

XXVI^e Congrès National de la Société Française d'Hygiène Hospitalière

Cathéters Veineux Centraux en réanimation et hors réanimation : programme de prévention

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**Pourquoi établir un programme de
prévention dans tout l'hôpital ?**

Hôpitaux Universitaires de Genève

Etude pilote 2006

	Réanimation	Médecine interne	Chirurgie	Chirurgie abdominale
BCVC, DI (95 % IC)	4.9 (2.0-10.1)	1.9 (0.2-6.8)	2.4 (0.1-13.2)	7.7 (2.5-17.8)

Etude interventionnelle 2008-2012

	Réanimation BCVC, DI (95 % IC)	Hors réanimation BCVC, DI (95 % IC)
Première année	1.7 (0.8-3.2)	2.7 (1.8-3.9)
Dernière année	0.4 (0.05-1.3)	0.9 (0.4-1.8)

BCVC : bactériémie sur cathéter veineux central ; IC: Intervalle de confiance; DI : densité d'incidence

Zingg. *J Hosp Infect* 2009;73:41

Zingg. *PLOS One* 2014;9:e93898

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	Réanimation	Hors réanimation
Utilisation des CVCs, %	29.5	4.6
Durée de pose, médiane (IQR)	4 (2-7)	8 (3-14)
Total des jours cathéters	40 %	60 %

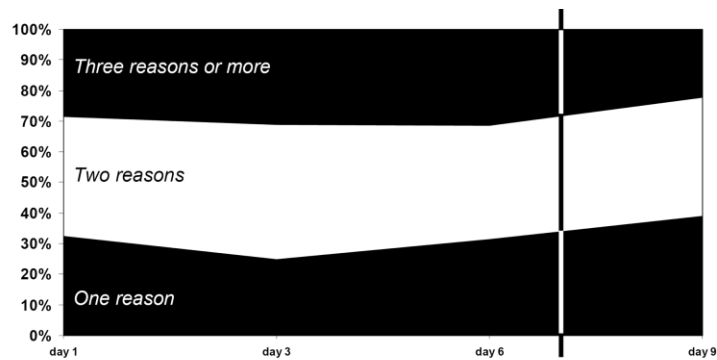
Zingg. *J Hosp Infect* 2009;73:41

Zingg. *J Hosp Infect* 2011;77:304

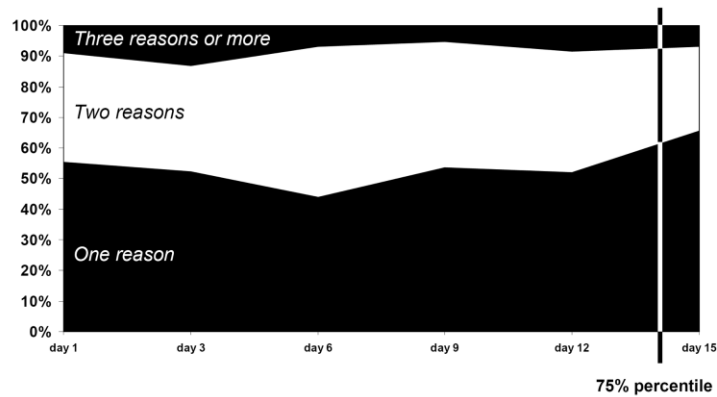
Utilisation des cathéters veineux centraux

Nombre d'indications

Réanimation

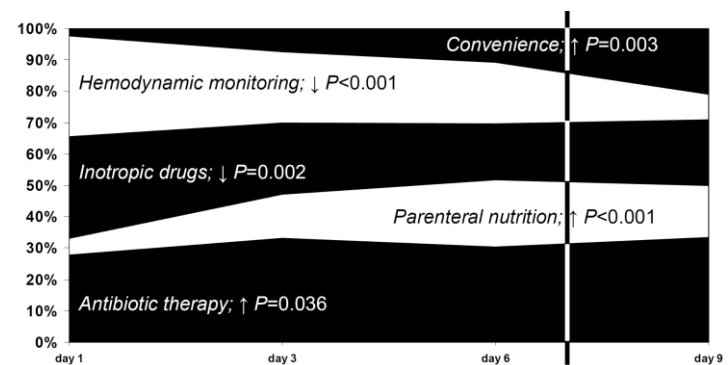


Hors réanimation

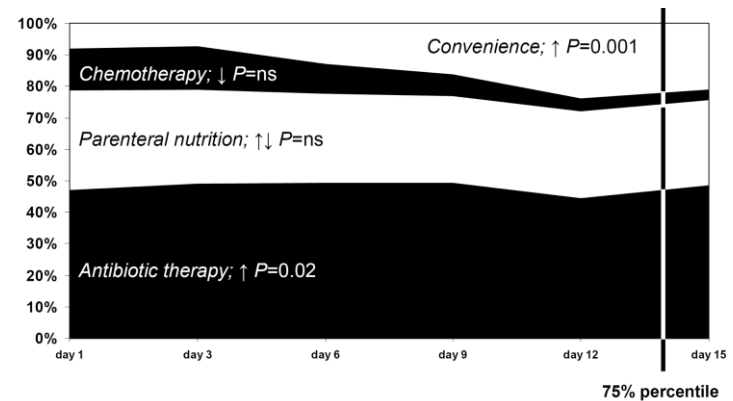


Types d'indications

Réanimation



Hors réanimation



Stratégies multimodales

Stratégies multimodales dans la prévention des BCVCs

(actualisé de Zingg et collègues)

Study (authors)	Setting	Practice interventions	Implementation strategies	Control/ Intervention (N/1000 device-days)	BSI-Type
Apisamtharak ²⁰⁰	Hospital-wide, single centre	Hand hygiene; full barrier precautions at catheter insertion; CHG for skin-antiseptics; avoiding the femoral insertion site; removing unnecessary catheters; optimal catheter care	Lectures; posters; hand hygiene tests	14.0/1.4 (P<0.001)	CABSI
Bion ²⁰⁹	223 ICUs, multicentre	Hand-washing; MSB at catheter insertion; checklist during catheter insertion; CHG for skin-antiseptics; avoiding the femoral insertion site; CVC maintenance: aseptic access technique, daily site review, and remove CVCs at earliest opportunity	Training days (data definitions, technical and non-technical interventions); Teleconference calls and internet-based teaching	3.7/1.5 (P<0.001)	CABSI
DePalo ²³⁶	23 ICUs, multicentre	Hand-washing; full barrier precautions at catheter insertion; CHG for skin-antiseptics; avoiding the femoral insertion site; removing unnecessary catheters	CUSP	3.7/1.0 (P=0.003)	CABSI
Eggimann ¹⁸⁹	1 ICU, single centre	Comprehensive intervention addressing material preparation, line insertion, dressing (change), CVC replacement, CVC care, CVC removal, hand hygiene	Slide-shows; practical demonstrations; bedside training	3.1/1.2 (P=0.04)	CLABSI
Guerin ¹⁹⁰	2 ICUs, single centre	Daily inspection of insertion site; site care in case of wet or soiled dressing; documentation of ongoing catheter need; hand hygiene before handling the IV system; alcohol scrub of infusion hubs before use	Practice training of catheter insertion; practice raining of catheter care; tests	5.7/1.1 (P=0.004)	CABSI
Marra ¹⁹⁶	1 ICU, single centre	Hand-washing; full barrier precautions at catheter insertion; central line cart; CHG for skin antiseptics; avoiding the femoral insertion site; removing unnecessary catheters	Lectures; monthly feedback of bundle compliance	6.4/3.2 (P<0.001)	CABSI
Miller ²⁶⁸	29 PICUs, multicentre	Hand hygiene; CHG for children ≥2 months; insertion cart; insertion checklist; daily review of line necessity; optimized catheter-care	Support and promotion by senior ICU-leader; involvement of quality improvement leaders; workshops; local practice adaptation	5.4/3.1 (P<0.001)	CABSI
Palomar ²³⁷	192 ICUs, multicentre	Hand-washing; full barrier precautions at catheter insertion; checklist during catheter insertion; CHG for skin-antiseptics; subclavian vein as the preferred insertion site; removing unnecessary catheters	CUSP; principles of engage, educate, execute, and evaluate	3.1/1.1 (P<0.001)	CRBSI
Peredo ²⁶²	2 ICUs, single centre	Checklist for catheter insertion; CHG for skin antiseptics; avoiding the femoral insertion site; removing unnecessary catheters	Lectures	6.7/2.4 (P=0.015)	CRBSI
Perez ¹⁹⁷	3 ICUs, single centre	Full sterile sheet for catheter insertion; subclavian vein as preferred insertion site; needless catheter connectors; 2% CHG for skin antiseptics; parenteral nutrition via a multilumen CVC; optimal catheter care	Lectures; before and after knowledge tests	4.2/2.9 (P=0.030)	CABSI
Pronovost ¹²³	90 ICUs, multicentre	Hand-washing; full barrier precautions at catheter insertion; checklist during catheter insertion; CHG for skin-antiseptics; avoiding the femoral insertion site; removing unnecessary catheters	CUSP	7.7/1.1 (P<0.001)	CRBSI
Schulman ²⁴⁰	18 NICUs, multicentre	Hand hygiene; central line kit or cart for catheter insertion; MSB; checklist for catheter insertion; CHG for skin antiseptics; optimized catheter care; checklist for catheter care; daily evaluation of catheter exit site; aseptic technique for catheter handling; 'scrub the hub'; daily review of line necessity	State-wide workshops; periodic surveys and conference calls	3.5/2.1 (P<0.001)	CABSI
Venkatram ²⁰⁷	1 ICU, single centre	Hand-hygiene; full barrier precautions at catheter insertion; checklist during catheter insertion; CHG for skin-antiseptics; preferring subclavian access; daily review of line necessity	Lectures	10.7/1.7 (P<0.001)	CRBSI
Weber ¹⁹⁸	8 ICUs, single centre	Hand-washing; full barrier precautions at catheter insertion; checklist for catheter insertion; customized CVC insertion kits; alcohol-based CHG for skin antiseptics; avoiding the femoral insertion site; removing unnecessary catheters	Lectures; repeated practice trainings for CVC insertion and -care	8.9/2.4 (P<0.001)	CABSI
Zingg ⁴⁰	Hospital-wide, single centre	Comprehensive intervention addressing CVC insertion, CVC care (dressing change, preparation of drugs/infusates), CVC removal, hand hygiene	Skills lab training for doctors; modular E-learning using train-the-trainer system for nurses; optimized insertion set; trolleys for CVC insertion	2.3/0.7 (P<0.001)	CLABSI

An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU

Peter Pronovost, M.D., Ph.D., Dale Needham, M.D., Ph.D., Sean Berenholtz, M.D., David Sinopoli, M.P.H., M.B.A., Haitao Chu, M.D., Ph.D., Sara Cosgrove, M.D., Bryan Sexton, Ph.D., Robert Hyzy, M.D., Robert Welsh, M.D., Gary Roth, M.D., Joseph Bander, M.D., John Kepros, M.D., and Christine Goeschel, R.N., M.P.A.

- Hygiène des mains
- Précautions maximales de stérilité*
- Chlorhexidine (alcool)
- Eviter l'accès fémoral
- Enlever le CVC si plus nécessaire

*Masque, bonnet, blouse stérile, large drap stérile, gants stériles

**Médiane/1'000
Jours cathéter**

Table 3. Rates of Catheter-Related Bloodstream Infection of Follow-up.*

Baseline (before Implementation of the Study Intervention) to 18 Months

Study Period	No. of ICUs		No. of Bloodstream Infections per 1000 Catheter-Days				
			Overall	Teaching Hospital	Nonteaching Hospital	<200 Beds ≥200 Beds	
Baseline	55		2.7 (0.6–4.8)	2.7 (0.6–4.8)	0 (0–3.5)	0 (0–5.8)	1.7 (0–4.3)†
During implementation	96		1.6 (0–4.4)†	1.7 (0–4.5)	0 (0–3.5)	0 (0–5.8)	1.7 (0–4.3)†
After implementation							
0–3 mo	96	→	0 (0–3.0)‡	1.3 (0–3.1)†	0 (0–1.6)†	0 (0–2.7)	1.1 (0–3.1)‡
4–6 mo	96	→	0 (0–2.7)‡	1.1 (0–3.6)†	0 (0–0)‡	0 (0–0)†	0 (0–3.2)‡
7–9 mo	95	→	0 (0–2.1)‡	0.8 (0–2.4)‡	0 (0–0)‡	0 (0–0)†	0 (0–2.2)‡
10–12 mo	90	→	0 (0–1.9)‡	0 (0–2.3)‡	0 (0–1.5)‡	0 (0–0)†	0.2 (0–2.3)‡
13–15 mo	85	→	0 (0–1.6)‡	0 (0–2.2)‡	0 (0–0)‡	0 (0–0)†	0 (0–2.2)‡
16–18 mo	70	→	0 (0–2.4)‡	0 (0–2.4)‡	0 (0–0)‡	0 (0–0)†	0 (0–2.4)‡

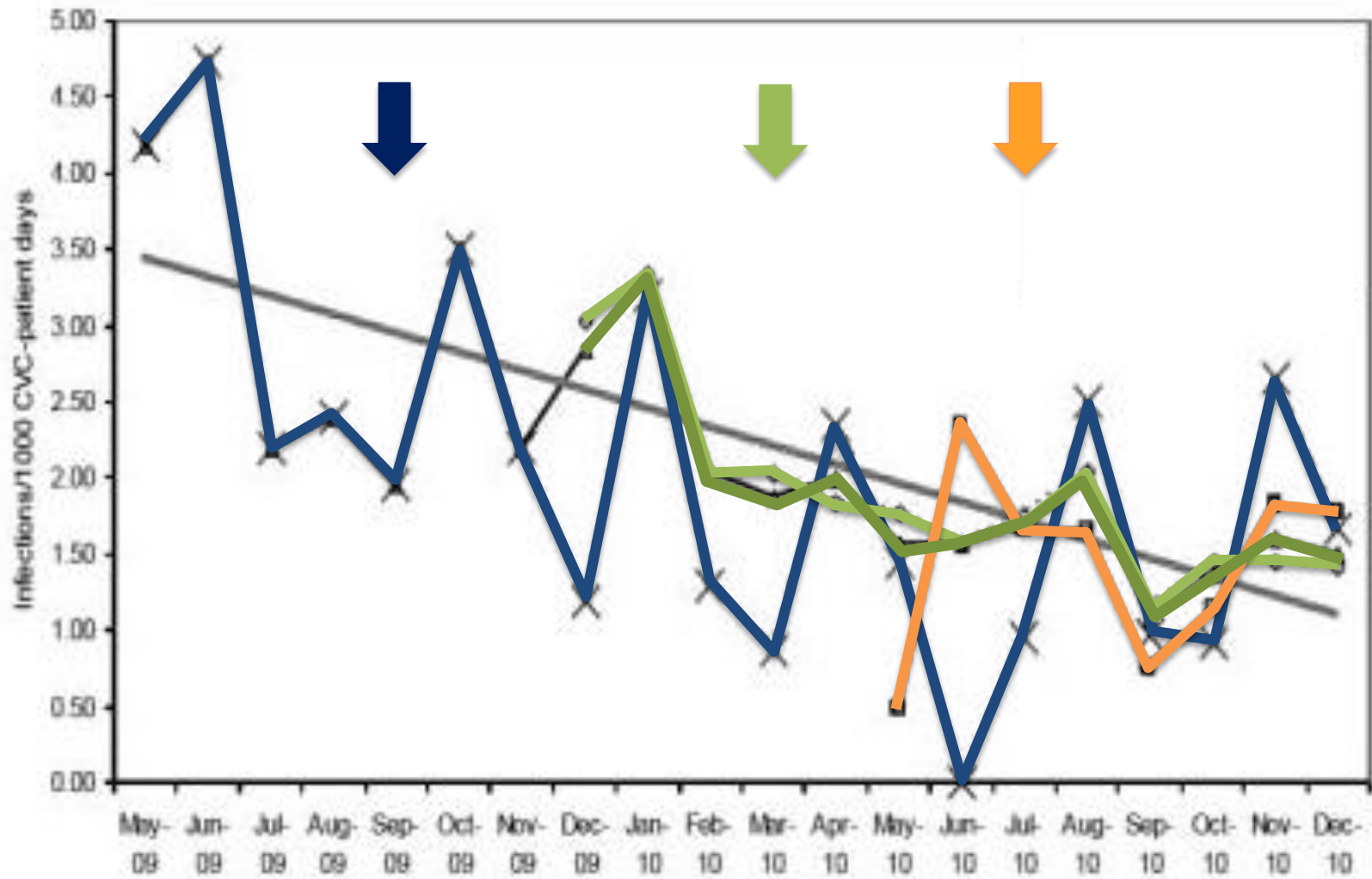
Moyenne/1'000 jours cathéter: 7.7

Moyenne/1'000 jours cathéter: 1.3

Un succès ! Mais pourquoi ?

« Matching Michigan » en Angleterre :

étude prospective non-randomisée
pendant 2 ans dans 223 unités de
réanimation

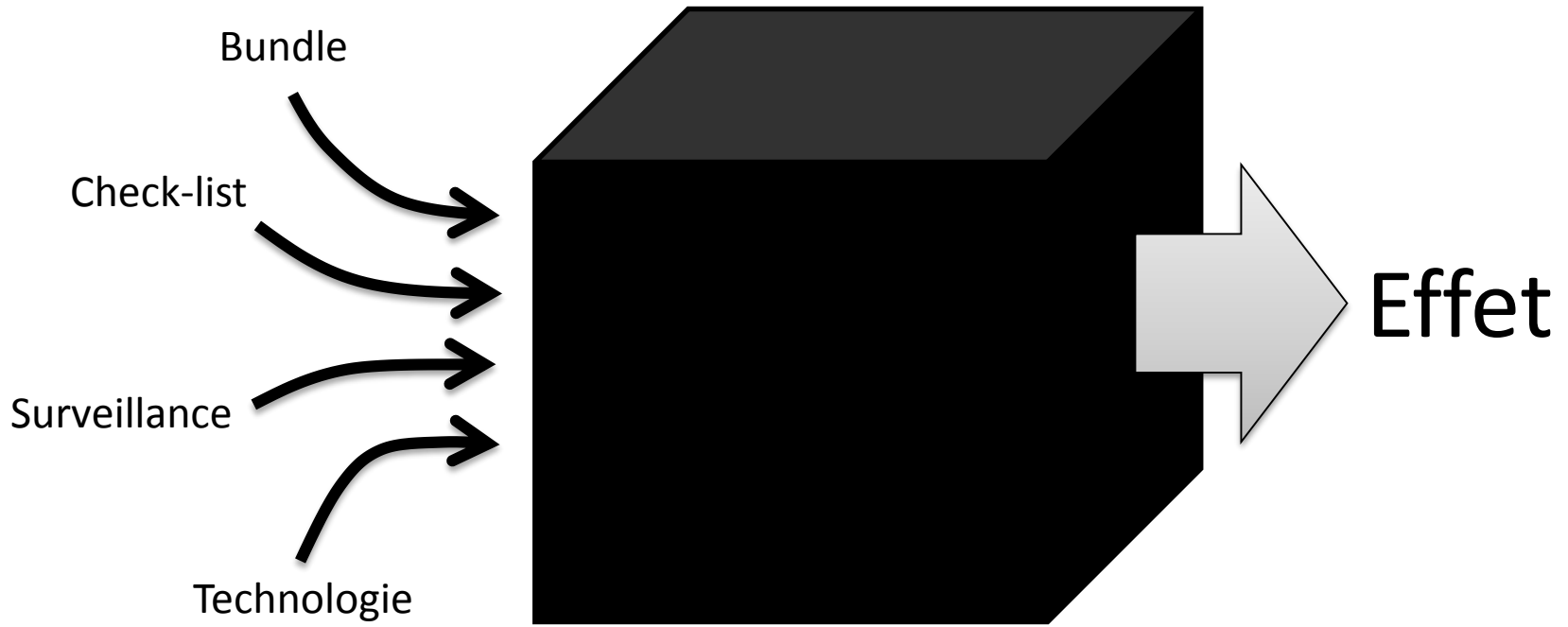


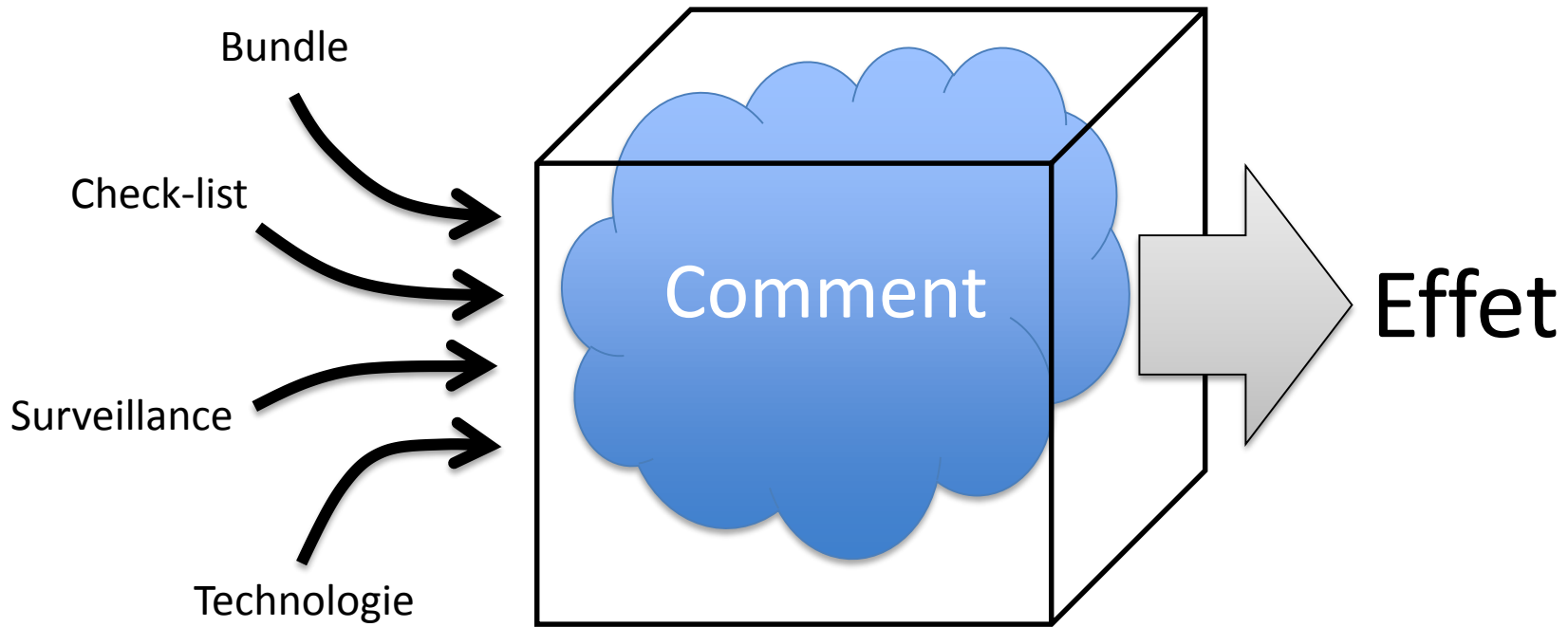
“The marked reduction in Catheter-related bloodstream infections found in this study is likely part of a wider **secular trend** for a system-wide improvement in healthcare-associated infections”

Diminution significative mais pas temporellement liée avec l'introduction de l'intervention !

“Explaining Michigan: Developing an Ex Post Theory of a Quality Improvement Program”

1. Générer des **pressions isomorphes** parmi les unités de réanimation dans le réseau des hôpitaux
2. Créer une **communauté bien connectée** avec des liens horizontaux qui forment une pression normative
3. Encadrer **BCVC un problème « social »** qui est adressé par un mouvement combinant « grassroots » avec une structure verticale
4. Utiliser des **interventions différentes** afin de former une culture d’engagement vers une pratique améliorée
5. Faire valoir les **taux d’infections une force disciplinaire**





Stratégie multimodale

Des stratégies multimodales sont des combinaisons de technologie et de bonnes pratiques qui sont disséminées par différents modes : lectures, affiches, simulations, formation « bedside », tests de connaissance, ou toute autre idée imaginable avec le but d'obtenir un changement de comportement des soignants

Exemples

Impact of a prevention strategy targeting hand hygiene and catheter care on the incidence of catheter-related bloodstream infections*

Walter Zingg, MD; Alexander Imhof, MD; Marco Maggiorini, MD; Reto Stocker, MD; Emanuela Keller, MD; Christian Ruef, MD

Hygiène des mains

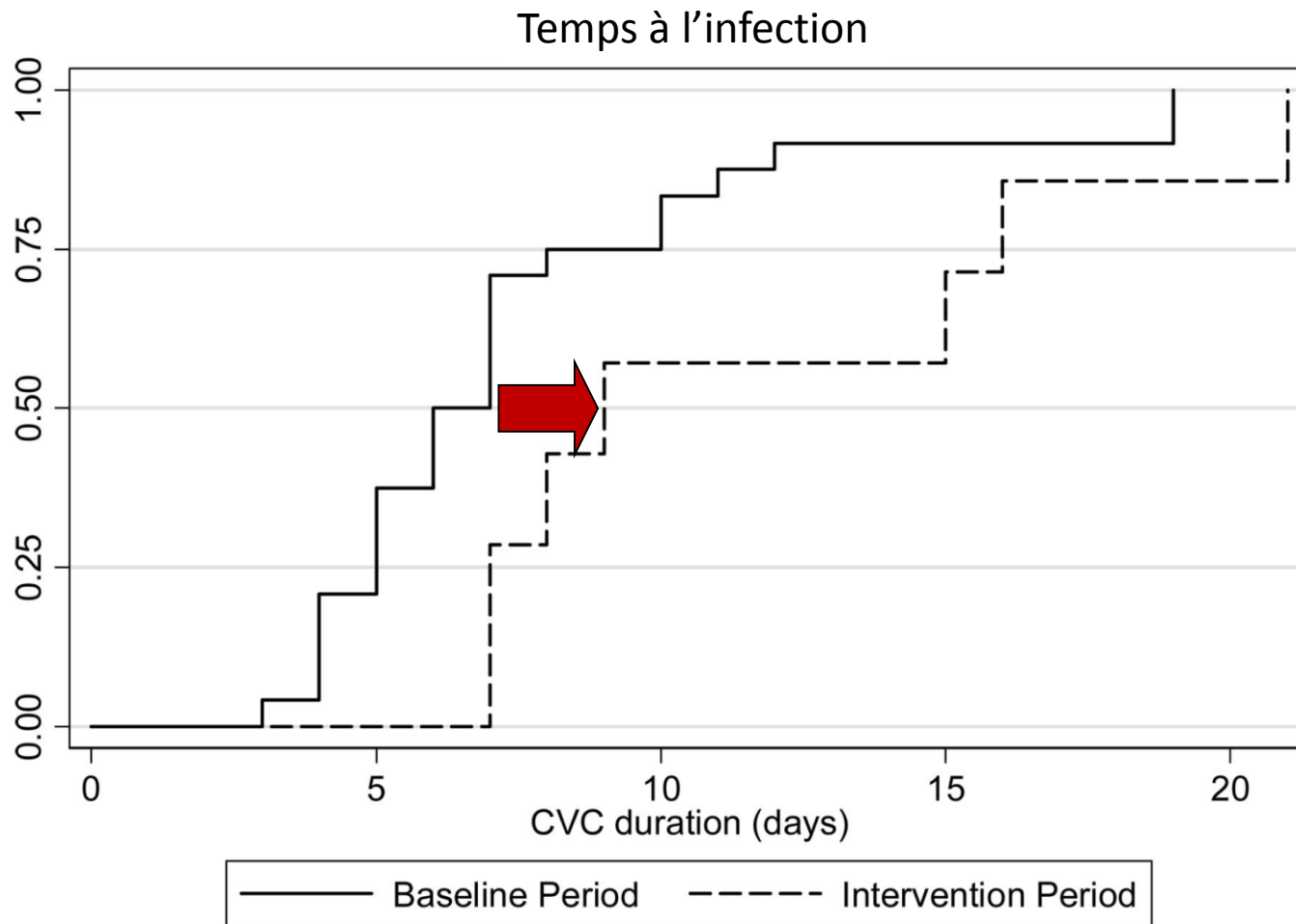
Soin des cathéters

- Pansement au site d'insertion
- Manipulations des tubulures, bouchons et robinets (technique « non-touch »)
- Préparation des perfusions utilisant une technique aseptique

Zingg – Zurich/Réanimation

	Baseline	Intervention
Densité d'incidence (n/1'000 jours cathéter)	3.9	1.0
<i>Cathéters</i>	974	1015
<i>Total jours cathéter</i>	6200	7279
<i>Durée (jours), médiane (IQR)</i>	5 (3-8)	6 (3-9)

Zingg – Zurich/Réanimation



Module	Topic	Intervention	Details
I	Hand hygiene	Hand washing	When starting work When finishing work When hands are visibly soiled After visiting the toilet
		Hand rubbing	Before/after patient contact Before/after invasive acts Before/after manipulation of catheters or tubings Before/after dressing changes After direct contact with biological fluids After glove removal
		Hand rubbing technique	30 sec with alcohol-based hand rub Use enough disinfectant (>3 mL = pushing two times hand rub dispenser), redose if necessary Six steps (European norm EN 1500:1997)
II	Catheter site dressing	Skin disinfection	Choice of: Povidone iodine Isopropyl alcohol Octenidine
		Material	Gauze: change after 48 hrs Opsite IV 300: change after 7 days ^a
		Instant changing	Dressing does not cover entirely insertion site Incomplete adherence of dressing Secondary hemorrhage Dressing is soggy CVC is under pressure Pain at insertion site
		Technique	Hand rub before and after changing dressing Prepare and check for completeness of the entire material before starting to change the dressing Wear sterile gloves Use a "non-touch-technique" during the whole procedure Assessment of catheter insertion site Leave incrustations at catheter insertion site Use enough disinfectant Respect incubation time of the disinfectant! Avoid tension of the catheter Strictly separate sterile and nonsterile material
III	CVC manipulation	Technique	"Non-touch-technique" Always respect as much distance as possible to the system Manipulate the catheter as little as possible Replace administration sets no more frequently than at 72-hr intervals Reduce components to a minimum Disconnect tubing only when absolutely necessary Reduce blood sampling through the catheter and use strict aseptic technique
IV	Preparation of infusates	Technique	Hand rub before preparation Prepare a clean work place Check for completeness of the entire material before preparing infusates Use a "non-touch-technique" during the whole procedure Always disinfect plugs

Information/Invitation
les infirmiers-chefs



« Focus groups » avec les
infirmiers chefs



Rajustement de
l'intervention



Formation ex-cathedra

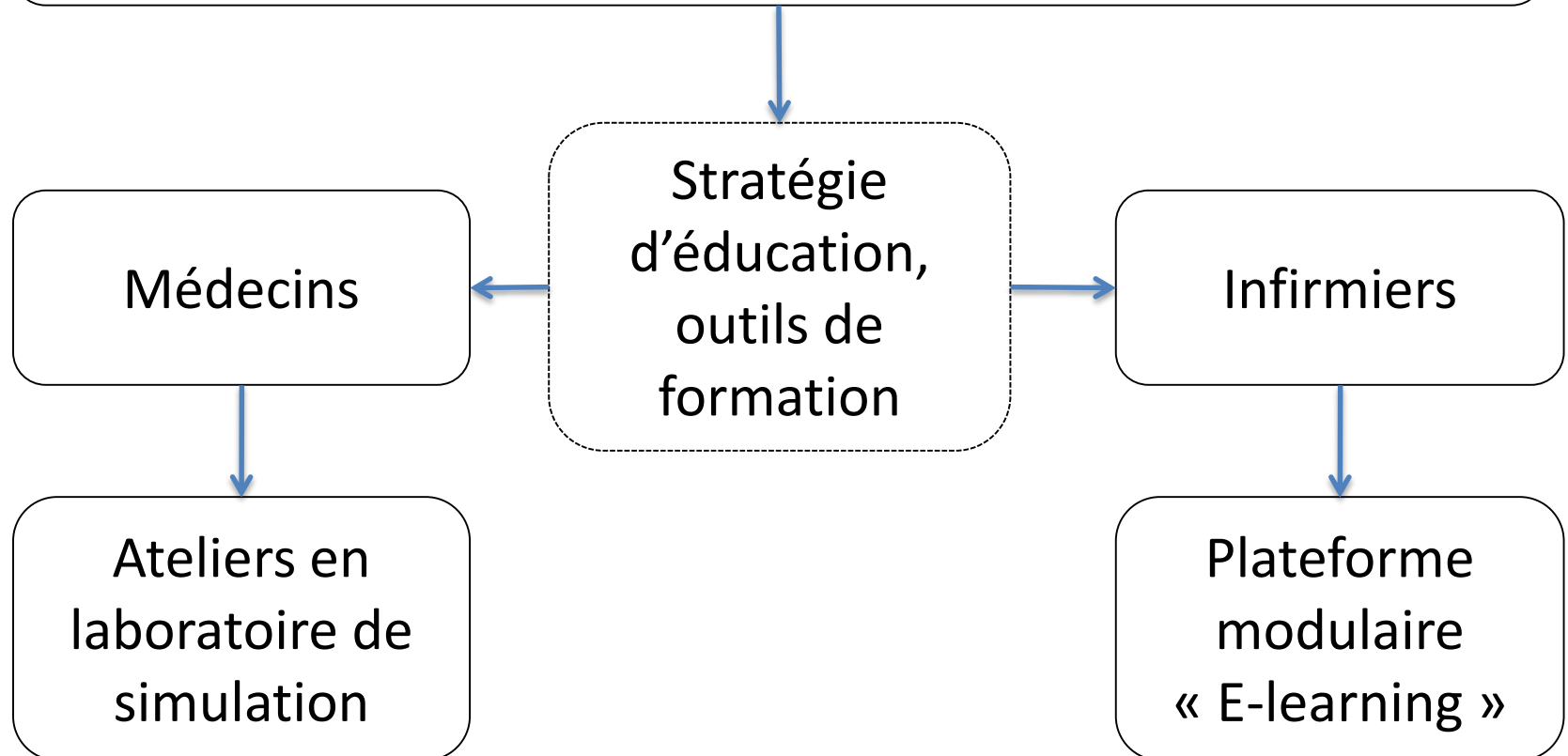


Ateliers pratiques dans les
unités

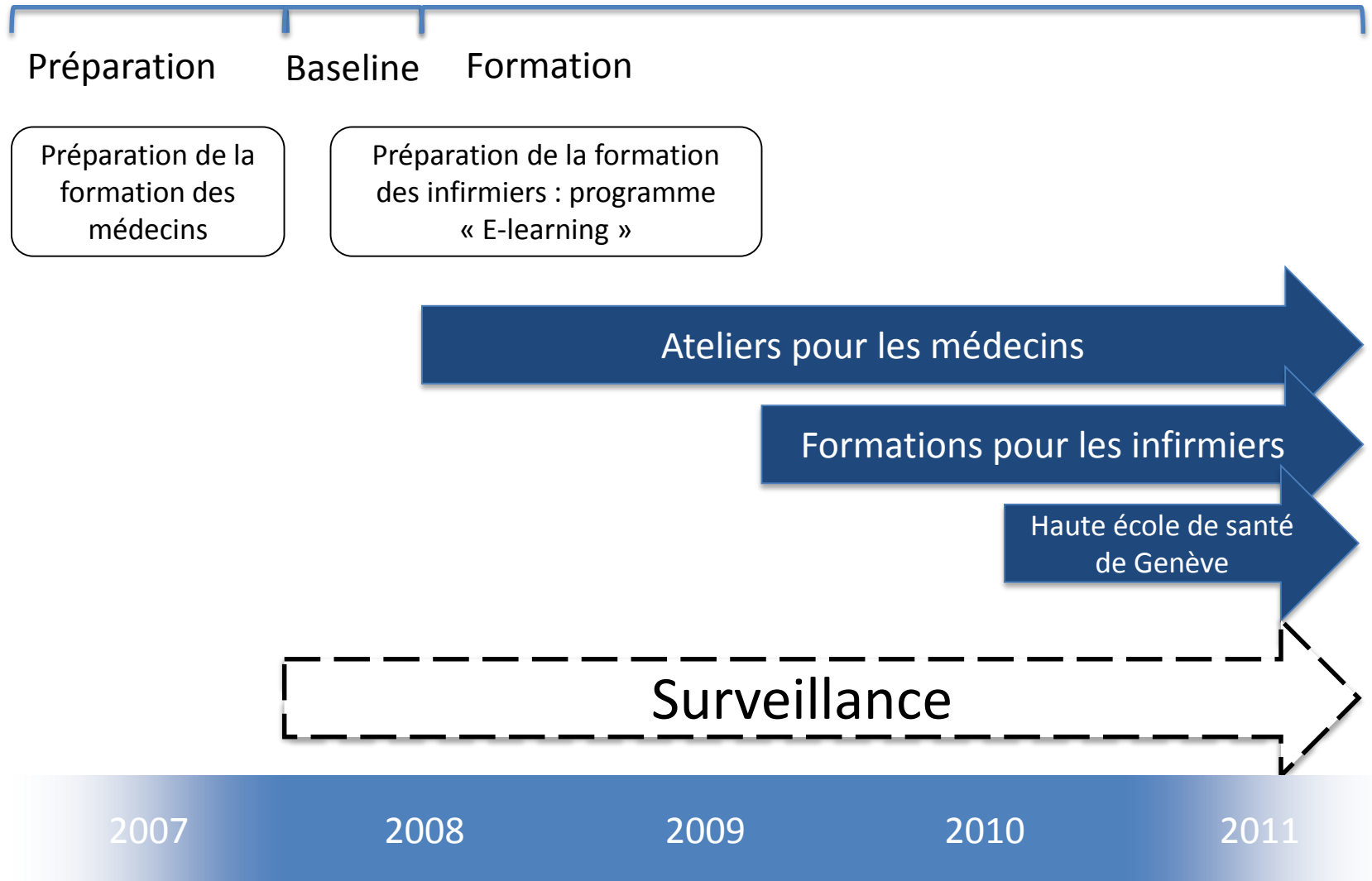
Zingg – Genève/Tout l'hôpital

Equipe multidisciplinaire

Anesthésiologie, contrôle de l'infection, direction des soins



Lignes du projet

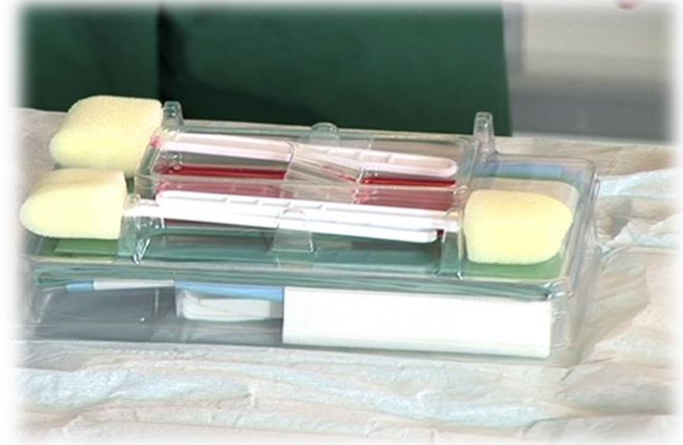


Disponibilité et accès à du matériel et de l'équipement et l'ergonomie optimisée


Chariot « CVC »



Kit d'insertion
compréhensive

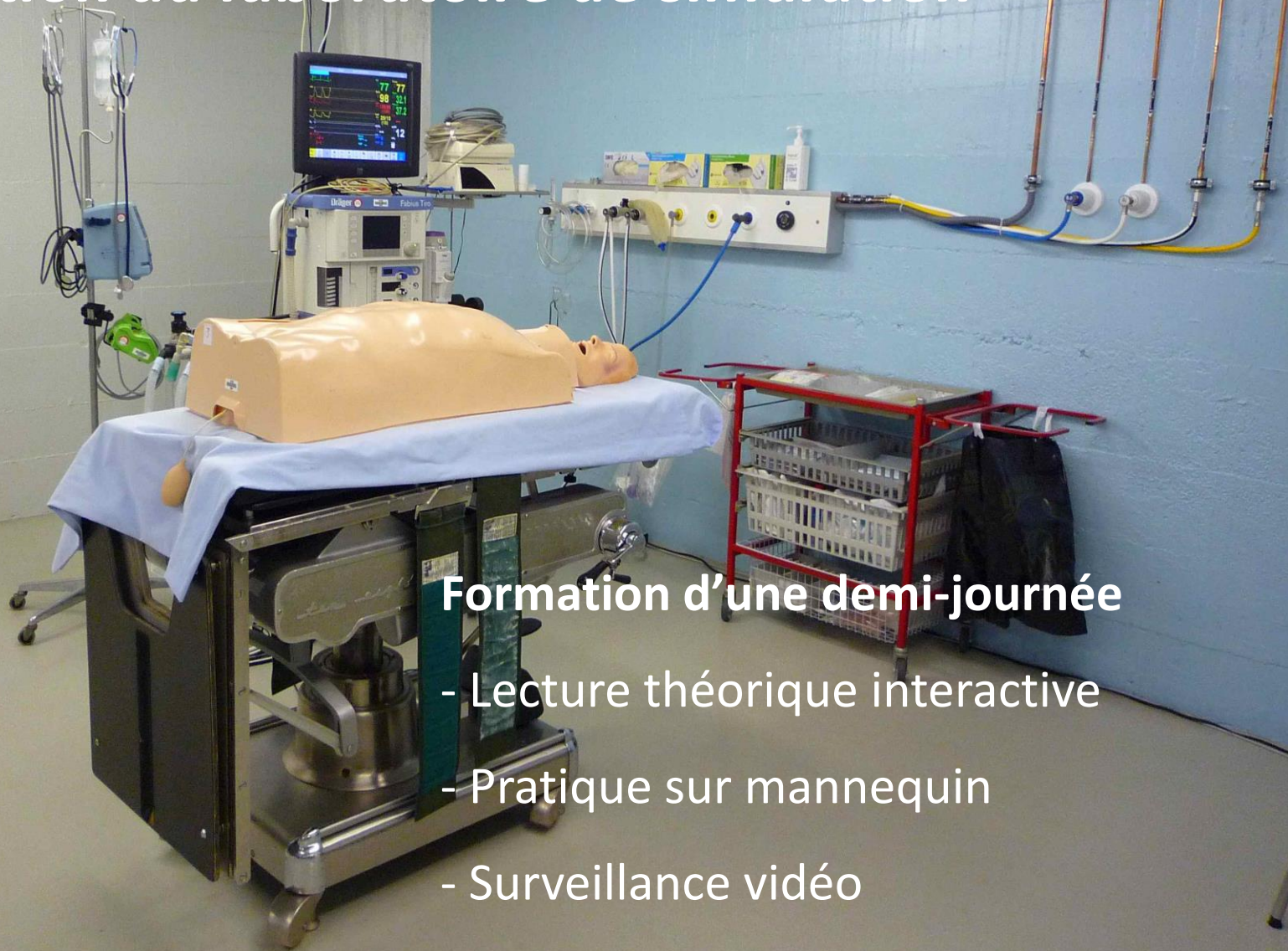


Discussion multidisciplinaire et obtention de l'accord sur les étapes détaillées de l'insertion d'un CVC

REDCO-CVC			
Nom prénom du médecin :		No CVC	Identité du patient (étiquette)
Nom prénom du formateur :		échec de pose	
Nom prénom de l'aide :		Oui/Non	
Lieu de pose :		Tentative n° Date de pose :	
	Méd O N	PCI O N	
PREPARATION			
1			PRESCO: visionner sur Presco ou document papier la demande de pose de CVC du patient
2			S'assurer qu'une personne connaissant la procédure de la pose des CVC, qui puisse aider est disponible à proximité immédiate
1 – Organisation de la salle			
Table d'opération:			
3			♦ Position centrale dans la salle
4			♦ Vérification du fonctionnement de la table
5			♦ Installation du patient
6			♦ Appareils de surveillance: écrans visibles par le médecin qui pose le cathéter
2 – Installation du patient			
7			♦ Hygiène des Mains (par friction hydro alcoolique avec Hopirub® ou Hopigel®)
Position:			
8			♦ Bras le long du corps
9			♦ Alèse sous les vertèbres thoraciques en cas d'accès sous clavier
10			♦ Position de Trendelenbourg fonctionnelle à tester
11			♦ Monitoring: saturomètre, ECG, administration d'oxygène lunettes ou masque si SAO2 < 95 %
Site de ponction:			
12			♦ Bonnet sur les cheveux du patient
13			♦ Tête tournée du côté opposé au site de ponction
14			♦ Repérage anatomique du site
3 – Préparation du matériel			
15			♦ 2 masques chirurgicaux avec visière ou lunettes (aide + opérateur)
16			♦ 2 bonnets (aide + opérateur)
17			♦ 1 blouse stérile
18			♦ Antiseptique pour les mains: Hopirub® ou Hopigel®
19			♦ 2 paires de gants stériles
20			♦ Antiseptique pour la peau: chlorhexidine alcoolique colorée 0.5%
21			♦ 1 set Braun® pour pose de CVC
22			♦ 1 set cathéter veineux central (CVC)
23			♦ 1 porte aiguille
24			♦ 1 ampoule de lidocaïne
25			♦ 1 flex de NaCl 0.9% avec tubulure et robinets purgés pour chaque lumière du CVC
26			♦ Poubelle
27			♦ Hygiène des Mains
28			♦ Ouverture du set Braun® par une personne portant masque et bonnet chirurgical
4 – Préparation du médecin (1)			
29			♦ Hauteur de la table adaptée, position trendelenbourg si accès jugulaire
Habillage du médecin qui pose le cathéter:			
30			♦ Bonnet
31			♦ Masque avec visière ou lunettes en plus du masque
32			♦ Hygiène des mains
33			♦ Gants stériles
5 – Antiseptie du site de ponction			
34			♦ Antiseptie du site du centre vers la périphérie avec la chlorhexidine alcoolique 0.5% 3 fois, laissez
6 – Préparation du médecin (2)			
35			♦ Retrait des gants stériles
36			♦ Hygiène des Mains
Habillage stérile:			

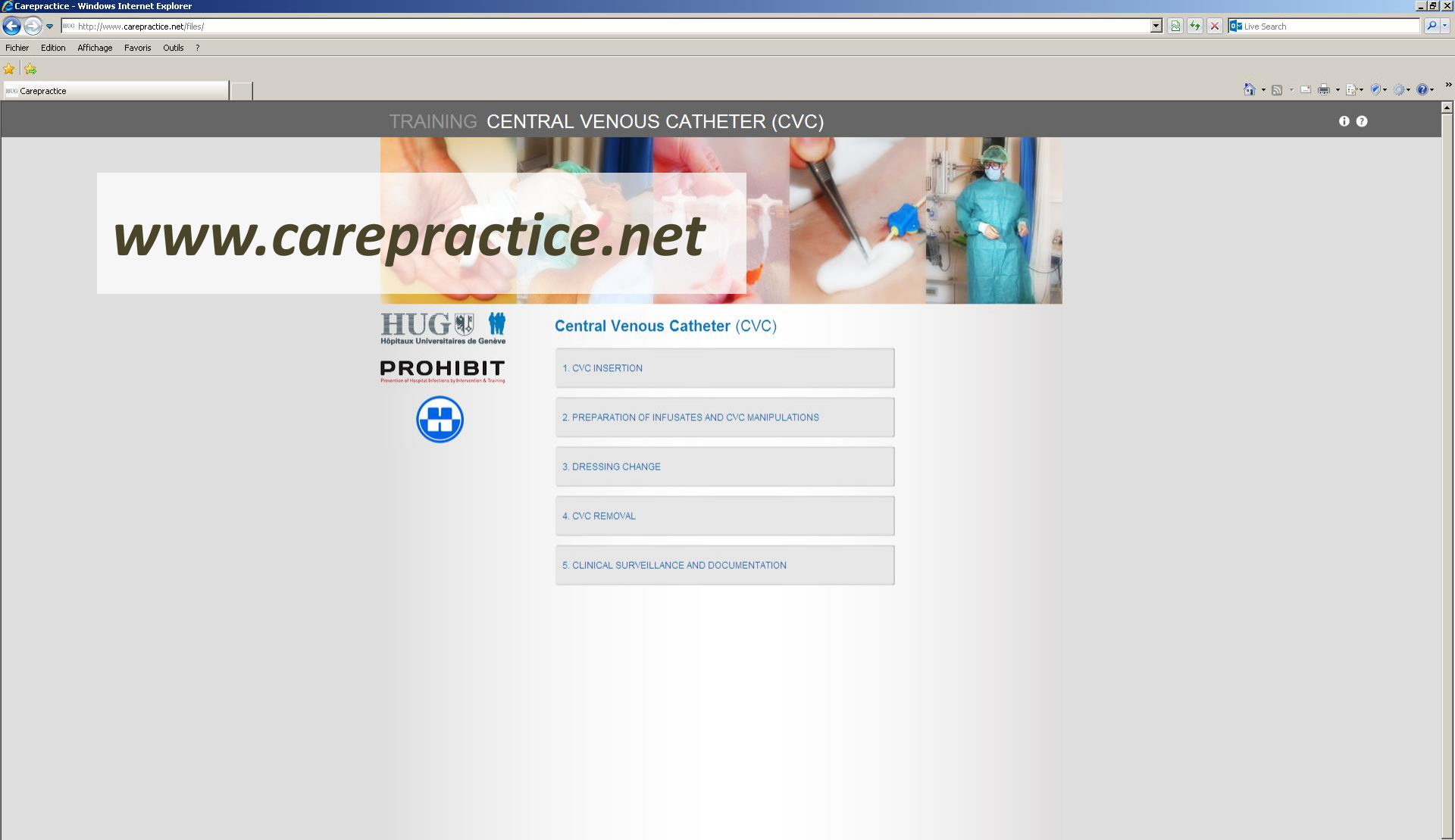
37			♦ Blouse stérile
38			♦ Gants stériles
7 – Matériel			
39			♦ Ouverture du set CVC et porte aiguille (effectué par l'aide masqué avec port du chapeau)
40			♦ Ouverture de l'ampoule de lidocaïne (effectué par l'aide)
INSER TION			
8 – Site de ponction			
41			♦ Champ stérile d'approche non percé (crânial en cas d'accès jugulaire ou latéral en cas d'accès sous-clavier)
42			♦ Champ stérile percé
9 – Anesthésie			
43			♦ Préparation d'une seringue 2 ou 5 ml (set Braun®) de lidocaïne 1% avec une aiguille rose
44			♦ Anesthésie locale avec aiguille noire (voie jug.) ou aiguille jaune longue (voie sous-clavière)
45			♦ Injection du périoste de la clavicule
10 – Ponction			
46			♦ Préparation d'une seringue (set Braun®) avec NaCl 0.9% pour le rinçage du cathéter
46 bis			♦ Repérage de la veine jugulaire (aiguille noire) ou de la veine sous-clavière (aiguille du CVC)
			♦ Positionnement de l'aiguille du CVC avec une seringue vide en parallèle de l'empreinte de l'aiguille noire (utilisée pour l'anesthésie locale) vers le lieu de ponction
47			
48			♦ Ponction de la veine et aspiration du sang
11 – Introduction du mandrin métallique			
49			♦ Déconnexion de la seringue
50			♦ Introduction du mandrin métallique dans l'aiguille jusqu'à une distance de 20 cm dans le corps
51			▲ Surveillance des arythmies
12 – Introduction du dilateur			
52			♦ Introduction et retrait du dilateur
53			♦ Introduction du cathéter autour du mandrin; avancement du cathéter à maximum à 15 cm à la peau (selon taille du patient)
54			♦ Retrait du mandrin qui peut être réinséré dans son « étui »
55			♦ Aspiration du sang par la (les) lumière(s) avec une seringue de 2 ml
56			♦ Rinçage de la lumière / des lumières avec la seringue de 5 ml de NaCl 0.9%; la seringue reste en place
57			♦ Fermeture de la lumière avec la pièce plastique prévue
14 – Fixation			
58			♦ Mise en place de la pièce de fixation jaune (CVC 1 lumière) ou blanche (CVC 2 lumières) en plastique du set CVC
59			♦ Fixation du cathéter avec le fil stérile (set Braun®)
60			♦ Pendant la fixation, maintien de la peau avec la pince plastique du set
15 - pansement			
61			♦ Retrait des champs stériles
62			♦ Antiseptie du lieu de ponction avec chlorhexidine alcoolique colorée 0.5%
Pansement:			
63			1. Pansement compresses et Mefix®; 2 compresses pré-découpées (set Braun®) à disposer en dessous et au dessus du site d'insertion et Pansement type Mefix® 10 x 10 cm (set Braun®) ou
64			2. Pansement transparent si absence d'écoulement sanguin: Opsite iv 3000®
65			♦ Hygiène des Mains
16 – Contrôle radiologique			
66			♦ Appel pour une radiographie thoracique
67			♦ Bon de radiologie
68			♦ Cliché radiologique en position expirée de face
69			♦ Contrôle de l'extrémité du CVC (position idéale: veine cave sup. en dehors de l'oreillette droite)
70			♦ Recherche d'un pneumothorax et d'un nouvel épanchement pleural
17 - Documentation			
71			♦ Documentation de l'acte de pose des CVC dans le dossier anesthésique informatisé
72			♦ Documentation succincte sur la feuille d'anesthésie manuscrite en cas de CVC nécessaire en per-opérateur

Formation au laboratoire de simulation



Formation d'une demi-journée

- Lecture théorique interactive
- Pratique sur mannequin
- Surveillance vidéo



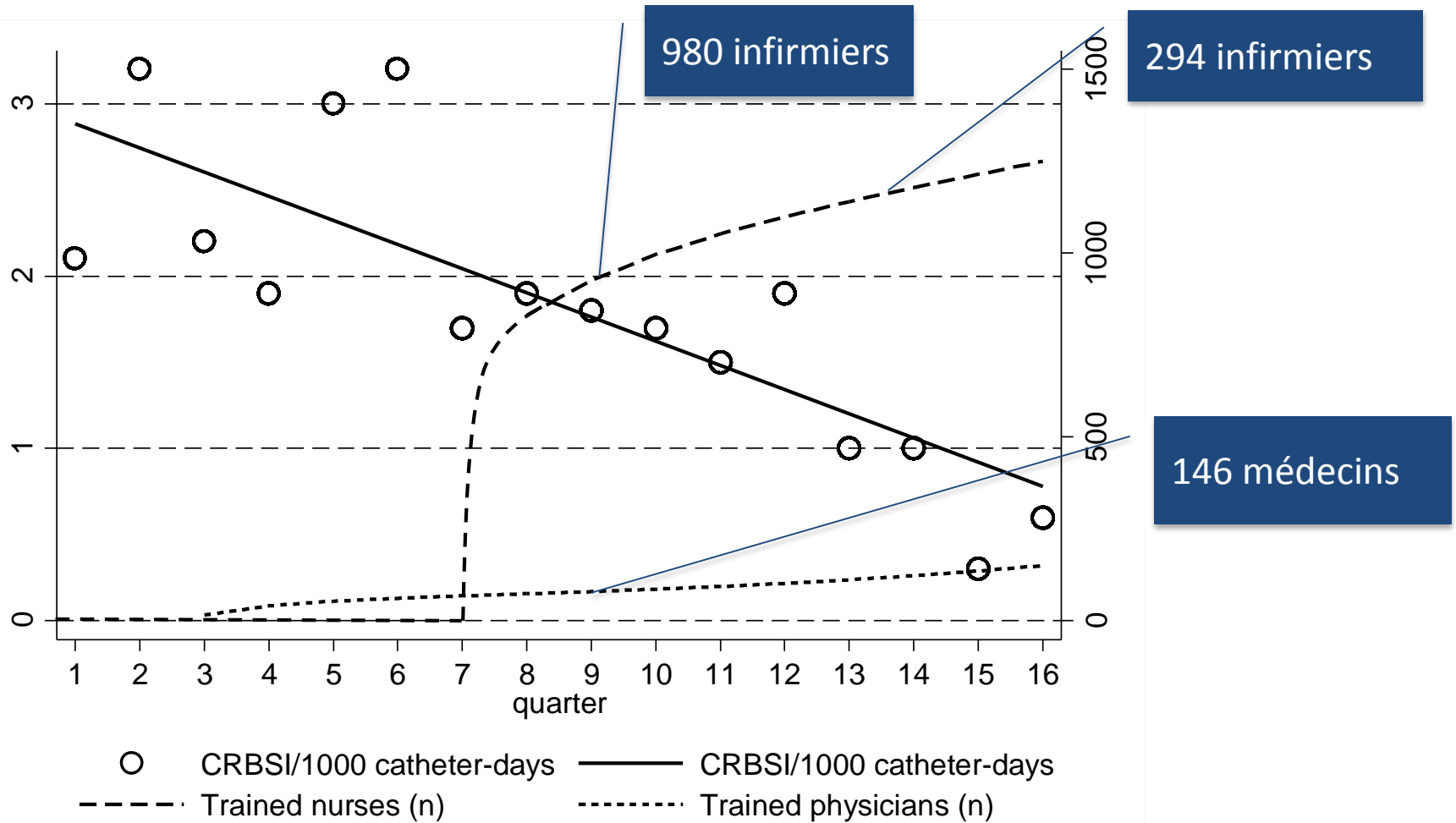
“Train the trainer”

Formation des formateurs dans deux ateliers :

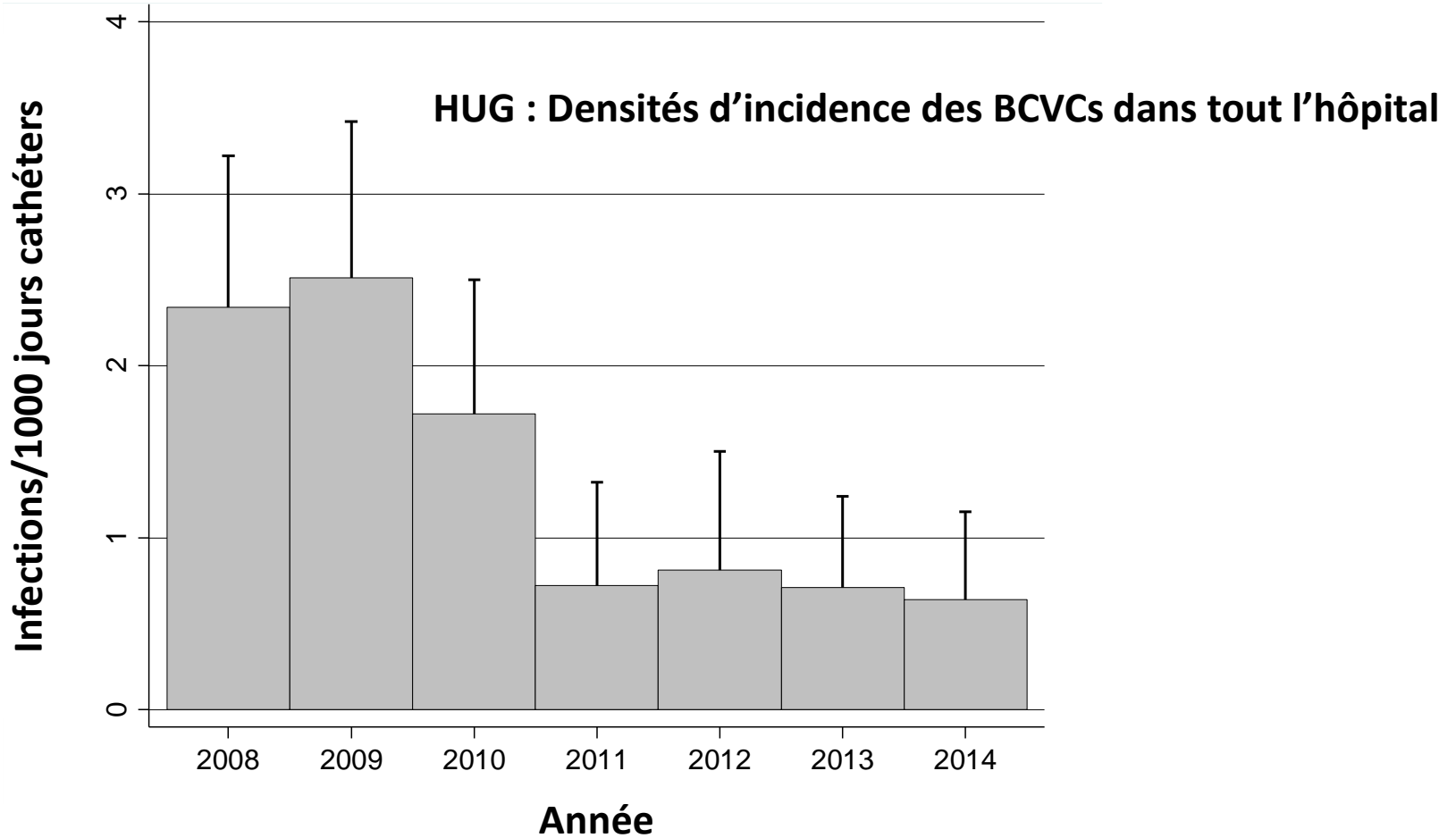
- Présentation de l’outil « E-learning »
- Sessions de formations simulées

Résultats

-8.2 %; 95 % IC -3.9-12.6 %; P < 0.001

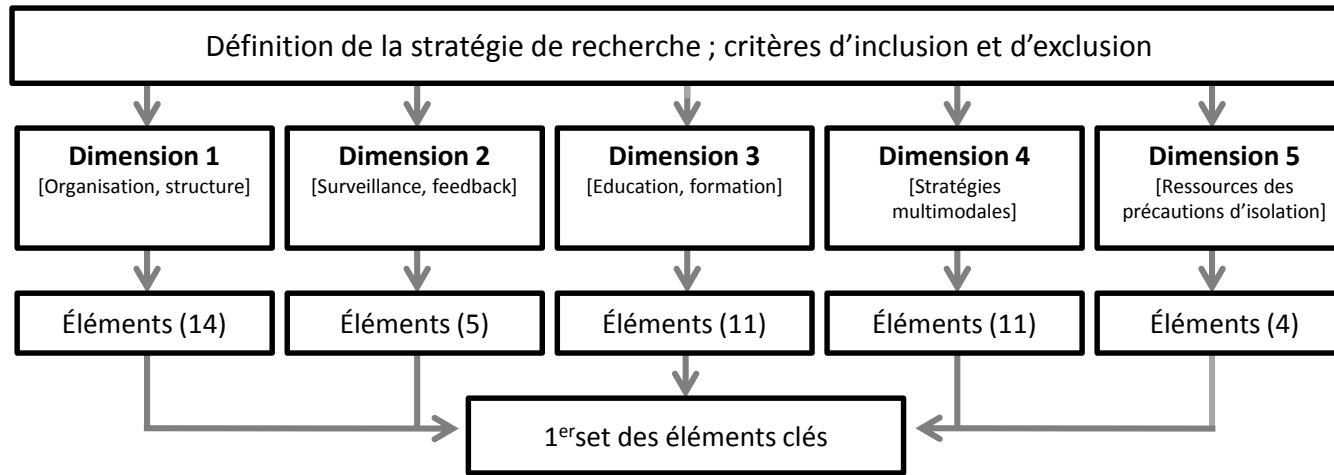


Soutenabilité

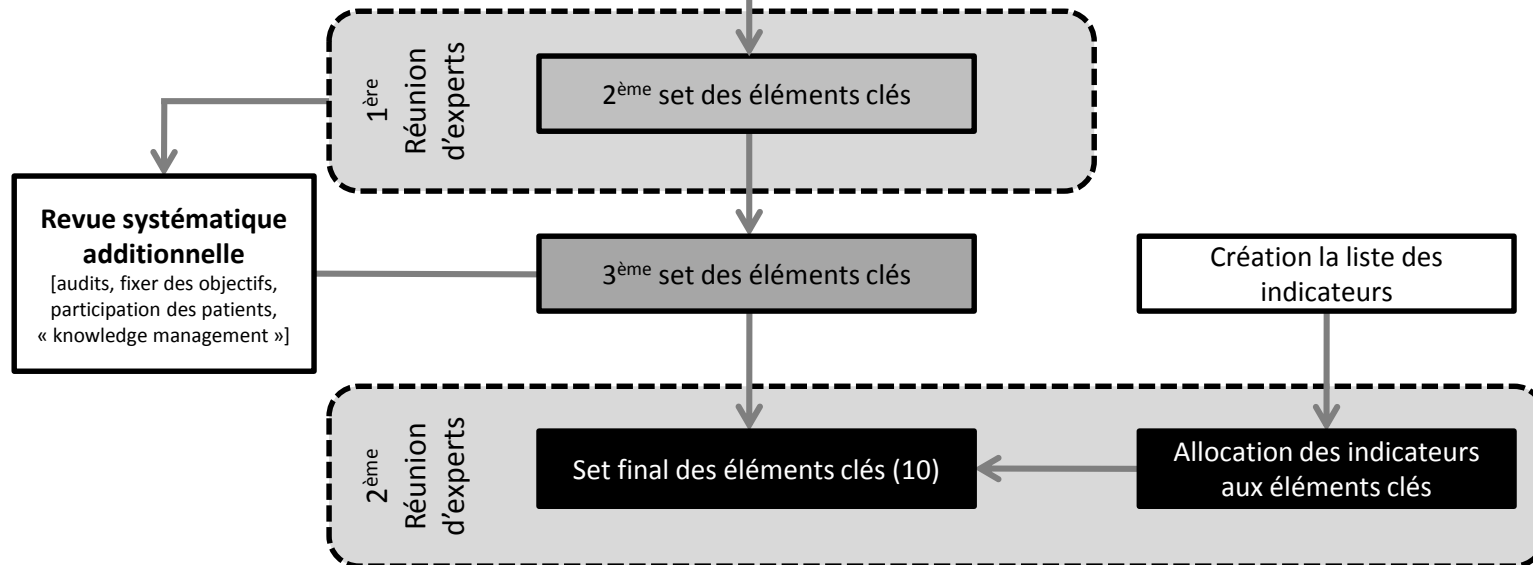


Systematic review and evidence-based guidance on organisation of hospital infection control programmes (SIGHT) project

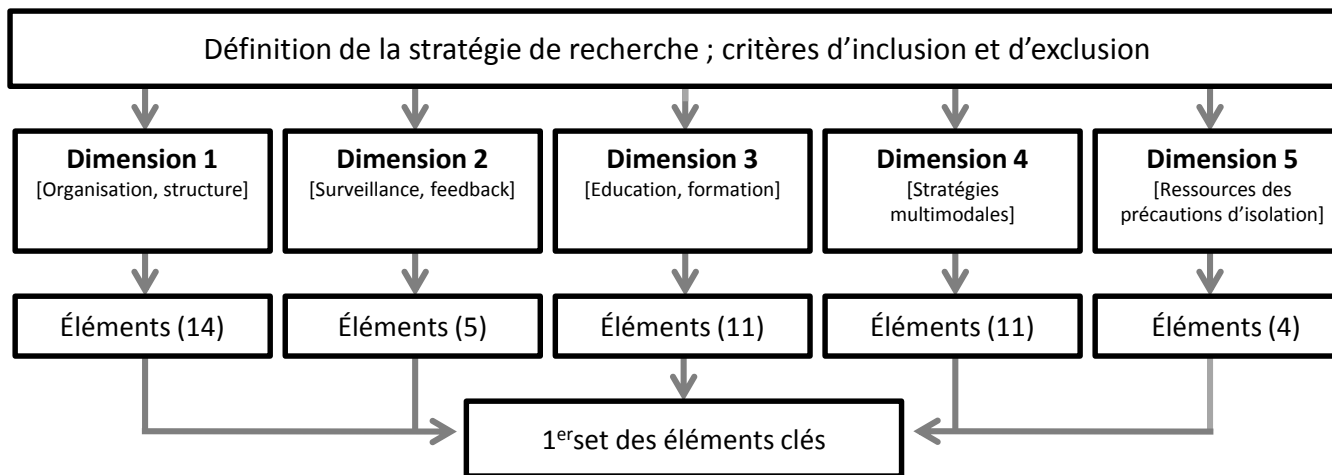
WP1: Revue systématique



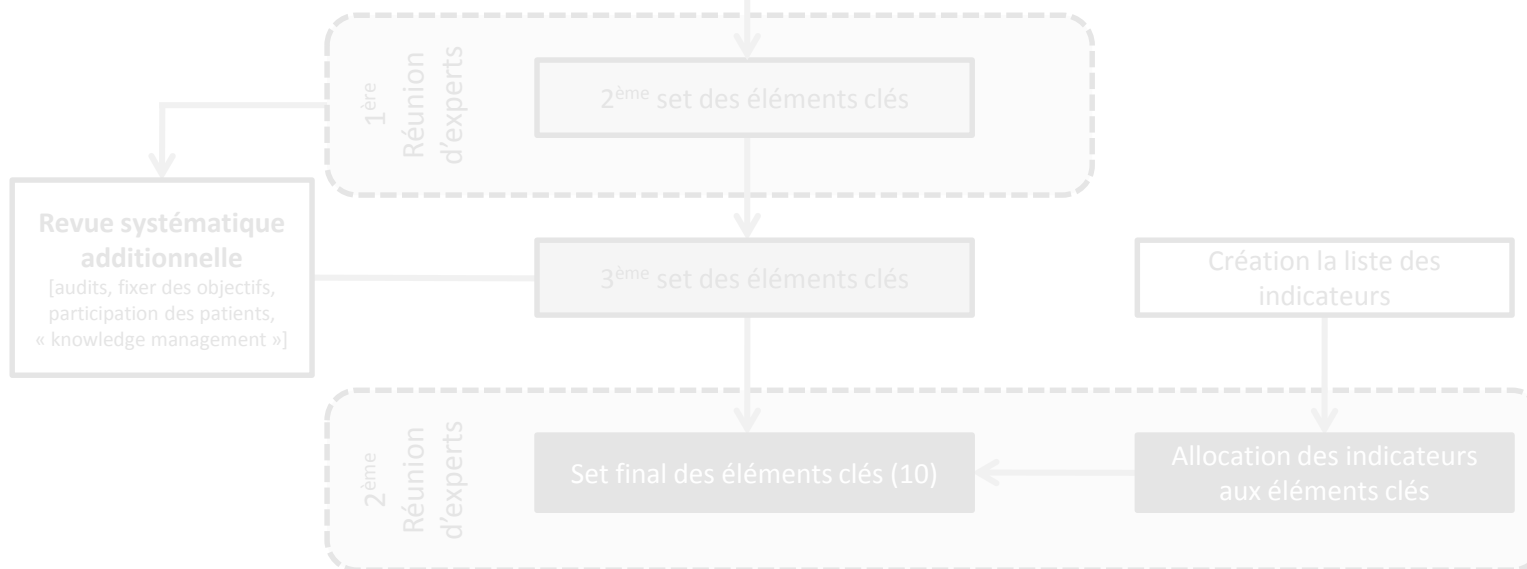
WP2 : Résumé des éléments clés, juger la faisabilité et définition des indicateurs

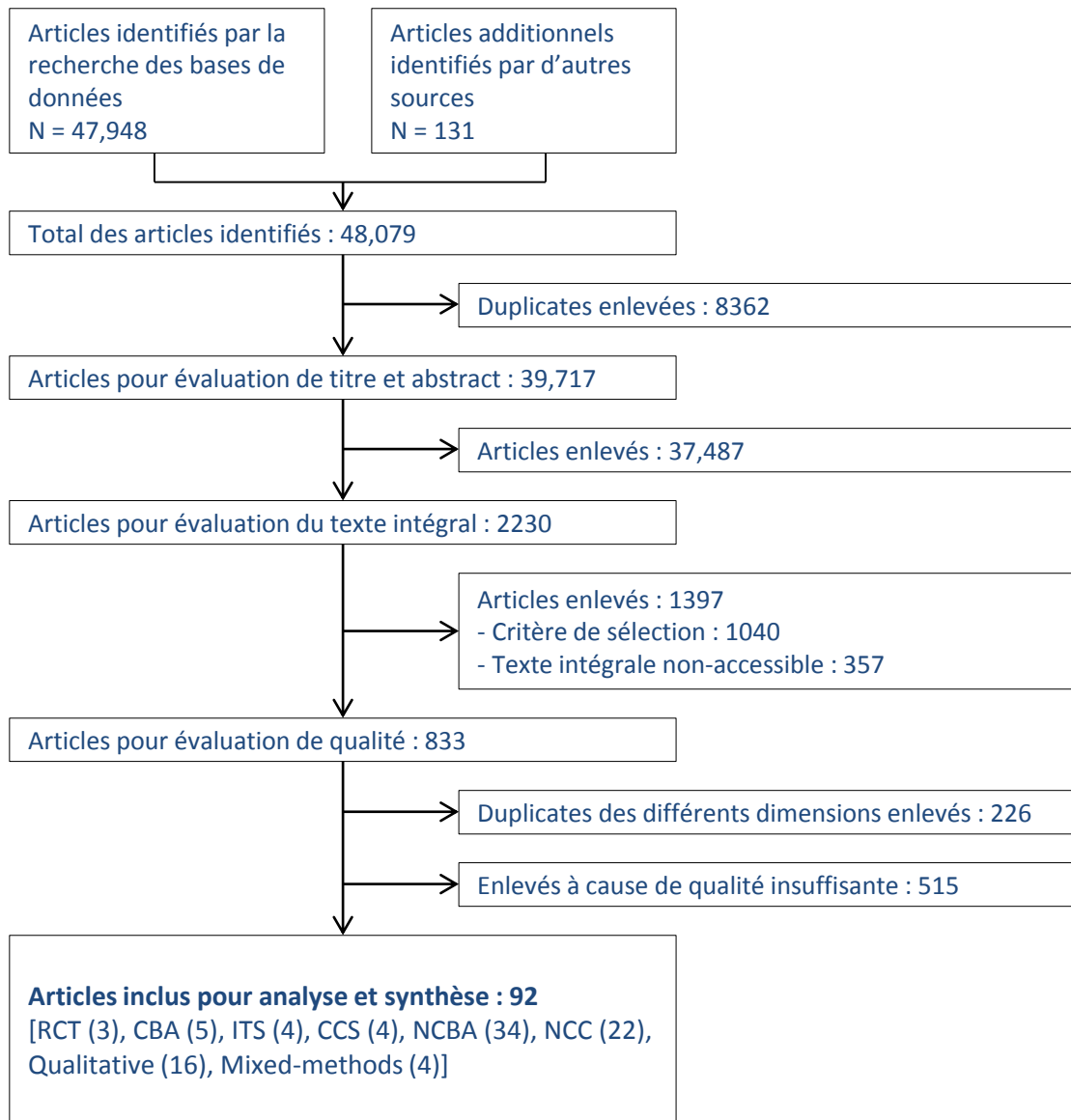


WP1 : Revue systématique



WP2 : Résumé des éléments clés, juger la faisabilité et définition des indicateurs





Key component

Indicators

1 An effective infection-control programme in an acute care hospital must include as a minimum standard at least one full-time specifically trained infection-control nurse per up to 250 beds , a dedicated physician trained in infection control, microbiological support, and data management support	Continuous review of surveillance and prevention programmes, outbreaks, and audits; infection control committee in place, inclusion of infection control on the hospital administration agenda, and defined goals; appropriate staffing and budget for infection control
2 Ward occupancy must not exceed the capacity for which it is designed and staffed; staffing and workload of frontline staff must be adapted to acuity of care, and the number of pool or agency nurses and physicians used kept to a minimum	Average bed occupancy at midnight, average numbers of frontline workers, and the average proportion of pool or agency professionals
3 Sufficient availability of and easy access to materials and equipment, and optimisation of ergonomics	Availability of alcohol-based hand rub at the point of care and sinks stocked with soap and single-use towels
4 Use of guidelines in combination with practical education and training	Adaptation of guidelines to local situation, number of new staff trained with the local guidelines, teaching programmes are based on local guidelines
5 Education and training involves frontline staff and is team and task oriented	Education and training programmes should be audited and combined with knowledge and competency assessments
6 Organising audits as a standardised (scored) and systematic review of practice with timely feedback	Measurement of the number of audits (overall, and stratified by departments, units and topics) for specified time periods
7 Participating in prospective surveillance and offering active feedback, preferably as part of a network	Participation in nationals and international surveillance initiatives, number and type of wards with a surveillance, regular review of the feedback strategy
8 Implementing infection-control programmes following a multimodal strategy , including tools such as bundles and checklists developed by multidisciplinary teams, and taking into account local conditions	Verification that programmes are multimodal; measurement of process indicators; measurement of outcome indicators
9 Identifying and engaging champions in the promotion of intervention strategies	Interviews with frontline staff and infection-control professionals
10 A positive organisational culture by fostering working relationships and communication across units and staff groups	Questionnaires about work satisfaction, crisis management, and human resource assessments of absenteeism and staff turnover

Key component

Indicators

1 An effective infection-control programme in an acute care hospital must include as a minimum standard at least **one full-time** specifically trained infection-control **nurse per up to 250 beds**, a dedicated physician trained in infection control, microbiological support, and data management support

Continuous review of surveillance and prevention programmes, outbreaks, and audits; infection control committee in place, inclusion of infection control on the hospital administration agenda, and defined goals; appropriate staffing and budget for infection control

2 **Ward occupancy** must not exceed the capacity for which it is designed and staffed; **staffing** and **workload** of frontline staff must be adapted to acuity of care, and the number of pool or agency

Average bed occupancy at midnight, average numbers of frontline workers, and the average proportion of pool or agency professionals

Disponibilité suffisante et accès facile à des **dispositifs** médicaux et des équipements, optimisation de l'**ergonomie**

5 **Education** and training involves frontline staff and is **team** and **task oriented**

Education and training programmes should be audited and combined with knowledge and competency assessments

6 Organising **audits** as a standardised (scored) and systematic review of practice with timely feedback

Measurement of the number of audits (overall, and stratified by departments, units and topics) for specified time periods

7 Participating in **prospective surveillance** and offering active feedback, preferably as part of a **network**

Participation in nationals and international surveillance initiatives, number and type of wards with a surveillance, regular review of the feedback strategy

8 Implementing infection-control programmes following a **multimodal strategy**, including tools such as bundles and checklists developed by multidisciplinary teams, and taking into account local conditions

Verification that programmes are multimodal; measurement of process indicators; measurement of outcome indicators

9 Identifying and engaging **champions** in the promotion of intervention strategies

Interviews with frontline staff and infection-control professionals

10 A **positive organisational culture** by fostering working relationships and communication across units and staff groups

Questionnaires about work satisfaction, crisis management, and human resource assessments of absenteeism and staff turnover

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3 Sufficient availability of and easy access to materials and equipment, and optimisation of ergonomics	Availability of alcohol-based hand rub at the point of care and sinks stocked with soap and single-use towels
4 Use of guidelines in combination with practical education and	Adaptation of guidelines to local situation, number of new programmes
Les collaborateurs des unités de soins participent aux activités de formation et d'éducation qui elles-mêmes adressent les besoins des équipes et les tâches à réaliser	
7 Participating in prospective surveillance and offering active feedback, preferably as part of a network	Participation in national and international surveillance initiatives, number and type of wards with a surveillance, regular review of the feedback strategy
8 Implementing infection-control programmes following a multimodal strategy , including tools such as bundles and checklists developed by multidisciplinary teams, and taking into account local conditions	Verification that programmes are multimodal; measurement of process indicators; measurement of outcome indicators
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5 Education and training involves frontline staff and is team and task oriented	Education and training programmes should be audited and combined with knowledge and competency assessments
6 Conducting audits as a standardised (scored) and systematic review	Measurement of the number of audits (overall and stratified periods)
7 Implementing a multimodal strategy , including tools such as bundles and checklists developed by multidisciplinary teams, and taking into account local conditions	Measurement of process indicators; measurement of outcome indicators
9 Identifying and engaging champions in the promotion of intervention strategies	Interviews with frontline staff and infection-control professionals
10 A positive organisational culture by fostering working relationships and communication across units and staff groups	Questionnaires about work satisfaction, crisis management, and human resource assessments of absenteeism and staff turnover

Participation à une activité prospective de **surveillance** permettant de restituer des feedbacks, de préférence dans un réseau national ou international

Key component

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7 Participating in prospective surveillance and offering active feedback to frontline staff	Participation in national and international surveillance initiatives, and use of data from surveillance, to inform practice
8 Intervention strategies developed by multidisciplinary teams	Development of evidence-based interventions, and their implementation
9 Staffing of frontline staff includes infection control professionals	Staffing of frontline staff includes infection control professionals
10 A positive organisational culture by fostering working relationships and communication across units and staff groups	Questionnaires about work satisfaction, crisis management, and human resource assessments of absenteeism and staff turnover

L'implémentation des programmes de contrôle des infections poursuit une **stratégie multimodale** y compris des outils tels que des « bundles » et des check-lists **développés par des équipes pluridisciplinaires**, en tenant compte des conditions locales

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9 Identifying and engaging champions in the promotion of	Interviews with frontline staff and infection-control
1 Une culture d'organisation positive en favorisant des relations de travail et la communication entre les unités et les groupes d'employés	ment, staff

Résumé

- La littérature suggère que la prévention des infections (liées aux CVCs) n'est pas le résultat d'un dispositif « magique » mais liée au respect des bonnes pratiques
- L'évidence du rôle d'un changement de pratique dans la prévention des infections (liées aux CVCs) est accablant mais malheureusement, l'implémentation d'un tel changement de pratique est un défi, beaucoup plus difficile que l'introduction d'un nouveau dispositif médical

- La question aujourd'hui n'est plus « **quoi faire** » mais « **comment** » le faire
- Les hôpitaux sont bien avisés de réfléchir comment arriver à l'implémentation d'un changement de pratique tout en cherchant à surmonter les barrières

Programme



3rd International Course on Implementation in Infection Control

29th – 30th October 2015

Auditoire Fondation
Louis-Jeantet, Geneva
Switzerland

27th – 28th October 2015

Online registration:
www.aesculap-akademie.ch
(instructions in German, French or Italian)