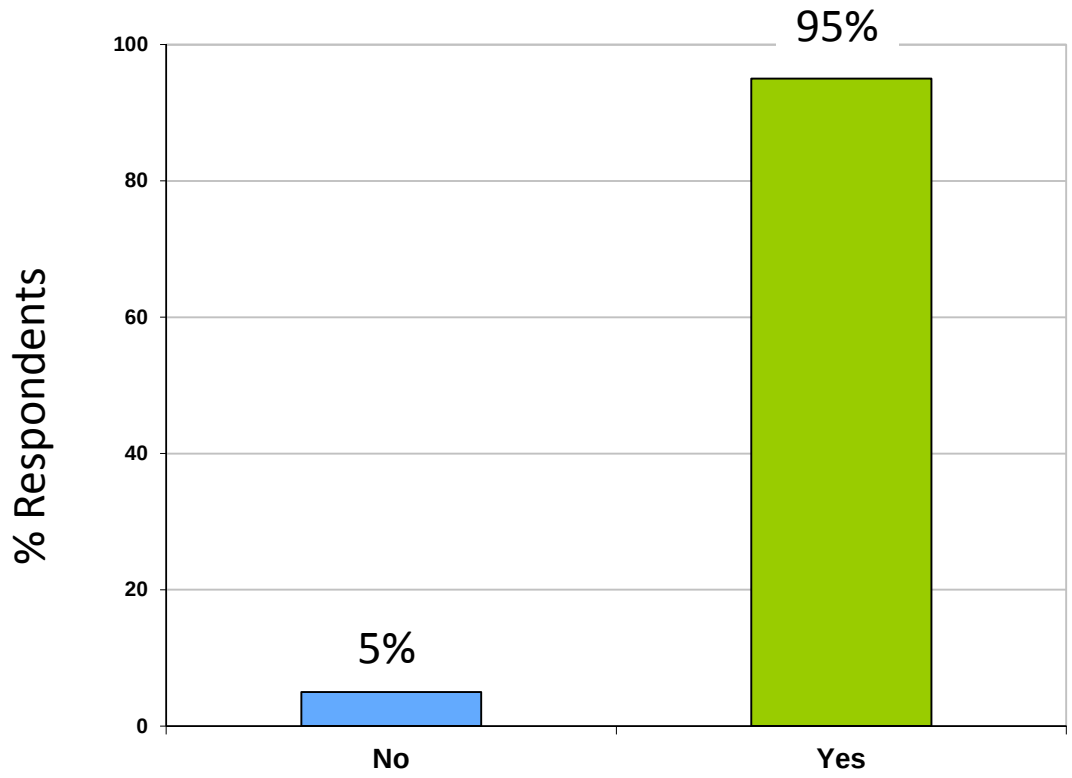
How **comfortable** were you observing healthcare workers?



Did you observe HCW **not complying** with HH?



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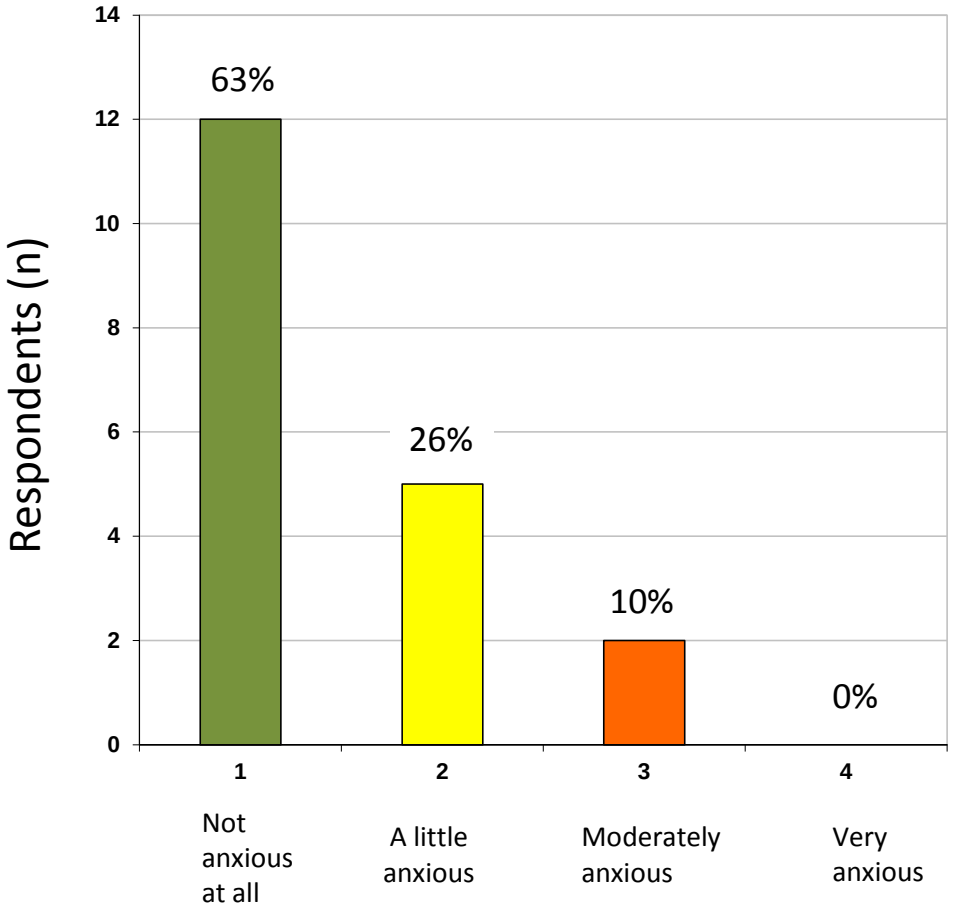
How **anxious** did you feel when witnessing non-compliance?



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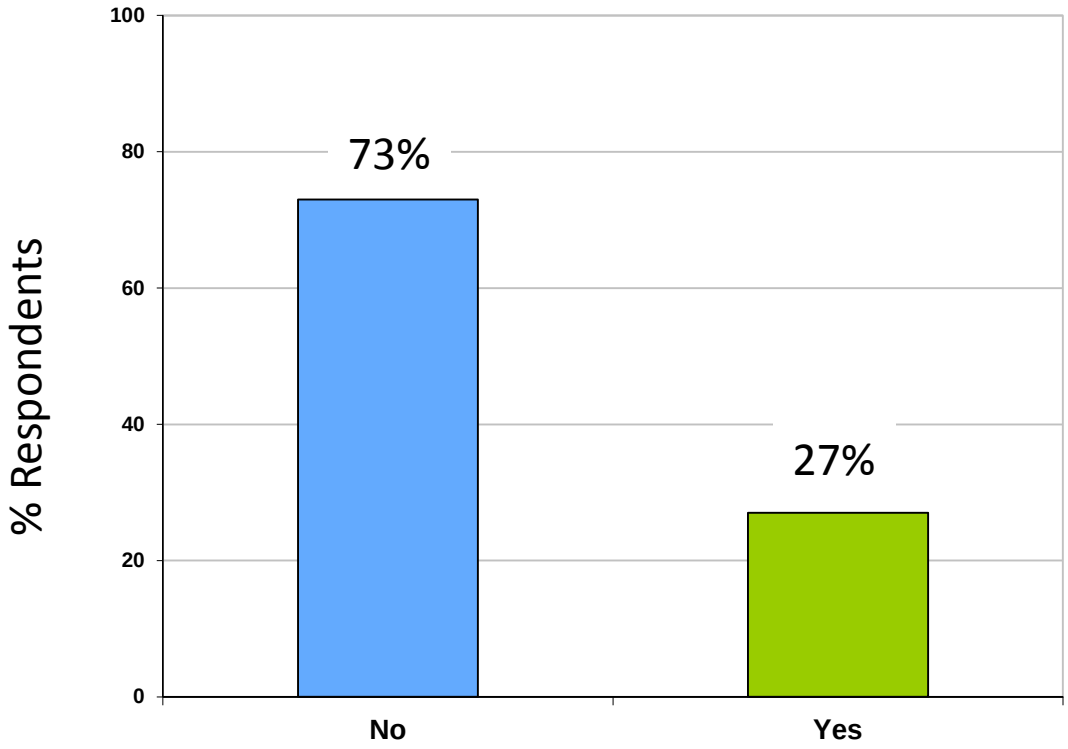
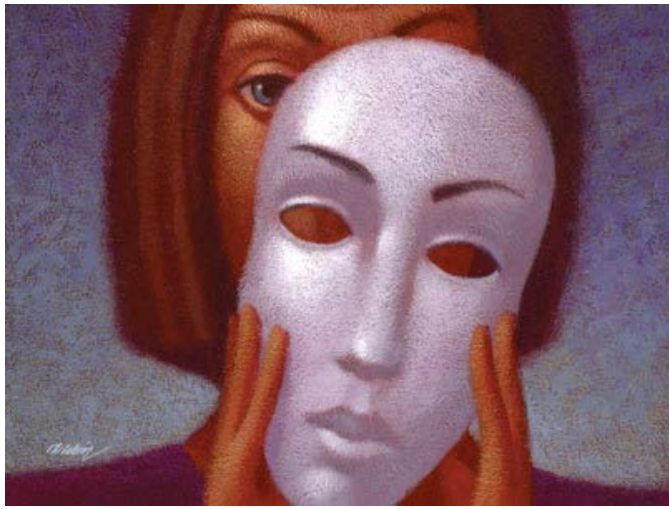
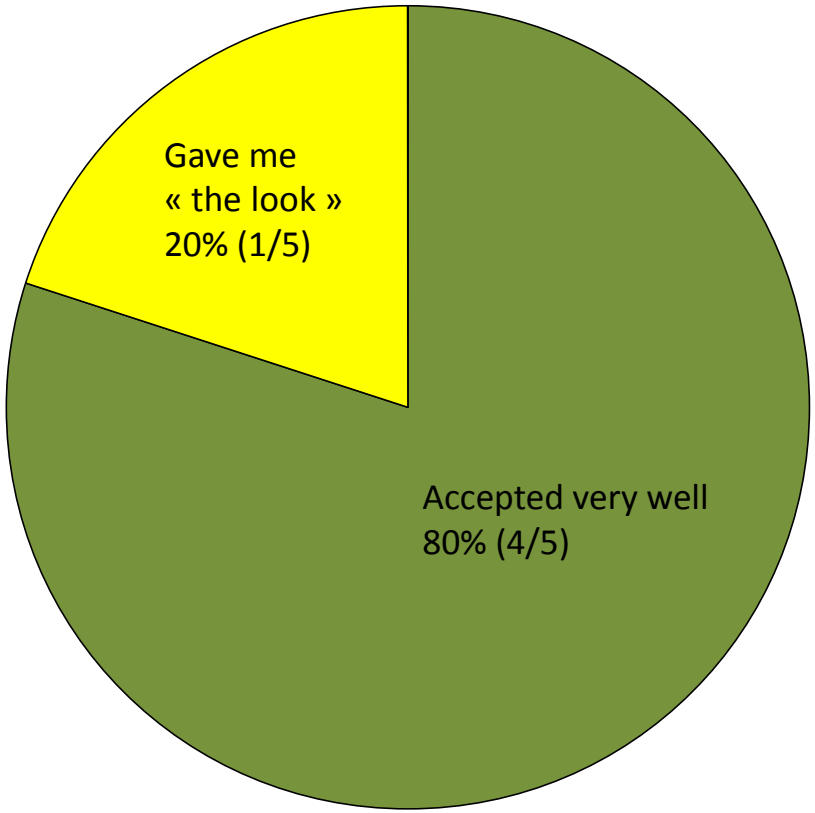
Did anyone **discover** you were performing HH audits?





How did the **HCW react** to discovering that you were observing them?



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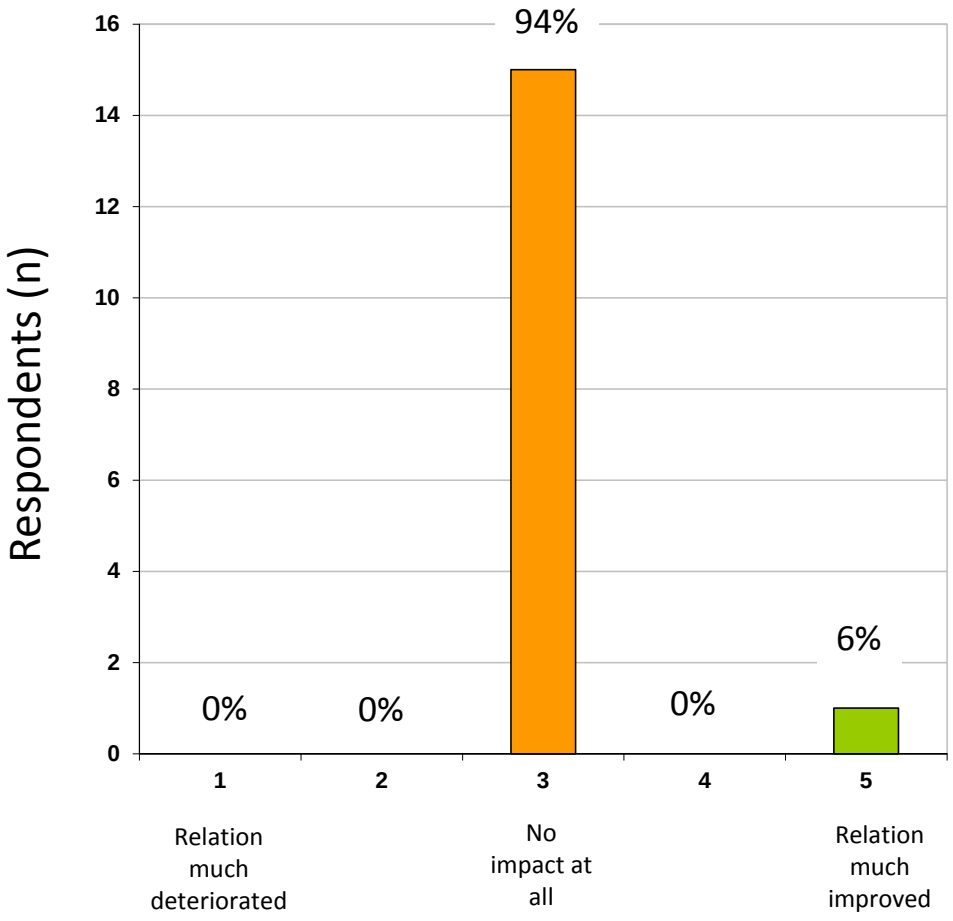
Did observing HCW change the **relationship** you had with them?



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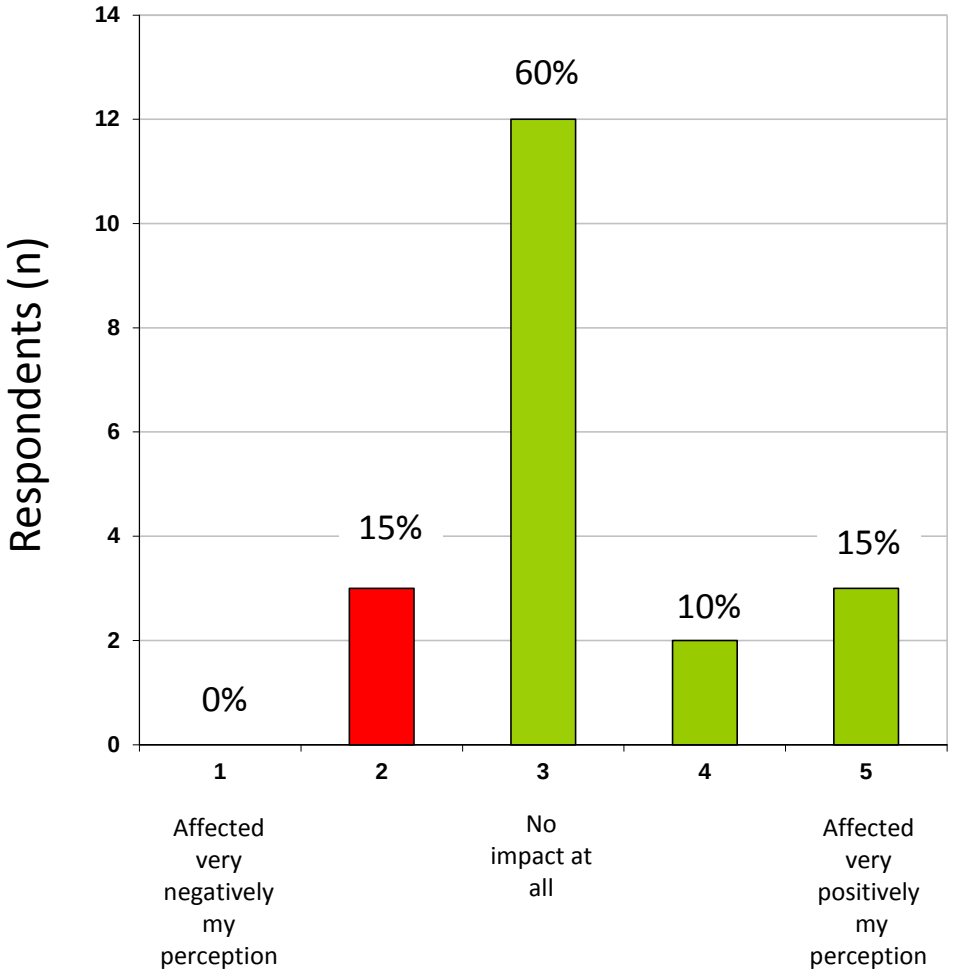
Did observing HCWs' HH behavior change the perception you had of the **quality of care**?



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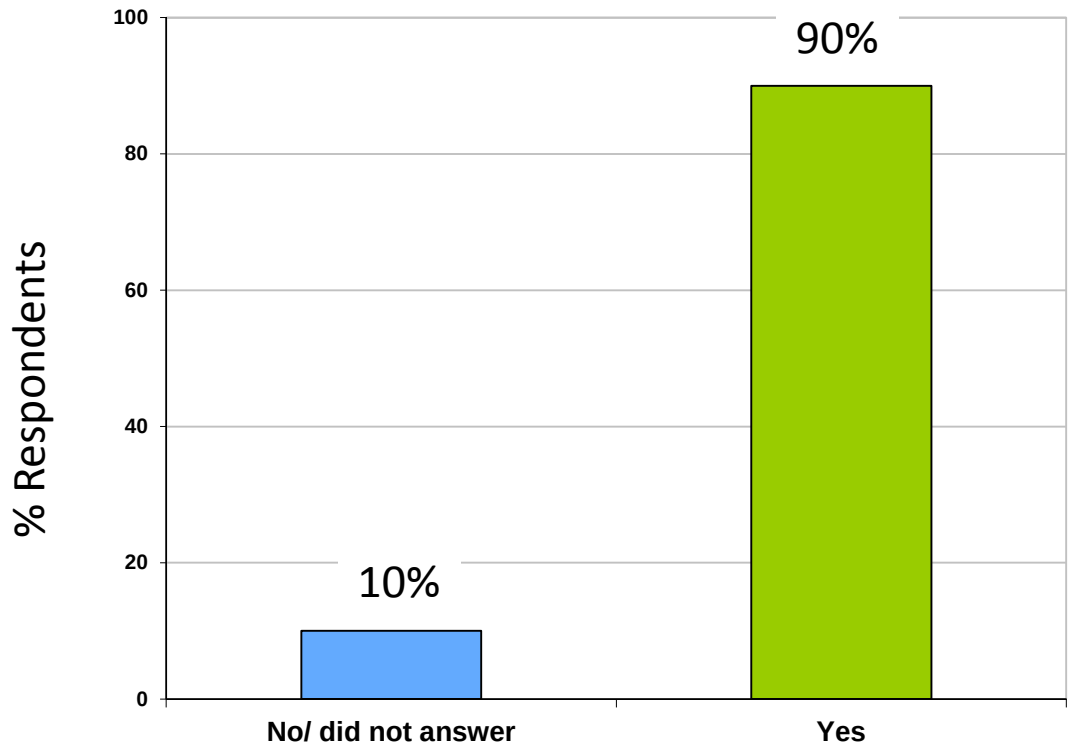
If you were rehospitalized in the **future**, would you Accept to evaluate other aspects of care?



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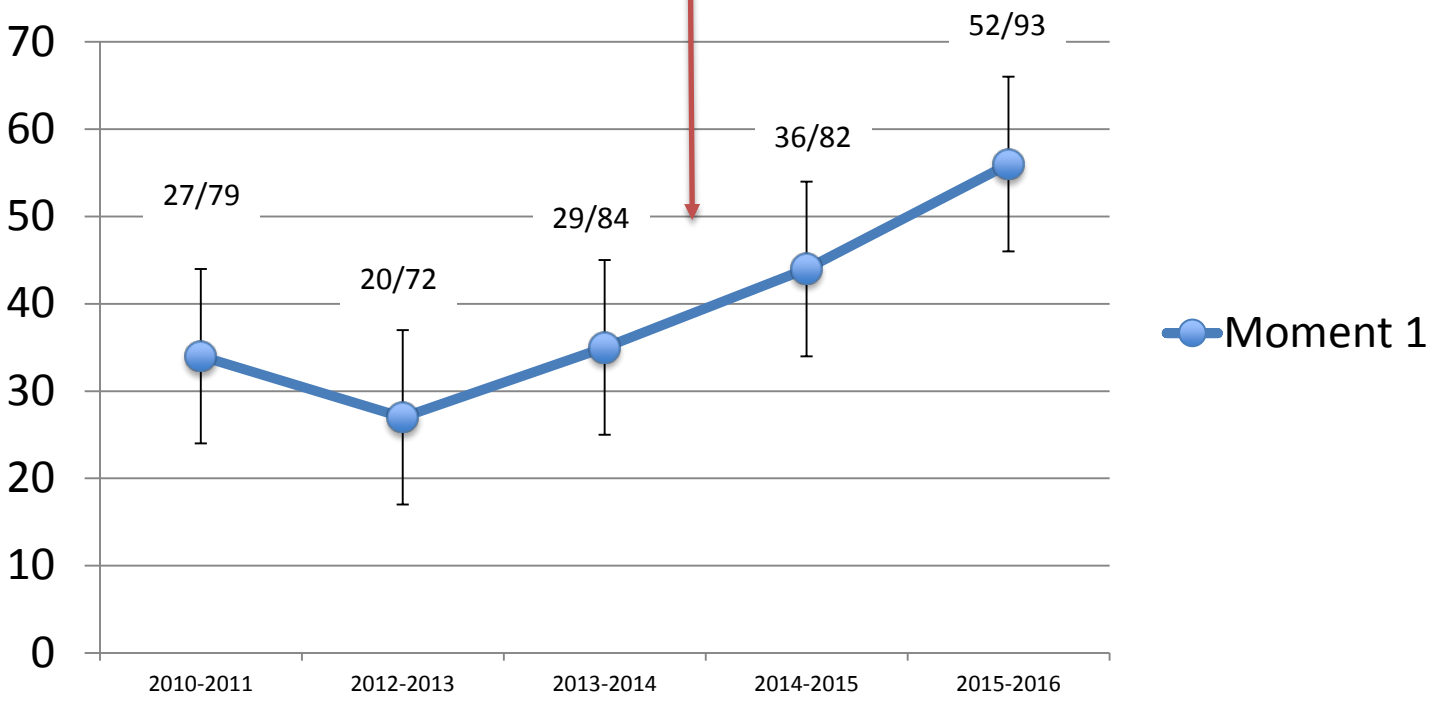
HH compliance

- HH compliance
  - Valid observations: 43/84 (51%)
  - Including events without observation touching surface outside patient zone: 67/154 (44%)

Impact?



Hand hygiene compliance, 2010-2015
Bariatric surgery ward

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Harnessing the Hawthorne Effect

Present only in the presence of the observer

Biases observations

Present at all time

Improves compliance

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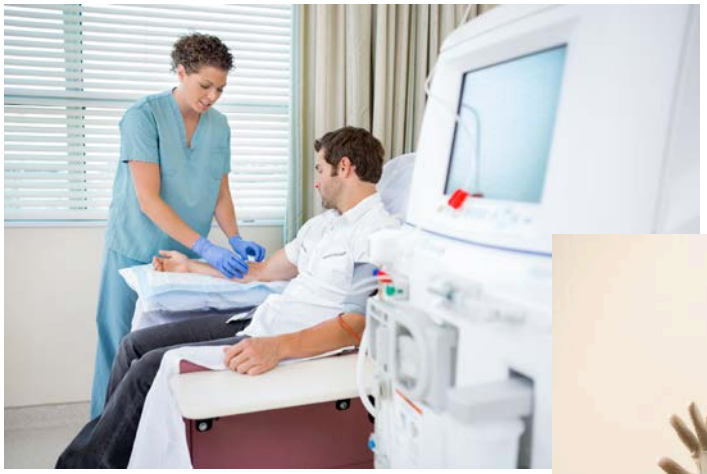
Hand Hygiene Monitoring

Direct Observation **by patients**

PROs	CONs
Standardized Methodology	Labor-intensive
Distinguishes among HH indications	Requires training and certification
Recognizes the “patient zone”	
Can collect additional information (type of HCW, glove use, time of day, etc.)	
Scaling-up potential	
Possible in all settings	
Less disruptive to care	
Hawthorne Effect **exploited ?**	

PERSONAL EXPERIENCE

Potential areas for involvement



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Conclusions

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Conclusions

- Canada is involving patients at many different levels to improve patient care
  - Systems level
  - Advocacy
  - Patient HH
  - Patient reminding about HH
  - Patient observers

Questions?

Thank you!

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