

PROHIBIT WP2 – Systematic review of national guidelines in European countries

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Introduction

The European Commission (FP-7) funded project “Prevention of Hospital Infections by Intervention and Training” (PROHIBIT, www.prohibit.unige.ch) was established in 2010. PROHIBIT aims to analyse existing guidelines and practices to prevent healthcare associated infections (HAI) in Europe, to identify factors that influence compliance with best practices and to test the effectiveness of interventions with known efficacy.

The aim of workpackage 2 (WP2) was to provide a systematic review of current, national guidelines on HAI prevention and an overview of HAI surveillance and public reporting practices in European countries. The focus was set on surgical site infection (SSI), ventilator-associated pneumonia (VAP), catheter-associated urinary tract infection (CAUTI), catheter-associated bloodstream infection (CA-BSI) and *C. difficile* associated infection (CDI).

Methods

In August 2010, 34 HAI surveillance National Contact Points (NCP) of the European Centre for Disease Prevention and Control (ECDC) and other experts were invited to complete an online questionnaire about (i) existing national and subnational guidelines for prevention of SSI, VAP, CAUTI, CA-BSI and CDI, (ii) national HAI surveillance systems and (iii) public reporting policies. For the systematic review of guidelines these 34 NCPs (27 EU member states; whereby UK counts as 4 countries: England, Northern Ireland, Scotland, Wales; Croatia, Iceland, Norway and Switzerland) were asked to provide their guidelines in print or the websites where guidelines may be found. If data from the questionnaire were inconsistent compared to the information found on the websites NCPs were contacted personally and results were adapted where necessary.

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Conclusions

Most of the European countries have at least one national guideline concerning the five topics of interest in PROHIBIT WP2. Definition of evidence categories and strength of recommendation vary widely and evidence-based guidelines are still to be developed in many European countries. In a majority of countries finding the currently valid guidelines may be difficult for users.

Results

The following results have been updated compared to the data in the abstract.

34 of 34 NCPs (100%) completed the questionnaire. One country withdrew data at a later date.

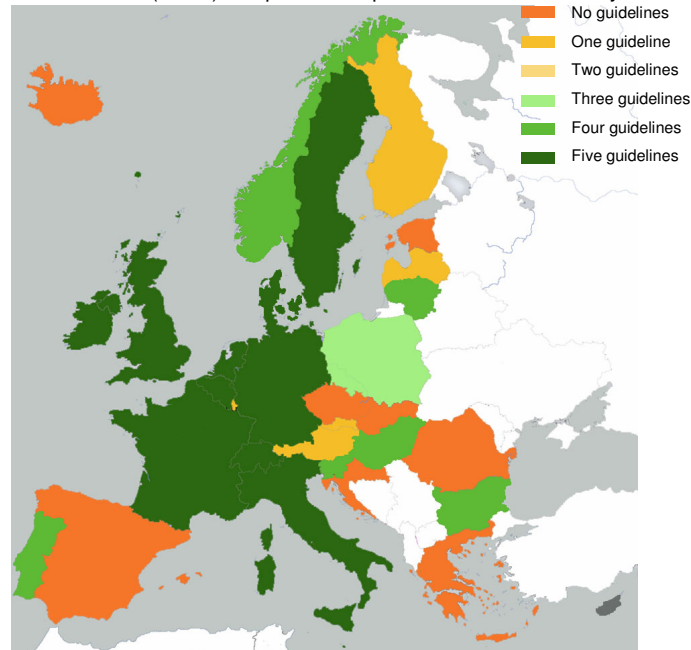


Figure 1: National and subnational guidelines in Europe; subnational (regional) guidelines exist in Italy and Norway, Malta uses the US-CDC guidelines.

National and subnational guidelines: 8 countries reported to have no national guidelines, 4 countries reported to have a national guideline on one topic, 1 to have 3 and 6 countries to have 4 guidelines. 14 countries reported to have guidelines on all 5 topics (Figure 1). Countries with just one guideline/topic have a guideline for the prevention and control of CDI.

Guidelines for CA-BSI, SSI and VAP are available in 21, CAUTI in 20 and CDI in 18 countries. Most CA-BSI guidelines were developed or revised between 2000 and 2010. However, scientific level of supporting evidence and strength of recommendation are rated in just 43% (9/21). The intercountry differences in definition of evidence level is shown in Table 1.

Locating the current valid guidelines was for some countries only possible in direct contact with the NCP. Language problems, guidelines not freely available in the www or unclear structured websites were some of the difficulties encountered (Figure 2).

	Bulgaria			CDC (Malta; Norway, Portugal)					England (EPIC 2)				Germany				Hungary			Sweden			Slovenia	Missing data				
	IA	IB	MoH	II	III	IA	IB	IC	II	UI	A	B	C	D	D(GPP)	IA	IB	II	III	IV	A	B	C		I	II	III	
Meta-analyses or systematic reviews of RCT											X																	
Well designed studies	X					X					X					X						X						
Suggestive studies		X				X	X									X	X						X	X				
Case-control and cohort studies											X																	
theoretical rationale						X	X									X						X				X		
Expert consensus		X										X	X			X						X	X					
Legal regulations			X				X											X										
Unresolved question									X								X											

Table 1: Level of supporting evidence used for recommendations for prevention of CA-BSI in the nine European guidelines (adapted from B. Cookson et al., JHI 2009)
MoH = Ministry of health; UI = Unresolved Issue; GPP = good practice point;

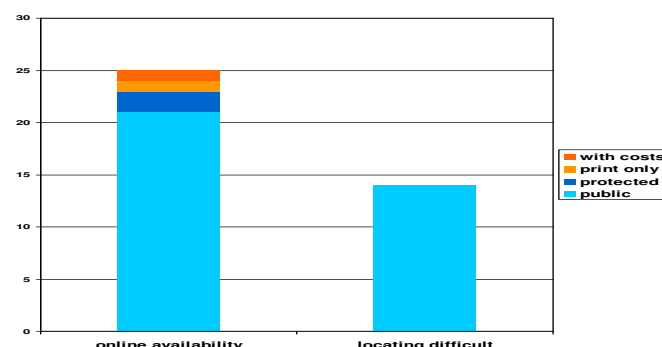


Figure 2: Accessibility of national guidelines; column 1 shows the answers in the questionnaire to online availability of guidelines, column 2 number of countries where location was only possible after consultation of NCP

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