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BARN re-start in 2010

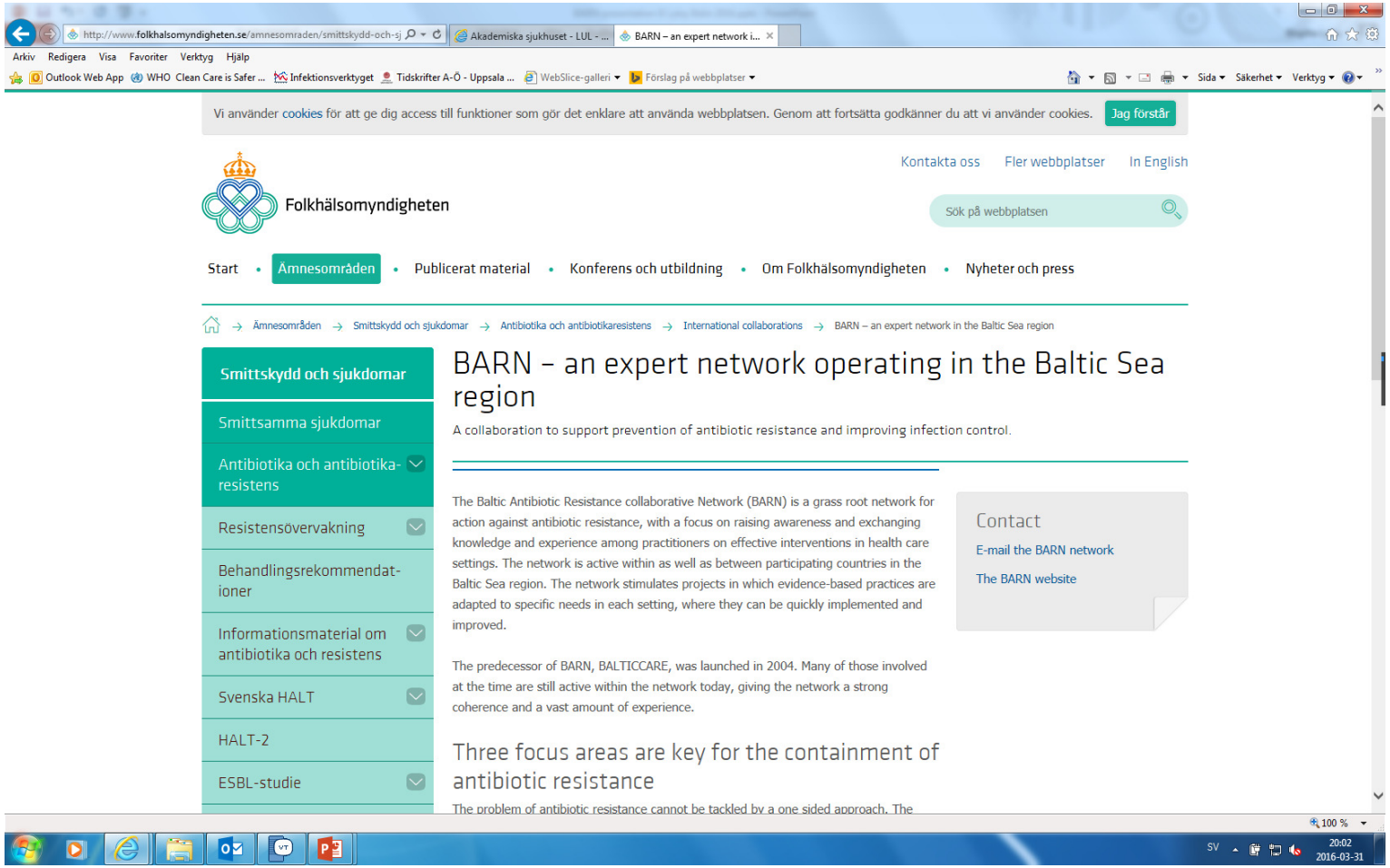
History:

BARN was an extension of activities initiated in the networks of BALTICCARE in the 1990:ies

The Baltic Network for Infection Control and Containment of Antibiotic Resistance and Forum Balticum

Anna Hambraeus, MD, PhD and others

Public Health Agency of Sweden coordinator



BARN – a network of experts

Members

Doctors, nurses, health-care staff

Epidemiologists, stake holders,

University academy professionals

Currently 200 professionals

BARN – 12 countries

Members

Sweden, Norway, Denmark, Estonia, Latvia, Lithuania, Poland, Russia (St Petersburg), Georgia, Ukraine, Belarus, Moldova and WHO (Copenhagen and Geneva)


Monchegorsk
(Мончегорск)
Luleå
Oulu
Skellefteå
Umeå
Trondheim
Östersund
Örnsköldsvik
Sverige
(Sweden)
Kuopio
Joensuu
Sundsvall
Gulf of
Bothnia
Norge
(Norway)
Suomi
(Finland)
Pori
Tampere
Lahti
Lappeenranta
Borlänge
Gävle
Turku
Kouvola
Oslo
Uppsala
Helsinki
Sankt-Peterburg
(Санкт-Петербург)
Karlstad
Västerås
Stockholm
Tallinn
Sosnovyy
Bor
(Сосновый
Бор)
Pushkin
(Пушкин)
Örebro
Södertälje
Eesti
(Estonia)
Trollhättan
Linköping
Norrköping
Baltic Sea
Novgorod
(Новгород)
Jönköping
Gotland
Göteborg
Borås
Pskov
(Псков)
Varberg
Växjö
Rīga
Latvija
(Latvia)
Aalborg
Halmstad
Kalmar
Velikiye Luki
(Великие
Луки)
Aarhus
Kristianstad
København
Klaipėda
Lietuva
(Lithuania)
Danmark
(Denmark)
Navapolack
(Наваполацк)
Kaliningrad
(Калининград)
Vitebsk
(Вицебск)
Elensburg
Kiel
Słupsk
Vilnius
Maladzieczna
(Маладзечна)
Orsha
(Орша)
Neumünster
Koszalin
Gdańsk
Olsztyn
Minsk
(Мінск)
Lübeck
Grudziądz
Hrodna
(Гродна)
Mogilev
(Магілёў)
Szczecin
Hamburg
Białystok
Беларусь
(Belarus)
Bydgoszcz
Baranavičy
(Баранавічы)
Bremen
Görzów
Wielkopolski
Berlin
Brest
(Брест)
Hannover
Polska
(Poland)
Warszawa
Homiel
(Гомель)
Osnabrück
Poznań
Bielefeld
Magdeburg
Pinsk
(Пінск)
Mazyr
(Мазыр)
Cottbus
Kalisz
Radom
Lublin
Iserlohn
Łódź
Deutschland
(Germany)
Leipzig
Wrocław
Częstochowa
Luts'k
(Луцьк)
Chernihiv
(Чернігів)
Gießen
Liberec
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Antimicrobial resistance is scope

- BARN has three legs to combat antimicrobial resistance

1. Build laboratory capacity to detect resistance and for surveillance
2. Antibiotic stewardship
3. Infection prevention and control

Six subprojects

- Collaboration in infection control to combat antimicrobial resistance and hospital infections
- Expansion of network and improvement of lab capacity for better AMR surveillance (enilabAMR)
- The Hand Hygiene Project (completed)
- The Happy Audit Project (completed)
- The Baltic ESBL Epidemiology Project (completed)
- The Perioperative Antibiotic Prophylaxis Project (completed)

BARN idea

“From declarations to actions”

All countries have guidelines

Compliance to guidelines is not always perfect

The gap

There is a gap between

what we DO ……and what we KNOW

Some existing knowledge is not applied sufficiently

The traditional approaches

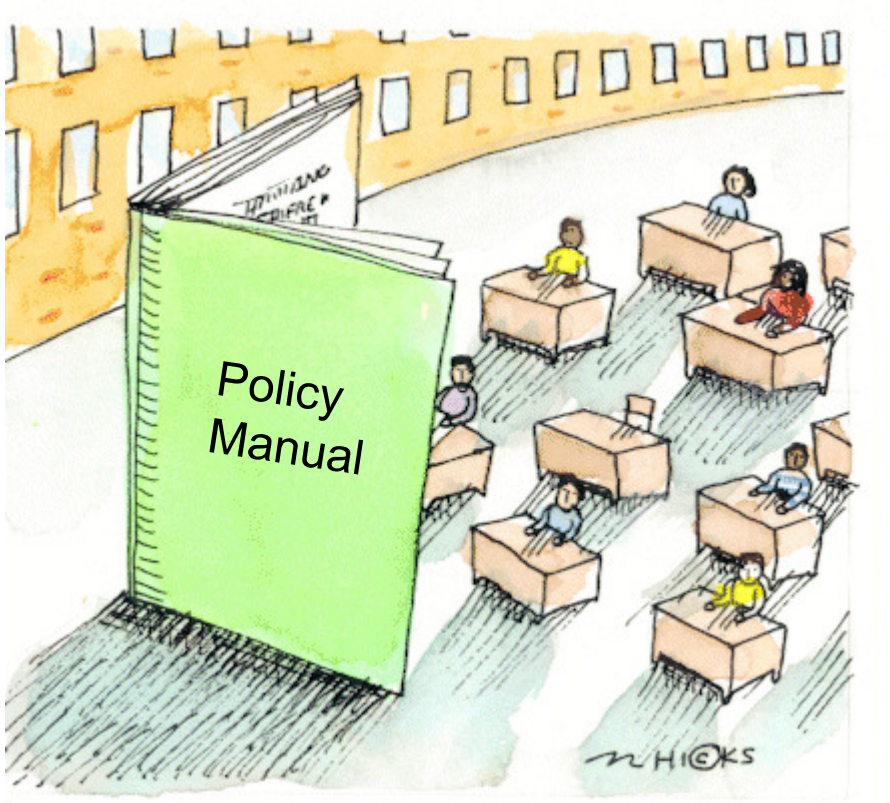
Memo

Date: February 2012
To: All Staff
From: Management

Starting next Monday, all staff will be expected to implement the new procedure we just tested in the 3 West med/surg unit.

It worked there so in order to save time, everyone will now start doing the new procedure like 3 West.

Thank you for your cooperation.



BARN idea

“From declarations to actions”

All countries have guidelines

Compliance to guidelines is not always perfect

Grass-root level

Funding is spent on workshops to bring professionals together and exchange experience

It is the people in the system that are the best to know how to change it!

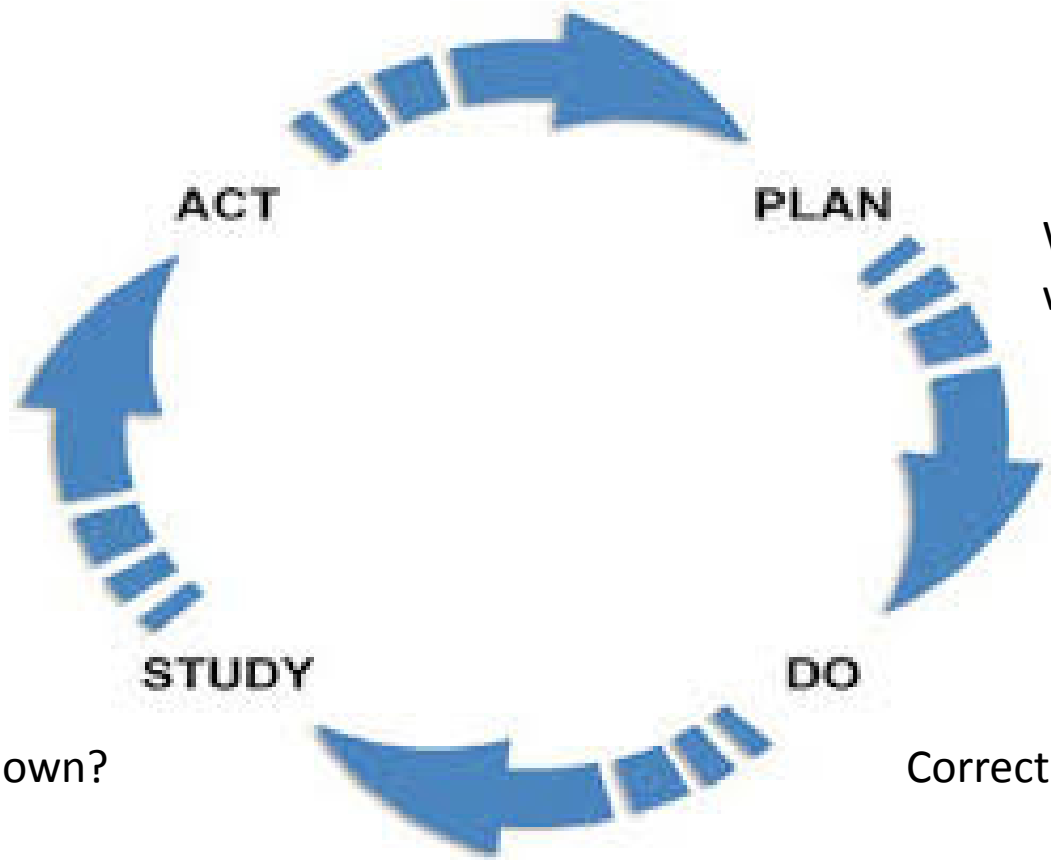
If you want anothter results, you have to do something in another way….

…and that way can be quite different depending on the variation in context!

Test small changes and evalute

What worked?

What errors do we have to correct?



Did the rates go down?

Correct

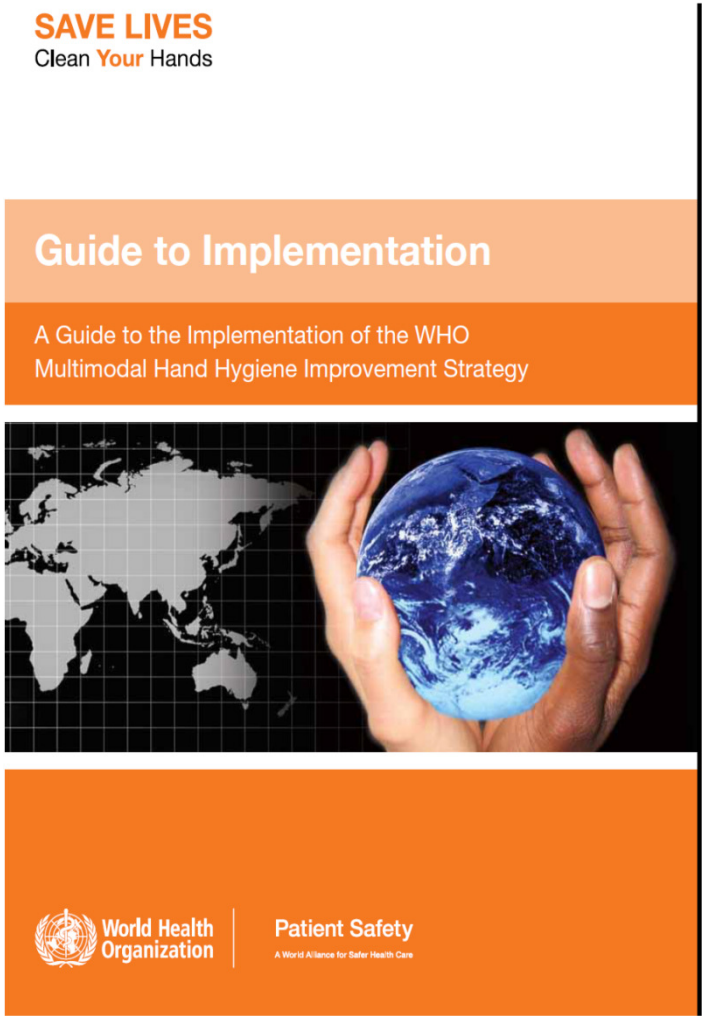
BARN Baltic Antibiotic Resistance collaborative Network

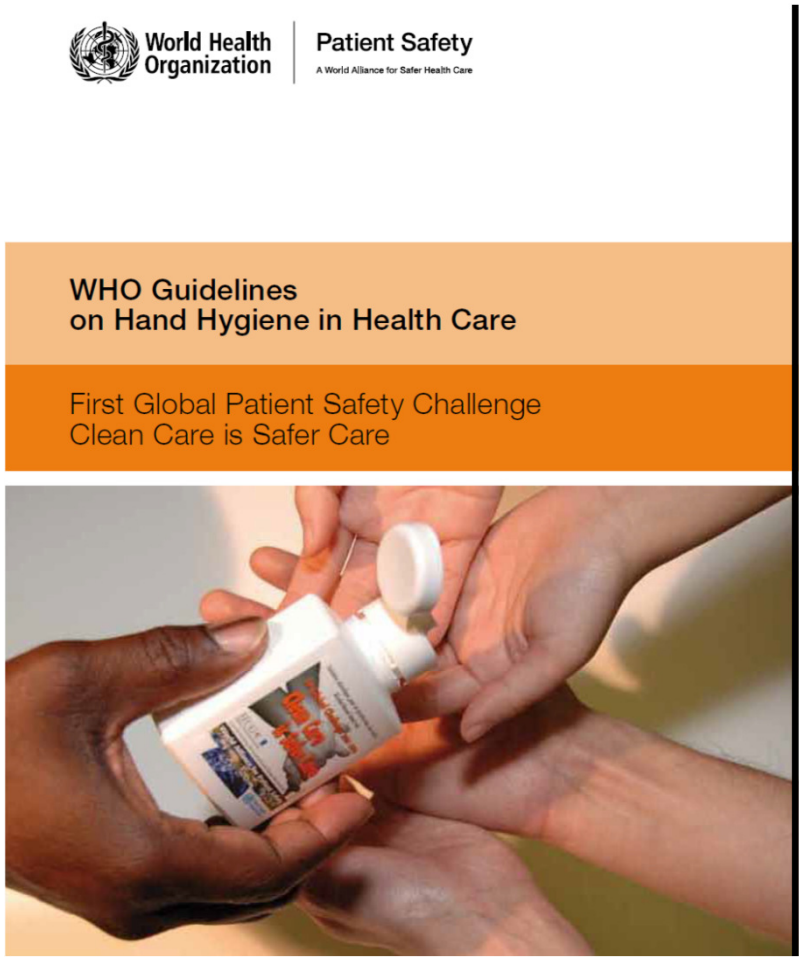
Hand Hygiene 2011-2014

Implementing the WHO guidelines for improving hand hygiene in health care

Latvia-Lithuania-St Petersburg -Sweden

WHO-Clean Care is Safer Care

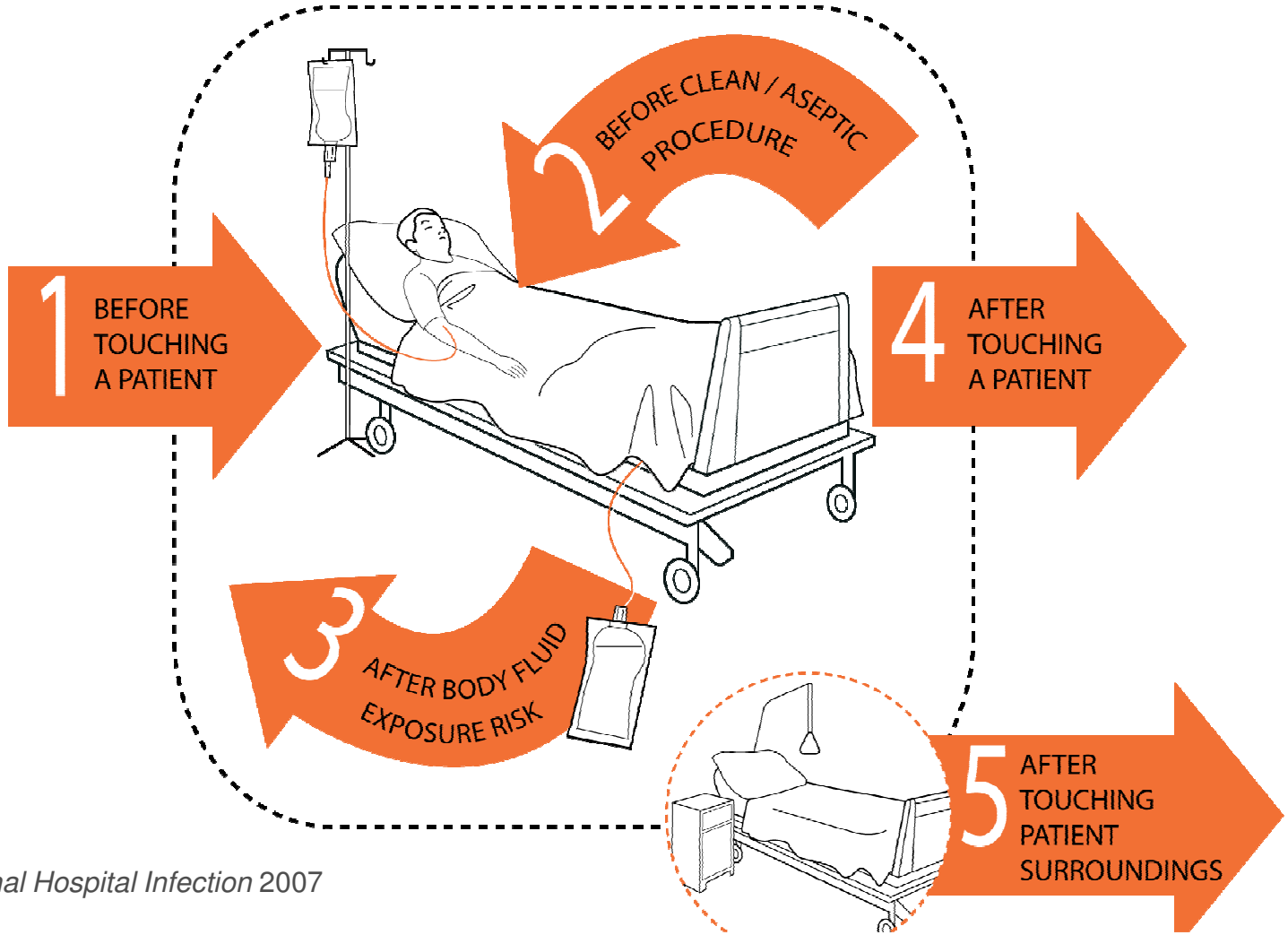




WHO Key documents

1WHOhandhyg2009aug.pdf
2WHO_IER_PSP_2009.02_eng_Implementation_guide.pdf
3hhsa_framework_October_2010.pdf
4Sustaining_Improvement.doc
5Hand_Hygiene_Why_How_and_When_Brochure.pdf
6Glove_Use_Information_Leaflet.pdf
7Guidance_Organizations_patients.doc
8Hand Hygiene Technical Reference Manual.pdf
9Ward_Infrastructure_Survey.doc
10Soap_Handrub_Consumption_Survey.doc
11How_To_HandRub_Poster.pdf
12How_To_HandWash_Poster.pdf
13Your_5_Moments_For_Hand_Hygiene_Poster_Chair.pdf
14Your_5_Moments_For_Hand_Hygiene_Poster.pdf
15Save_Lives_Screensaver.zip
16slides_for_education_session_low_res.ppt
17slides_for_hand_hygiene_coordinator.ppt
WHOhandHygieneDocuments.zip

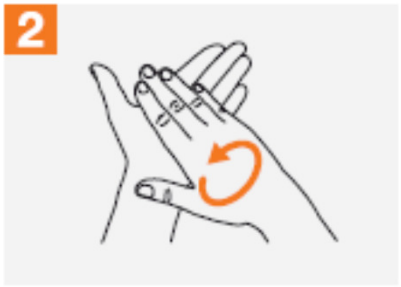
The “My 5 Moments for Hand Hygiene” approach



Sax H et al. *Journal Hospital Infection* 2007

How to handrub

Apply a palmful of the product in a cupped hand, covering all surfaces;



Rub hands palm to palm;

Right palm over left dorsum with interlaced fingers and vice versa;

Palm to palm with fingers interlaced;

Backs of fingers to opposing palms with fingers interlocked;

Rotational rubbing of left thumb clasped in right palm and vice versa;

Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

Once dry, your hands are safe.

To effectively reduce the growth of germs on hands, **handrubbing** must be performed by following all of the illustrated steps. **This takes only 20–30 seconds!**

Hand hygiene project
2011-2014

- Accepted manuscript in the American Journal of Infection Control 2016
- Latvia – Agita Melbarde
- Lithuania – Rolanda Valentiene
- Sweden- Olov Aspevall, Anna Hambraeus
- St Petersburg (Russia) – Anna Liubimova

13 hospitals, 38 wards, 998 beds

Aim

To implement WHO SAVE LIVES: Clean Your Hands to reduce HCAI and ABR.

- abbreviate
- simplify
- adapt

Project design

Phases

I. Preparation

II. Baseline

III. Intervention

IV. Evaluation

V. Reporting

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Outcomes

- ***Wards infra strustructure***
- ***Hand rub consumption***
- ***Hand hygiene observation***
- ***Assessment knowledge, attitudes and skills***

Interventions

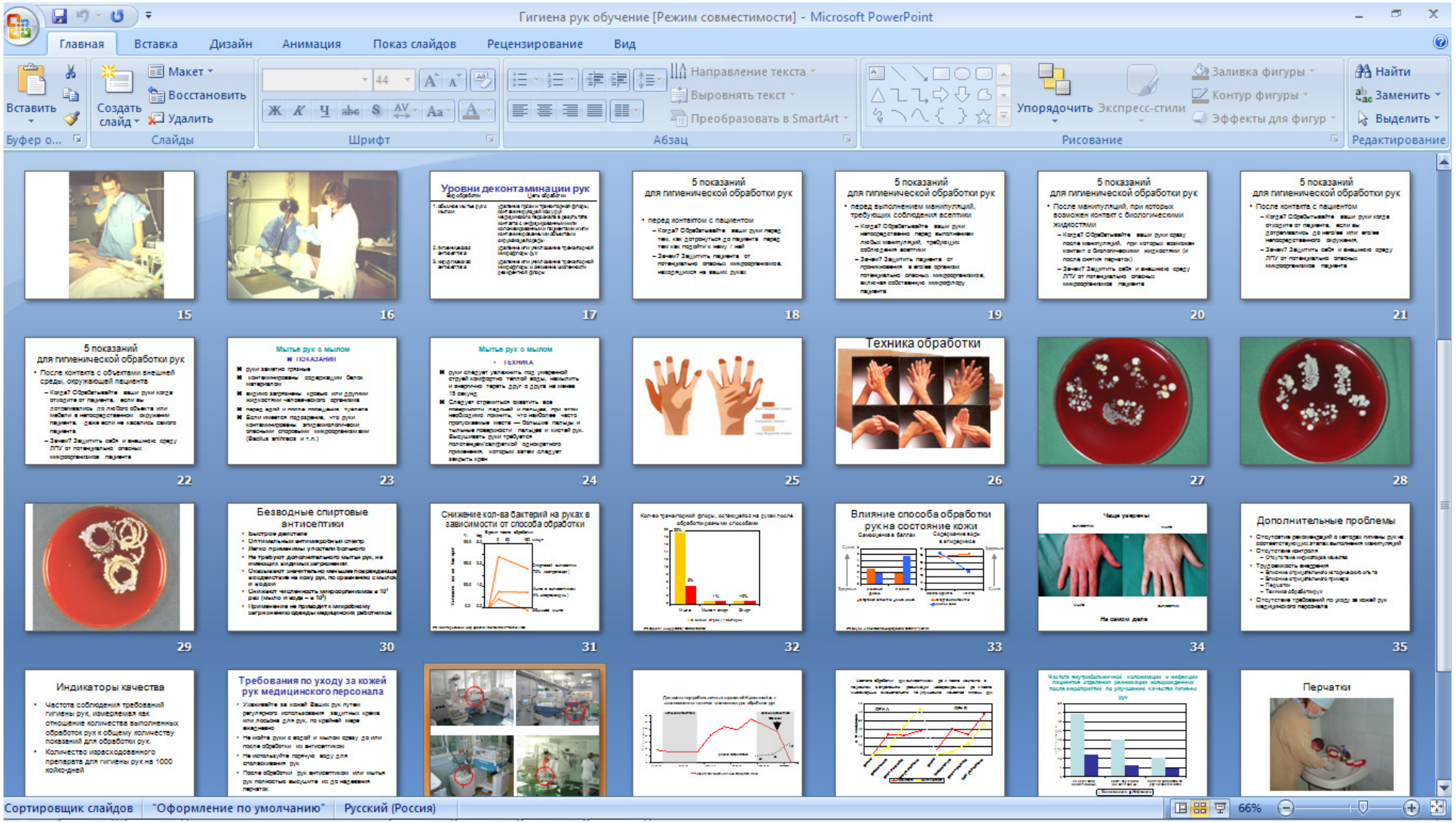
- Education of all staff
- Posters and reminders
- Feed-back results of

Observations of compliance to hand hygiene

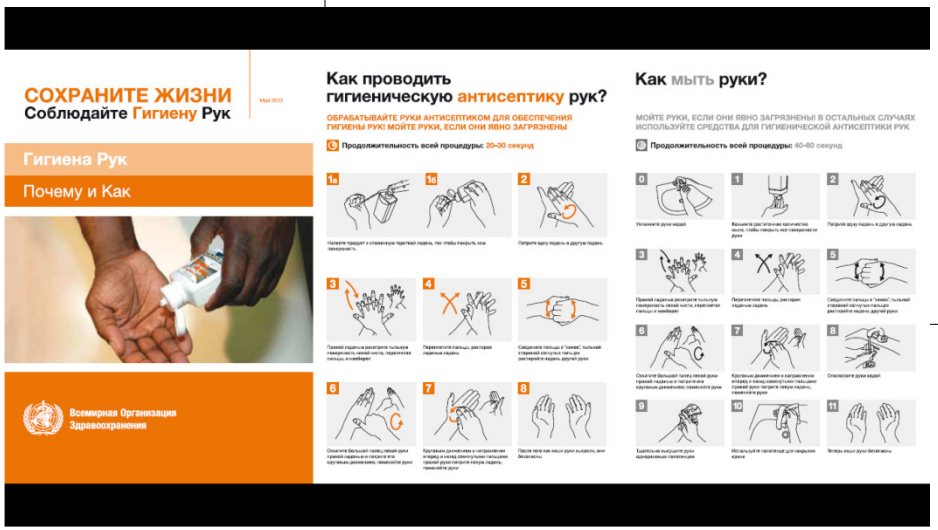
Hand-rub consumption

Attitudes and knowledge

Educational slides



Posters/Video



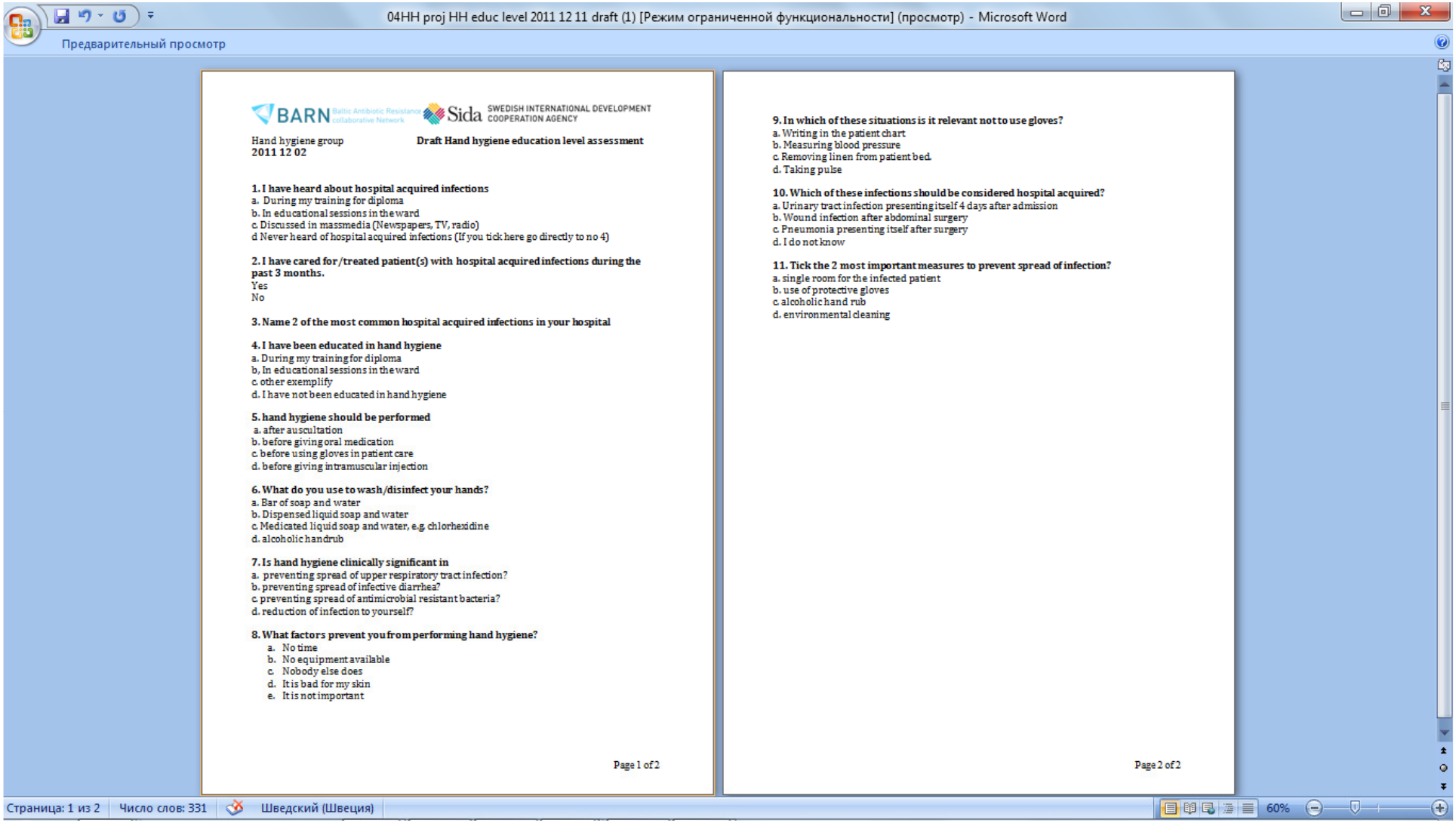
Hand hygiene observation

Observed person/ procedure*	Profession	Before touching a patient	Before clean/ aseptic proced-ure	After body fluid risk	After touching patient	After touching patient surroundings	Rings watches and bracelets removed	Are gloves used correct ly?	Bare fore-arms	Correct in all aspects
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
Rate = >	No of correct/No of observed									

Hand rub consumption

- During 2 weeks
- Calculated bottles used in the ward
- Volume in millilitres
- Calculated patent-days in order to compare wards
- Time consuming

Hand hygiene education level assessment



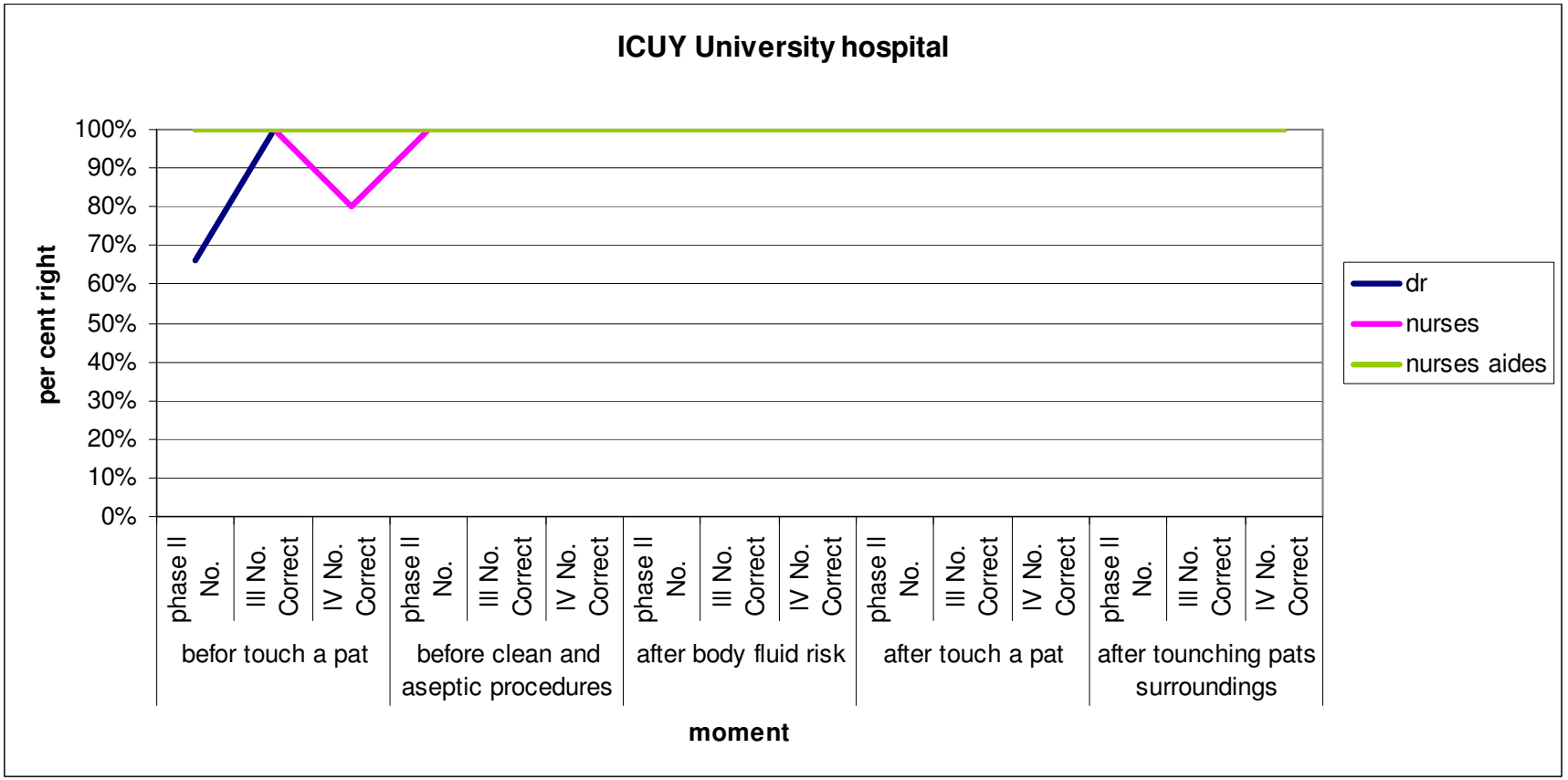
Results and lessons learnt

- Interventions led to improvement of the hand hygiene
- Feeding back results is excellent educational tool for improvement
- Hand-rub consumption is a better outcome than observations of compliance

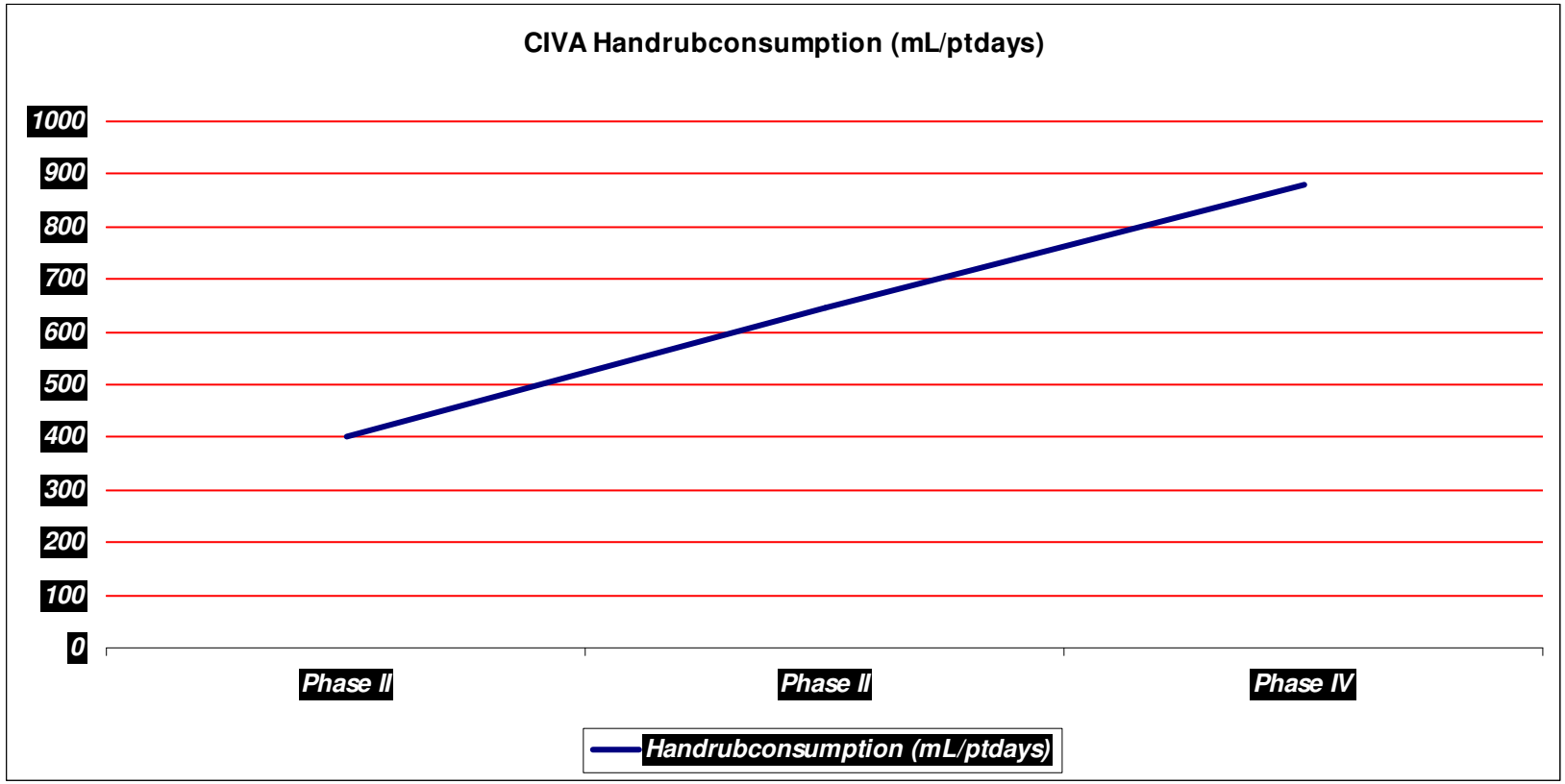
Hand hygiene observation

Number healthcare professionals were surveyed for hand hygiene compliance		
country	Before interaction	After interaction
Latvia	190	169
Lithuania	41	46
Russia	195	95
Sweden	30	30
Total	**456**	**340**

ICU Uppsala University Hospital



ICU Uppsala Univ Hospital



Intensive care unit St Petersburg
Hospital named after Eykhvald

Hand rub consumption

Project phase	No days	amount hand rub in liter	No patient days	mL handrub/patient day
2	14	2,2	84	26,1
3	14	10,5	70	150

- Observation of compliance to hand hygiene practice (% correct)

Project phase	Before touching a patient	Before clean/ aseptic proced-ure	After body fluid risk	After touching patient	After touching patient surroun-dings	Rings watches and bracelets removed	Are gloves used correctly ?	Bare fore-arms	Correct in all aspects
2	60	100	75	80	40	56	60	70	10
3	95	100	100	83	85	80	100	100	80

Intensive care unit St Petersburg
Hospital of Peter the Great

Hand rub consumption

Project phase	No days	amount hand rub in liter	No patient days	mL handrub/patient day
2	14	1,2	70	17,1
3	14	1,4	42	33,3

- Observation of compliance to hand hygiene practice (% correct)

Project phase	Before touching a patient	Before clean/ aseptic proced-ure	After body fluid risk	After touching patient	After touching patient surroun-dings	Rings watches and bracelets removed	Are gloves used correctly ?	Bare fore-arms	Correct in all aspects
2	60	56	82	78	51	63	72	100	29
3	96	96	86,9	91,3	78,2	91,3	78,2	100	62,5

Conclusion

Lessons learnt

- Hand hygiene compliance rates increased, especially among physicians
- Compliance with hand hygiene is higher among nurses before and after intervention

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Latvian experience re doctors

- Educational sessions for doctors not applicable, because they think that they know all problems.
- Only 3 wards from all BARN wards has educational sessions with doctors
- They do not think it is a doctors problem

BARN Baltic Antibiotic Resistance collaborative Network

Swedish experience

- Problems: doctors belong to clinic not ward
  doctors not easy to assemble
  doctors function diagnose and treat
  pats and not to care

- Success factor: Present cases
  Evidence
  Epidemiology

Low compliance to hand rub

- Latvia
- Lithuania
- St Petersburg

Reported skin problems from alcoholic hand rub

Cheep brands with no emolient

Disappeared after education in how to hand rub

Next project

Started in autumn of 2015

CAUTI- Catheter associated UTI

2015-2016

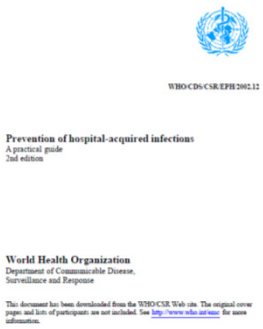
- Reduce CAUTI
- Reduce urinary catheter-days
- Reduce number of urinary catheters

By implementing evidence into practice

Starting in small scale

Implement in whole hospital

Evidence based guidelines

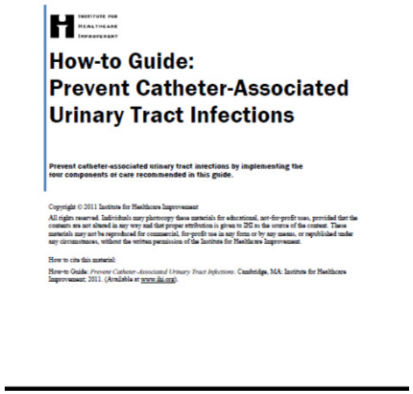


WHO/CDS/CSR/EPH/2002.12

Prevention of hospital-acquired infections
A practical guide
2nd edition

World Health Organization
Department of Communicable Disease,
Surveillance and Response

This document has been downloaded from the WHO/CSR Web site. The original cover page and list of participants are not included. See http://www.who.int/asr/ for more information.



How-to Guide:
Prevent Catheter-Associated Urinary Tract Infections

Prevent catheter-associated urinary tract infections by implementing the four components of care recommended in this guide.

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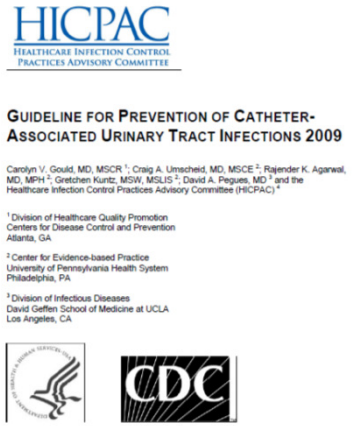

HICPAC
HEALTHCARE INFECTION CONTROL PRACTICES ADVISORY COMMITTEE

GUIDELINE FOR PREVENTION OF CATHETER-ASSOCIATED URINARY TRACT INFECTIONS 2009

Carolyn V. Gould, MD, MSCR [1]; Craig A. Umscheid, MD, MSCE [2]; Rajender K. Agarwal, MD, MPH [2]; Gretchen Kuntz, MSW, MSLIS [2]; David A. Pegues, MD [3] and the Healthcare Infection Control Practices Advisory Committee (HICPAC) [4]

[1] Division of Healthcare Quality Promotion
Centers for Disease Control and Prevention
Atlanta, GA

[2] Center for Evidence-based Practice
University of Pennsylvania Health System
Philadelphia, PA

[3] Division of Infectious Diseases
David Geffen School of Medicine at UCLA
Los Angeles, CA

CDC

1

Journal of Hospital Infection 86S1 (2014) S1-S70

ELSEVIER

Available online at www.sciencedirect.com

Journal of Hospital Infection

journal homepage: www.elsevierhealth.com/journals/jhin

epic3: National Evidence-Based Guidelines for Preventing Healthcare-Associated Infections in NHS Hospitals in England

H.P. Loveday[a]*, J.A. Wilson[a], R.J. Pratt[a], M. Golsorkhi[a], A. Tingle[a], A. Bak[a], J. Browne[a], J. Prieto[b], M. Wilcox[c]

[a] *Richard Wells Research Centre, College of Nursing, Midwifery and Healthcare, University of West London (London).*
[b] *Faculty of Health Sciences, University of Southampton (Southampton).*
[c] *Microbiology and Infection Control, Leeds Teaching Hospitals and University of Leeds (Leeds).*

NATIONELL SATSNING FÖR ÖKAD PATIENTSÄKERHET

Vårdrelaterade urinvägsinfektioner

ATGÄRDER FÖR ATT FÖREBYGGA

Sveriges Kommuner och Landsting

Main components

I. Alternatives

II. Material and size

III. Insertion technique

IV. Maintainance routines

V. Daily review of removal

CATHETER IN FOCUS!

Centra

- Estonia 3 hospitals and 13 departments
- Latvia 1 hospital and 1 department
- Sweden 1 hospital and 5 departments
- St Petersburg (Russia) 3 hospitals and 3 departments
- Moldova 1 hospital and 3 departments
- Ukraine 1 hospital and 2 departments

Total: 10 hospitals and 27 departments

Aims and outcomes

- Reduce CAUTI
- Reduce urinary catheter-days
- Reduce number of urinary catheters

By implementing evidence into practice

Starting in small scale

Implement in whole hospital

Main conclusions

Experiences

- Everybody have access to the knoweledge tha main issue is about implementation
- Post-soviet countries have another tradition of reporting HAI
- Baltic countries have been there and moved on

  Speak Russian after some time

  Exchange experience

  Provide ”road-map” for improvements
- Swedish people do not have the same experience and can´t speak the language
- Sweden provide the platform for meetings

Infection prevention and control leg

Improvement work is not research to develop new medical knowledge

…. it´s a way to put evidence and research into practice!

International collaboration between experts

- Few doctors and nurses work with infection control
- International perspective
- Comparison between countries
- Learn from others
- Educational package consisting of practical tools
- Include physiscians in workshop

Tack för er uppmärksamhet

Paldies par uzmanību

Dėkojame už Jūsų dėmesį

Tänan teid tähelepanu eest

Dziękuję za uwagę

Спасибі за увагу

Vă mulțumesc pentru atenție

Спасибо за внимание

Thank you for attention