Nationales Referenzzentrum
für Surveillance
von nosokomialen Infektionen

New targets for HAI surveillance

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Charité – Universitätsmedizin Berlin

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August 2010:
Outbreak in a neonatal ICU in Mainz

November 2011:
Outbreak in a neonatal ICU in Bremen

August 2011
A new infection prevention act

Bundesrat Drucksache **361/11**

17.06.11

G

Gesetzesbeschluss
des Deutschen Bundestages

Gesetz zur Änderung des Infektionsschutzgesetzes und weiterer Gesetze

Der Deutsche Bundestag hat in seiner 114. Sitzung am 9. Juni 2011 aufgrund der Beschlussempfehlung und des Berichts des Ausschusses für Gesundheit – Drucksache 17/6141 – den von den Fraktionen der CDU/CSU und FDP eingebrachten

Pilot study 1994/95

Development of modified surveillance definitions

BSI (laboratory confirmed)

Patient has a recognized pathogen other than CNS cultured from blood or cerebrospinal fluid and organism is not related to an infection at another site

AND TWO of the following symptoms:

- Fever (> 38 °C) or temperature instability or hypothermia (< 36.5 °C)
- tachycardia (> 200/min) or new/increasing number of bradycardias (< 80/min)
- recapillarisation time > 2 s
- new or increasing number of apnoeas (> 20 s)

- metabolic acidosis (BE < -10 mval/l)
- new hyperglycemia (>140mg/dl)
- other sign of BSI (skin color (only if recapillarisation time not used), labory signs (CRP, Interleukin), increasing need for oxygen (intubation), instable overall situation, apathy)

Pneumonia Definition

ONE radiologic finding

- New or growing infiltrate
- Consolidation
- Pleural effusion

AND respiratory complaints

AND four of the following

- new/increasing number of bradycardias (< 80/min) or new/increasing tachycardia (> 200/min)
- new/increasing tachypnoea (>60/min) or new/increasing number of apneas (> 20 s)
- purulent sputum
- pathogen detected in sputum

- new/increasing dyspnoea
- Temperature instability / fever / hypothermia
- increasing respiratory secretions
- CRP > 2,0 mg/dl
- I/T - ratio > 0,2

NEC Definition

ONE of the following radiologic signs

- pneumoperitoneum
- pneumatosis intestinalis
- Unchanging “rigid” loops of small bowel

AND TWO of the following (without other recognized cause)

- vomiting
- prefeeding residuals
- abdominal distension

- abdominal redness
- persistent microscopic or macroscopic blood in stools

New definitions for neonatal ICU patients?

Ventilator associated pneumonia

		Berlin criteria yes	Berlin criteria no	TOTAL
CDC criteria	yes	2	0	2
CDC criteria	no	1	86	87
TOTAL		3	86	89

K = 0.79 (CI95 0.40-1.19) agreement according to Landis and Koch: „good“

CVC associated BSI

Berlin criteria yes	Berlin criteria no	TOTAL
7	0	7
1	35	36
8	35	43

K = 0.92 (CI95 0.76 -1.08) agreement according to Landis and Koch: „excellent“

Gastmeier et al. J Hosp Infect 1998; 38: 51-60

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Conclusion

- Our neonatologists did not accept CDC criteria for neonates
- Our criteria appeared to be more objective for neonates.
- It is possible to apply specified criteria for pneumonia and BSI without loosing the possibility for comparison with NNIS data.

Journal of Hospital Infection (2004) 57, 126-131

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Development of a surveillance system for nosocomial infections: the component for neonatal intensive care units in Germany

P. Gastmeier[a,*], C. Geffers[b], F. Schwab[b], J. Fitzner[b], M. Obladen[c], H. Rüden[b]

NHSN data for neonatal ICUs

Table 7. Pooled means and key percentiles of the distribution of central line–associated BSI rates and central line utilization ratios for level III NICUs, DA module, 2006 through 2008

Central line-associated BSI rate*

Birth-weight category	No. of locations†	No. of CLABSI	Central line-days	Pooled mean	Percentile				
					10%	25%	50% (median)	75%	90%
≤750 g	142 (124)	481	122,272	3.9	0.0	0.0	3.2	5.3	8.0
751-1000 g	153 (133)	373	111,293	3.4	0.0	0.0	2.5	4.8	7.5
1001-1500 g	154 (136)	276	112,926	2.4	0.0	0.0	1.4	3.5	6.0
1501-2500 g	152 (117)	216	90,384	2.4	0.0	0.0	0.7	3.5	4.8
>2500 g	145 (106)	157	82,677	1.9	0.0	0.0	0.0	2.6	6.1

Central line utilization ratio‡

Birth-weight category	No. of locations†	Central line-days	Patient-days	Pooled mean	Percentile				
					10%	25%	50% (median)	75%	90%
≤750 g	142 (139)	122,272	345,082	0.35	0.19	0.28	0.35	0.46	0.56
751-1000 g	153 (145)	111,293	348,976	0.32	0.16	0.25	0.30	0.41	0.55
1001-1500 g	154 (151)	112,926	472,563	0.24	0.10	0.15	0.22	0.33	0.50
1501-2500 g	152 (148)	90,384	547,895	0.16	0.04	0.07	0.12	0.21	0.37
>2500 g	145 (140)	82,677	420,114	0.20	0.04	0.07	0.13	0.21	0.35

Edwards et al. AJIC 2009; 37:783-05

NNIS/NHSN versus NEO-KISS

	NNIS/NHSN	**NEO-KISS**
Definitions	CDC definitions (children < 1 year)	Modified CDC definitions (for neonates only)
Endpoints	CVC-BSI VAP	CVC-BSI, PVC-BSI Tube-associated pneumonia, CPAP-associated pneumonia NEC
Collection of device days	Unit-based (summarized for the unit)	Patient based (for each individual patient)
Birth weight groups	< 750g; 751-1000g 1001-1500g 1501-2500g; >2500g	< 500g 500-999g 1000-1499g
Data entry/ analysis	webbased	webbased

Included neonates per department 2006-10

	Mean	25th percentile	Median	75th percentile
Number of patients	32	17	27	44

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Journal of Hospital Infection (2008) 68, 214–221

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NEO KISS

Incidence of healthcare-associated infections in high-risk neonates: results from the German surveillance system for very-low-birthweight infants

C. Geffers [a,b,*], S. Baerwolff [a,b], F. Schwab [a,b], P. Gastmeier [b,c]

[a] *National Reference Center for Surveillance of Nosocomial Infections, Germany*
[b] *Institute for Hygiene and Environmental Medicine, Charité-University Medicine Berlin, Berlin, Germany*
[c] *Institute of Medical Microbiology and Hospital Epidemiology, Medical School Hanover, Hanover, Germany*

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- PRÄVALENZERHEBUNG
- PROHIBIT WP3-Studie
- webKess

12. Einführungskurs in die Methodik der Infektionssurveillance im Modul NEO-KISS (NEO-KISS-Einführungskurs) für Neuteilnehmer/Refresher

am 25.09.2012 (Di) in Berlin.

Nähere Informationen finden Sie hier.

Krankenhaus-Infektions-Surveillance-System (KISS) - 16. Erfahrungsaustausch 2012 in Berlin

17.09.2012 (Mo) bis 18.09.2012 (Di) – **Langversion**

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KISS
Participation
CDC Definitions
AMBU-KISS
CDAD-KISS
DEVICE-KISS
HAND-KISS
ITS-KISS
MRSA-KISS
NEO-KISS
ONKO-KISS
OP-KISS
Import
SARI

Project description

It has been known for over twenty years that the continuous, systematic collection, analysis and interpretation of data relevant to nosocomial infections and that feedback for doctors and nurses can reduce the frequency of these infections. This kind of internal quality assurance is known as surveillance. Data from one hospital are more valid and more effective when they are compared with those from other hospitals. The frequency of infection at one station or department can only be determined in context with data from other stations and departments. In order to avoid false conclusions, comparisons are only possible when identical methods of data collection with fixed diagnostic definitions are used. Because different stations and departments gauge risks differently and differ in patient composition, these differences are compensated for by a standardisation and stratification process in data calculation and analysis.

In 1996, the NRZ developed a method to enable hospital wards and departments to complete surveillance with a single method that would take the most important influences and risk factors into account and

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NRZ | SURVEILLANCE | SUPPORT | DOWNLOAD | LINKS | KONTAKT

- KISS
  - Participation
  - CDC Definitions
  - AMBU-KISS
  - CDAD-KISS
  - DEVICE-KISS
  - HAND-KISS
  - ITS-KISS
  - MRSA-KISS
  - NEO-KISS
  - IMPORT
  - ONKO-KISS
  - OP-KISS
  - Import
- SARI

NEO-KISS (Nosocomial infection surveillance system for preterm infants on neonatology departments and ICUs)

Infection is one of the most important reasons for neonatal morbidity and mortality worldwide. Progress in neonatal intensive care has made it possible to decrease mortality among preterm infants with very low birth weights, but these preterm infants are at especially high risk for developing nosocomial infections. Surveillance has proven itself to be an effective method for reducing the frequency of nosocomial infections. An important part of the surveillance system is the comparison of infection rates. Nationwide reference data are necessary for comparing infection rates and for evaluating the efficiency of preventative measures. The goal of the project is to make nationwide reference data about the frequency of nosocomial infections among preterm infants more available. A pilot project was started in May 1999. Data collection on a patient-by-patient basis has been underway since January 2000. All children with a birthweight (BW) of less than 1500 g are included until their hospital discharge, death or weight of over 1800 g. Specially developed definitions are

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Protocol

Protocol as of February 2010

Data Collection Forms

Patient Surveillance Master Data Form

Patient Progress Chart

Data Collection Form Pneumonia

Data Collection Form NEC

Data Collection Form BSI

Reference Data

NEO-KISS Reference Data, 2009

KISS Hospital Infection Surveillance System
NEO-KISS Component
Calculation period: January 2005 to December 2009

Reference data for neonatology departments

Birthweight class	**500 to 999**
Total departments	198
Total patients	9,226
Total patient days	454,978
Average length of surveillance (days):	49.31

Table 1: Device usage rate[1]

Device	Total device days	Pooled average	25% quantile	Median	75% quantile
Vascular catheter	241,909	53.17	45.22	52.20	60.86
- **CVC**	138,303	30.40	19.08	29.84	39.47
- **PVC**	103,606	22.77	15.28	21.62	29.23
Mech. Ventilation	264,101	58.05	42.57	54.79	62.92
- **Intubation**	97,856	21.51	13.17	20.65	27.38
- **CPAP**	166,245	36.54	20.17	31.03	39.66
Antibiotics	157,945	34.17	25.70	33.30	42.34

Table 2: Incidence density[2]

Type of infection	Total infections	Pooled average	25% quantile	Median	75% quantile
Severe HAI[3]	3,151	6.93	2.76	5.99	9.01
- **Pneumonia**	416	0.91	0.00	0.41	1.31
- **BSI**	2,735	6.01	1.82	4.69	7.83
NEC	510	1.12	0.00	0.68	1.44

KISS Hospital Infection Surveillance System
NEO-KISS Component
Calculation period: January 2005 to December 2009

Reference data for neonatology departments

Table 3: Device-associated infection rates[4]

Dev.-assoc. infection	Total dev.-assoc. infections	Pooled average	25% quantile	Median	75% quantile
Vascular catheter-assoc. BSI	2,258	9.33	1.71	6.77	11.51
- CVC-assoc. BSI	1.367	9.88	0.00	6.96	12.52
- PVC-assoc. BSI	891	8.60	0.00	3.87	10.95
Mech. Ventilation-assoc. pneumonia	376	1.42	0.00	0.37	2.10
- Intubation-assoc. pneumonia	236	2.41	0.00	0.00	3.26
- CPAP-assoc. pneumonia	140	0.84	0.00	0.00	0.67

Other activities in Europe

- Belgium: Dr. D. Haumont, Brussels
- Italy: Prof. Antonella Agoni, University Catania
- Poland: Prof. Piotr B. Heczko, Krakow
- Spain: Prof. Adolf Valls i Soler, Bilbao

(Using the NEO-KISS method or similar methods)

BSI data collection form – NEO-KISS

webKessID | Patient ID: | Patient name:

Vascular catheter association: ○ CVC ○ PVC ○ No catheter

Infection start date:

Pathogen 1:

Pathogen 2:

Pathogen 3:

Two of the following clinical signs and symptoms:

- Fever (> 38 °C) or unstable temperature or hypothermia (< 36.5 °C) ○ no ○ yes
- Tachycardia (> 200/min) or new/increased bradycardia (< 80/min) ○ no ○ yes
- Recapillarisation time > 2 s ○ no ○ yes
- new or increased apnea (> 20 s) ○ no ○ yes
- unexplained metabolic acidosis (BE < -10 mEq/l) ○ no ○ yes
- new hyperglycemia (> 140 mg/dl) ○ no ○ yes
- Other signs of BSI: (skin color, increased oxygen requirement (intubation), unstable condition, apathy)

As well as fullfillment of criteria for clinical sepsis, or laboratory-confirmed BSI with or without CNS

Criteria for clinical sepsis (all of the following)

- Treating physician begins appropriate antimicrobial therapy for sepsis for at least 5 days ○ no ○ yes
- No pathogens detected in blood cultures or not tested ○ no ○ yes
- No apparent infection at another site ○ no ○ yes

Criteria for laboratory-confirmed BSI

- Non-CNS pathogen isolated in blood culture or cerebrospinal fluid (pathogen *not* related to infection at another site) ○ no ○ yes

Criteria for laboratory-confirmed BSI with CNS as sole pathogen

- CNS isolated in blood culture or intravascular catheter as sole pathogen ○ no ○ yes

and one of the following criteria:

- CRP > 2.0 mg/dl / high interleukin ○ no ○ yes
- Neutrophil I/T ratio > 0.2 ○ no ○ yes
- Leukocytopenia < 5/nl ○ no ○ yes
- Thrombocytopenia < 100/nl ○ no ○ yes

Patient progress chart - NEO-KISS

webKessID: Patient ID: Patient name

Month: Chart No.:

Day:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	∑
Patient was on unit:																																
CVC:																																
CVC:																																
Intubation:																																
CPAP:																																
Anti-biotics:																																

Add up the figures at the end of the month. When surveillance ends (weight ≥ 1800g, transfer or discharge, or death), add together all monthly totals and put the total on the patient surveillance master data form.

Comments:

Overview | Patients | Administration | Analysis

Patient list (ZZZ / NEO1)

Search

Details

#	webKessId	Birth location	Birthweight	Gestational age	Sex	Multiple birth?	End of surveillance	Infection type
1	2	Transfer to own Hospital >= 24h postnatal	1163g	28+1	m	No	19/07/2009	
2	1	Transfer to own Hospital >= 24h postnatal	720g	29+4	m	No	24/07/2009	
3	3	Transfer to own Hospital < 24h postnatal	1250g	31+2	f	No	31/10/2009	
4	4	Transfer to own Hospital >= 24h postnatal	1490g	32+1	m	No	01/12/2009	
5	5	Transfer to own Hospital < 24h postnatal	1132g	29+4	f	No	18/12/2009	
6	6	Transfer to own Hospital < 24h postnatal	720g	25+1	f	n/s	04/01/2010	
7	7	Born in own Hospital	1200g	27+4	m	No	30/01/2010	
8	8	Born in own Hospital	1137g	29+4	f	No	09/03/2010	
9	9	Transfer to own Hospital < 24h postnatal	1310g	30+6	f	No	08/04/2010	
10	12	Born in own Hospital	1490g	30+3	m	Yes : 2	22/06/2010	
11	10	Transfer to own Hospital < 24h postnatal	1146g	28+0	m	No	23/06/2010	
12	13	Born in own Hospital	1380g	30+3	m	Yes : 2	24/06/2010	
13	16	Born in own Hospital	1110g	32+0	m	No	16/07/2010	Sepsis
14	14	Born in own Hospital	1370g	29+4	m	No	27/07/2010	Sepsis
15	15	Born in own Hospital	1110g	30+1	f	No	18/08/2010	
16	17	Born in own Hospital	1455g	33+1	f	No	11/09/2010	
17	20	Born in own Hospital	966g	28+1	f	No	26/09/2010	
18	18	Born in own Hospital	1490g	29+6	m	No	11/10/2010	
19	19	Transfer to own Hospital < 24h postnatal	1445g	32+2	f	Yes : 2	09/11/2010	
20	22	Transfer to own Hospital >= 24h postnatal	926g	28+4	m	No	05/12/2010	

<< < > >> total: 21 entries

New patient

Overview | Patients | Administration | Analysis

Add new patient

The fields marked with an '*' are obligatory.

Patient

Place of birth	*	Born in own Hospital
Birthweight (g)	*	
Gestational age (ww+d)		
Sex	*	f / m / Not selected
Multiple births		Yes / No / Not selected
Type of delivery	*	Caesarean section
CRIB-Score		
Comments (not evaluated by NRZ)		

Enter discharge information

End of surveillance (dd.mm.yyyy)	*	17/11/2011
Reason	*	achieved 1800g
Patient days	*	
CVC days	*	
PVC days	*	
Intubation days	*	
CPAP days	*	
Antibiotics days	*	

Save

New patient Patient list

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New infection/edit infection

Patient:

webKessId:	3	Sex:	w
Place of birth:	Born in own hospital	Multiple births:	No
Birthweight:	1250 g	Type of delivery:	Caesarean section
Gestational age:	31+2	CRIB:	1
Comments:			

Date of infection (dd.mm.yyyy)

Type of infection (•) Sepsis ( ) Pneumonia ( ) NEC ( ) Not selected

Pathogen 1 ESBL_KLE - Klebsiella pneumoniae (ESBL-producing)

Clinical sepsis:

Device association * ( ) No Device ( ) PVC ( ) CVC (•) Not selected

All of the following criteria

Treating physician begins appropriate antimicrobial therapy for sepsis for at least 5 days	(•) Yes ( ) No ( ) Not selected
No apparent infection at another site	(•) Yes ( ) No ( ) Not selected

AND
two of the following (without other recognized cause):

Fever (> 38°C), temperature instability or hypothermia (< 36.5°C)	(•) Yes ( ) No ( ) Not selected
Tachycardia (> 200/min) or new or increased bradycardia (> 80/min)	( ) Yes (•) No ( ) Not selected
Recapillarisation time > 2s	( ) Yes (•) No ( ) Not selected
new or increased apnea (> 20s)	(•) Yes ( ) No ( ) Not selected
unexplained metabolic acidosis (BE < -10 mEq/l)	( ) Yes (•) No ( ) Not selected
new hyperglycemia (> 140 mg/dl)	( ) Yes (•) No ( ) Not selected
Other signs of BSI	( ) Yes (•) No ( ) Not selected

Comments (not evaluated by NRZ)

Save infection

New patient Patient list

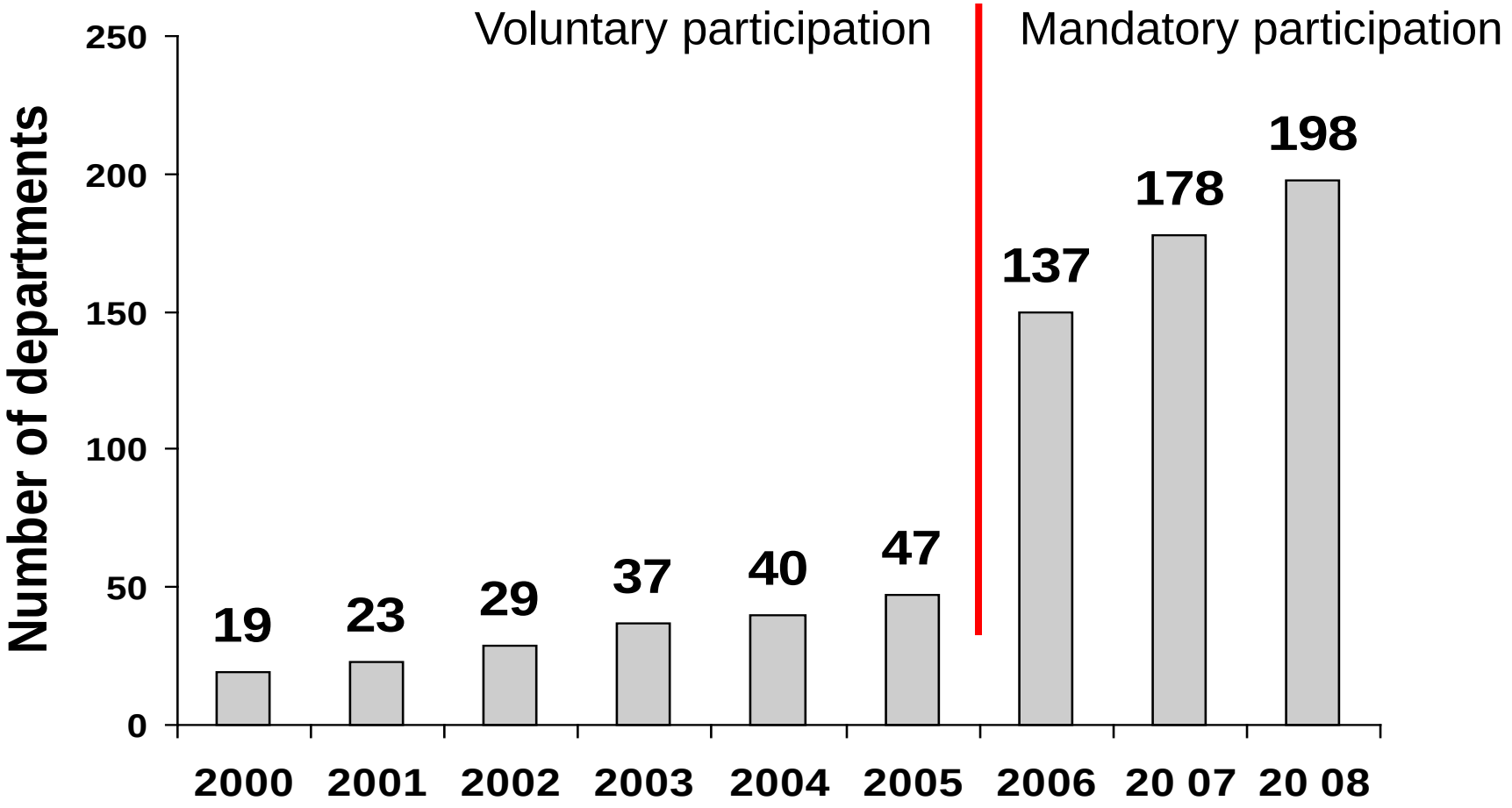
KISS
Krankenhaus-
Infektions-
Surveillance-
System

Voluntary participation + confidental outcome

One exception:

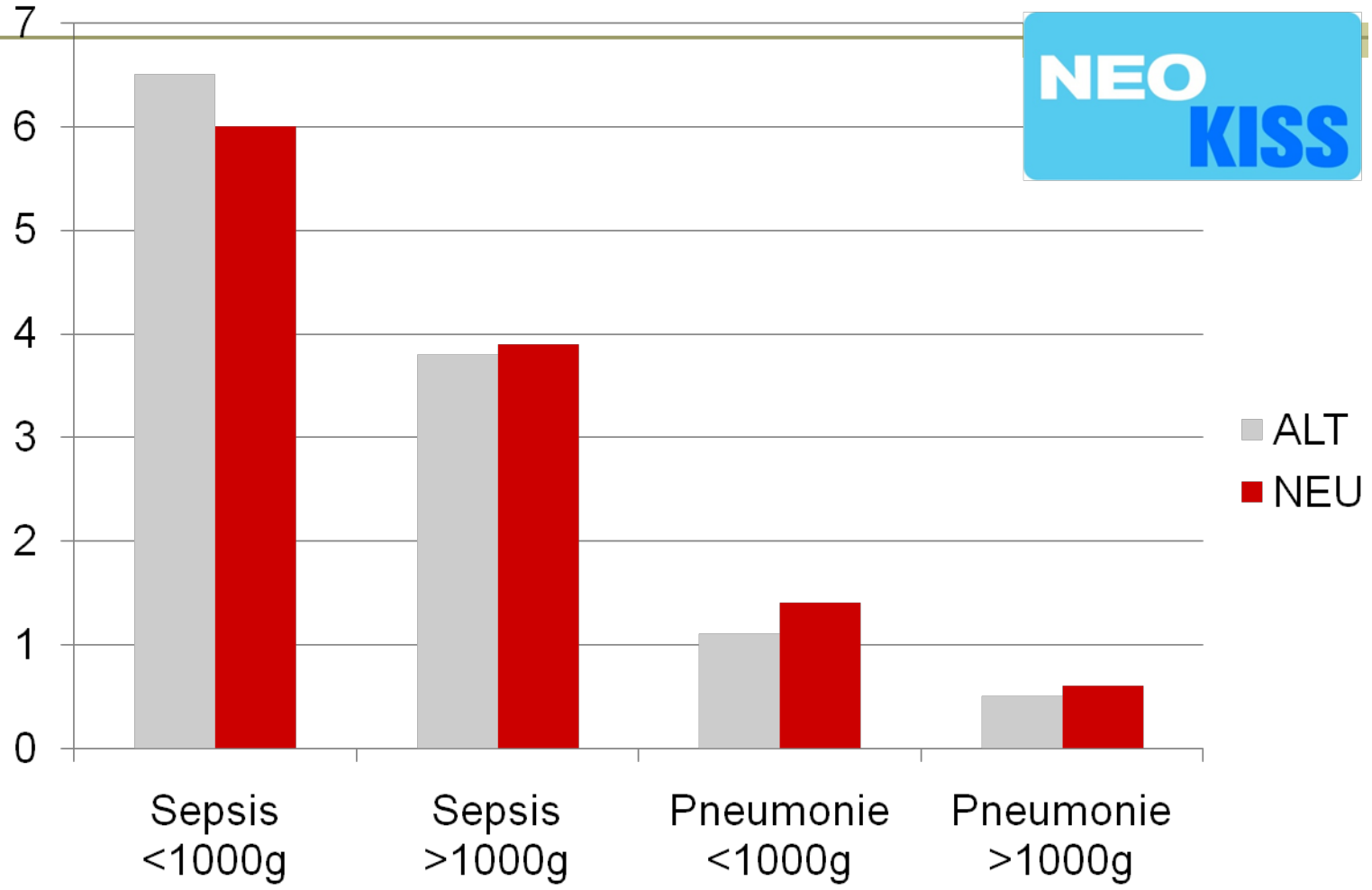
Mandatory participation
+ confidental outcome

Development of participation



Old vs. new participants

nosocomial infections per 1000 patient days



Geffers C et al. Z Geburtsh Neonatol 2008; 212: 170-75

Journal of Hospital Infection (2007) 65, 319–325

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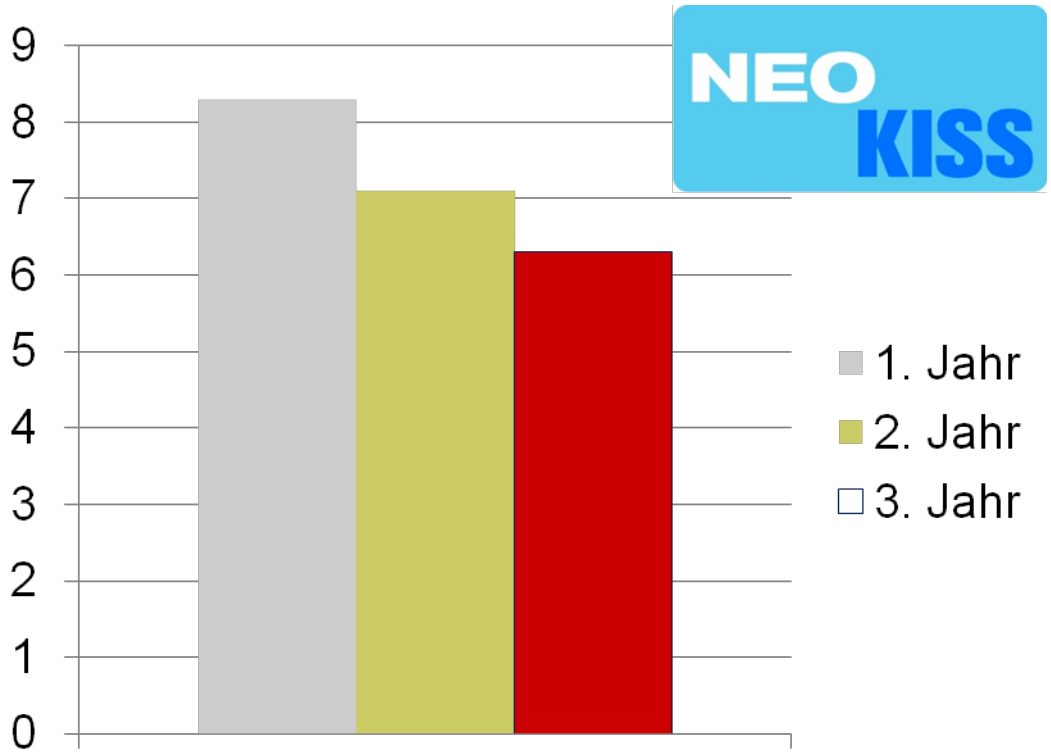
Reducing neonatal nosocomial bloodstream infections through participation in a national surveillance system

F. Schwab [a,*], C. Geffers [a], S. Bärwolff [a], H. Rüden [a], P. Gastmeier [b]

[a] *Institute of Hygiene and Environmental Medicine, Charité – University Medicine in Berlin, Germany*
[b] *Institute of Medical Microbiology and Hospital Epidemiology, Hannover Medical School, Hannover, Germany*

Infection rates according to the year of participation (old participants)



48 neonatal ICUs
January 2000
to June 2005

1st vs. 3rd year of participation

Multivariable logistic regression analysis:
OR=0.73;
CI95 0.60-0.89

→ 27% Reduction

Schwab F et al. J Hosp Infect 2007

Use of benchmarking and public reporting for infection control in four high-income countries

Thomas Haustein, Petra Gastmeier, Alison Holmes, Jean-Christophe Lucet, Richard P Shannon, Didier Pittet, Stephan Harbarth

Benchmarking of surveillance data for health-care-associated infection (HCAI) has been used for more than three decades to inform prevention strategies and improve patients' safety. In recent years, public reporting of HCAI indicators has been mandated in several countries because of an increasing demand for transparency, although many methodological issues surrounding benchmarking remain unresolved and are highly debated. In this Review, we describe developments in benchmarking and public reporting of HCAI indicators in England, France, Germany, and the USA. Although benchmarking networks in these countries are derived from a common model and use similar methods, approaches to public reporting have been more diverse. The USA and England have predominantly focused on reporting of infection rates, whereas France has put emphasis on process and structure indicators. In Germany, HCAI indicators of individual institutions are treated confidentially and are not disseminated publicly. Although evidence for a direct effect of public reporting of indicators alone on incidence of HCAIs is weak at present, it has been associated with substantial organisational change. An opportunity now exists to learn from the different strategies that have been adopted.

Lancet Infect Dis 2011; 11: 471–81

Infection Control Programme, Geneva University Hospitals and Faculty of Medicine, Geneva, Switzerland (T Haustein MD, Prof D Pittet MD, Prof S Harbarth MD); WHO Collaborating Centre on Patient Safety, Geneva, Switzerland (Prof D Pittet); Institute of Hygiene and Environmental Medicine, Charité University Medicine,

Haustein et al. Lancet Infect Dis 2011; 11:471-81

Use of benchmarking and public reporting for infection control in four high-income countries

Thomas Haustein, Petra Gastmeier, Alison Holmes, Jean-Christophe Lucet, Richard P Shannon, Didier Pittet, Stephan Harbarth

Lancet Infect Dis 2011; 11: 471–81

Benchmarking of surveillance data for health-care-associated infection (HCAI) has been used for more than three decades to inform prevention strategies and improve patients' safety. In recent years, public reporting of HCAI

Evidence for a direct effect of public reporting of HCAI indicators on incidence of such infections is weak at present, but public reporting has been associated with relevant organisational change and a strengthening of infection control.

Introduction of new public reporting schemes has to be discussed in the context of the prevailing social and political context.

Monitoring of unintended outcomes of public reporting is needed.


OP KISS
NEO KISS
ONKO KISS
ITS KISS
SARI
DEVICE KISS
HAND KISS
MRSA KISS
AMBU KISS
CDAD KISS
KISS
Krankenhaus-
Infektions-
Surveillance-
System
www.nrz-hygiene.de

Aktive participants June 2011

Modul	Departments/ Units	Hospitals
ITS-KISS	610	546
OP-KISS	616	495
DEVICE-KISS	126	81
NEO-KISS	209	209
ONKO-KISS	36	33
MRSA-KISS		277
CDAD-KISS		96
HAND-KISS	7794	588
Total		986*

KISS
Krankenhaus-Infektions-Surveillance-System

* Total number of acute care hospitals in Germany 2008: 1780

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German National Hand Hygiene Campaign

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Indicator:
Alcoholic hand rub consumption (AHC)

$$\text{AHC (in ml)} \over \text{1000 patient days}$$

HAND KISS

Results of alcoholic hand rub consumption (AHC) 2010

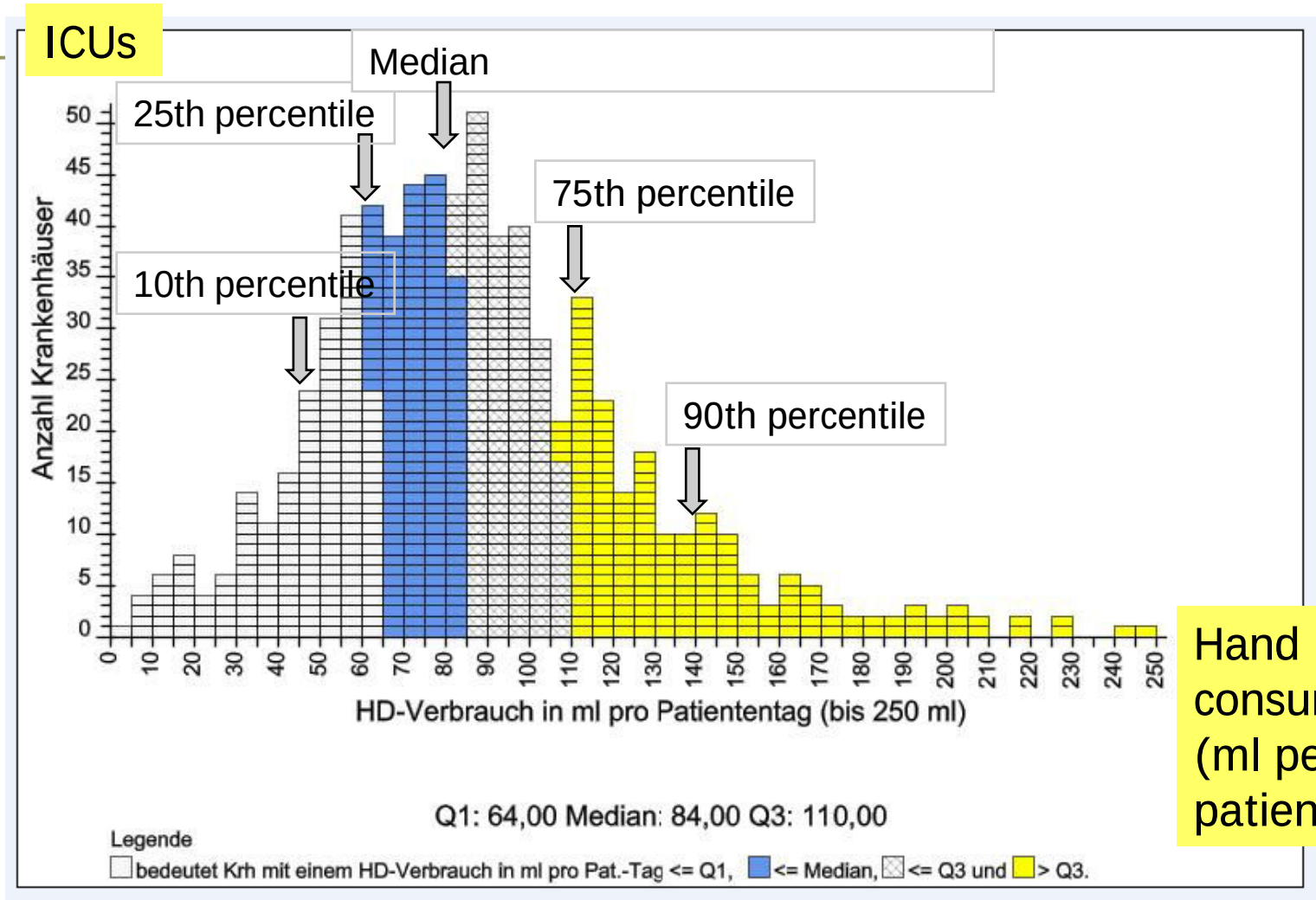
Data from 740 ICUs in 421 hospitals
Mean 91 ml / patient day
(about 30 hand rub procedures per patient day)

Data from 4638 non ICUs in 468 hospitals
Mean 21 ml/ patient day
(about 7 hand rub procedures per patient day)

HAND KISS

CHARITÉ

Distribution of ICUs according to alcoholic hand rub consumption (AHC) (ml per patient day) 2010



Hand rub consumption (ml per patient day)

CHARITÉ

Results- AHC in 740 ICUs in 2010

AHC (ml) per patient day

Speciality	No of ICUs	P10	P25	Median	P75	P90
Medical	114	46	59	81	108	131
Surgical	95	55	74	100	119	144
Neonatal	70	36	59	84	124	191
….						
Total	**740**	**46**	**64**	**84**	**110**	**140**

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HAND KISS

CHARITÉ

Results- AHC in 4638 non ICUs in 2010

AHC (ml) per patient day

Speciality	No of hospitals	No of units	P10	P25	Median	P75	P90
Medical	372	1272	12	15	20	27	35
Surgical	352	935	11	15	20	25	32
Neonatal	121	249	18	27	37	55	75
….							
Total	**468**	**4638**	**10**	**14**	**19**	**27**	**38**

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HAND KISS

CHARITÉ

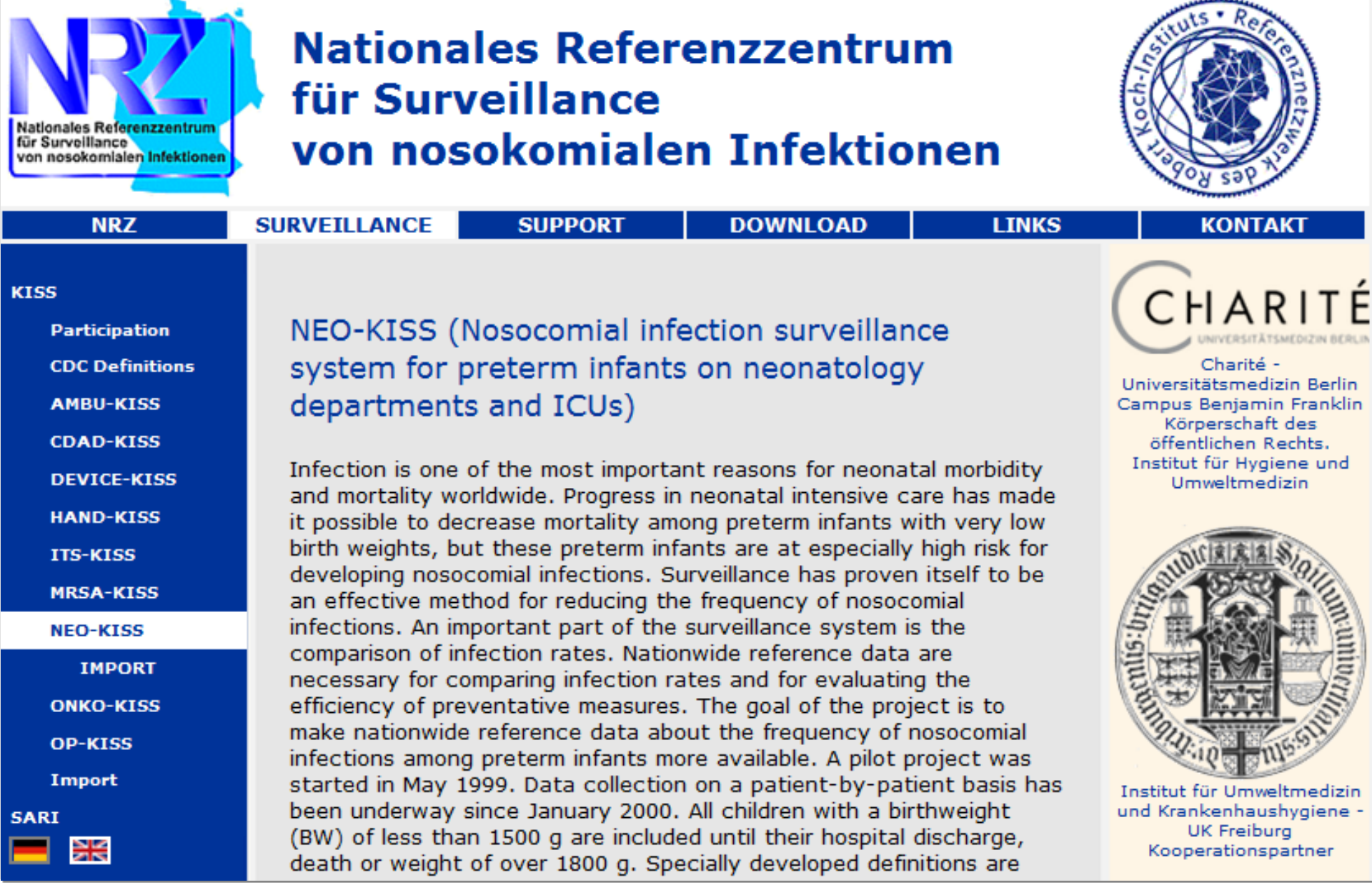
Increase of AHC per patient day compared to baseline year 2007

(only 152 hospitals participating for the whole period from 2007 to 2010 were included)

	AHC (ml) per patient day		
Type of units	**Median 2007**	**Median 2010**	**Increase compared to 2007**
ICUs	66	89	41 %
Non ICUs	15	21	28 %
Total	**18**	**25**	**36 %**

CHARITÉ

HAND KISS



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