

Online Supplementary Document

Balsells et al. Infection prevention and control of *Clostridium difficile*: a global review of guidelines, strategies, and recommendations

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Table S1. Summary of ranking systems used for grading evidence in CDI-IPC guidelines

Quality of Evidence							
Guideline	Ranking system	High	Medium	Low or Expert opinion			Legal requirement
ECDC 2008 Austria 2007 Italy 2009	Oxford Centre for Evidence-Based Medicine	1a: SR (homogeneity) of RCTs 1b: Individual RCT (narrow CI) 1c: Studies outcome 'All/none'	2a: SR (homogeneity) of cohort 2b: Individual cohort study (including low-quality RCTs) 2c: 'Outcomes' research; ecological studies	3a: SR (homogeneity) of case-control studies 3b: Individual case-control study	4: Case series (and poor quality cohort and case-control studies)	5: Based on Expert opinion without explicit critical appraisal, physiology, bench research, 'first principle'	
Ireland 2014	Consensus grade	A: Meta-analysis/SR of RCTs or from at least one RCT	B: One controlled trial without randomisation (e.g. cohort study), a quasi-experimental study, or extrapolated from RCT	C: Comparative, correlation, case control studies or, extrapolated from A or B.			D: Expert committees, reports or opinions, the clinical experience of respected authorities, and the conclusions of the Development Group Legal requirement
SHEA/IDSA 2014 AJG 2013	GRADE	I: High - further research is unlikely to change confidence in current estimate of effect * Several studies with no major limitations and little variation * CI summary estimate: narrow	II: Moderate - further research is likely to have an important impact * Few studies and some have limitations but not major flaws, some variation in-between * CI summary estimate: wide	III: Low - further research very likely to change the estimate * Studies have major flaws and important variation in-between studies. * CI summary estimate: very wide, or there are no rigorous studies, only expert consensus			
SHEA/IDSA 2002 (LTCF)	*	I: Good evidence	II Moderate evidence	III: Poor evidence			
Strength of Recommendation							
Guideline	Ranking system	Strongly recommended	Strongly recommended	Recommended	Suggested/To be considered	Unresolved	Legal requirement
ECDC 2008 Austria 2007 Italy 2009 Hungary 2011 Scotland 2014	Healthcare Infection Control Practices Advisory Committee	IA: Well-designed experimental, clinical, or epidemiological studies	IB: Some experimental, clinical or epidemiological studies and a strong theoretical rationale		II: Suggestive clinical or epidemiological studies or theoretical rationale	Practices for which insufficient evidence exists or no consensus regarding efficacy exists (no recommendation)	IC: As mandated by federal and/ or state regulation or standard (may vary among different areas)
England 2008	Consensus grade	A: SRs or individuals RCT	B: Non-RCT studies and/or by clinical governance reports and/or the Code		C: group consensus and/or strong theoretical rationale		Legal requirement
SHEA/IDSA 2002 (LTCF)	*	A: Evidence from at least one properly RCT	B: at least one well-designed CT without randomisation (cohort or case-controlled; preferably from more than one center), from multiple time-series studies, or from dramatic results in uncontrolled experiments		C: opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees		
Belgium	Simple grading	Level 1		Level 2	Level 3		
AJG 2013	GRADE	Strong: Evidence shows the benefit of the intervention or treatment clearly outweighs any risk			Conditional: Uncertainty exists about the risk-benefit ratio		

SHEA: The Society for Healthcare Epidemiology of America, IDSA: Infectious Diseases Society of America, AJG: American Journal of Gastroenterology, ECDC: European Centre for Disease Prevention and Control. LTCF: Long term care facilities ASID 2011 includes Quality Assessment of selected key areas as reported in Cohen et al 2010 (Recommendations for Clinical Practice of *C. difficile*) but does not grade their own guidelines, *SHEA/IDSA 2002 uses classification scheme from 1994; SR: systematic reviews, RCT: randomised controlled trials

Table S2. Main characteristics of documents with CDI-IPC guidance included in the review

Country	Year (1st issue)	Healthcare Settings	Guideline type (N/PO)	Systematic Review	Quality of Evidence Scoring	Strength of recommendations	Language	Scope (Updates)
North America								
APIC	2013 [36] (2008)	AC, LTCF	PO	x			English	Dx, IPC, Tx
SHEA/IDSA	2014 [26] (2008)	AC	PO	x	x		English	Dx, IPC
	2002[27]	LTCF	PO		x	x	English	Dx, IPC, Tx
AJG	2013[23]	AC	PO		x	x	English	Dx, IPC outbreaks, Tx
Canada	2013[34]	AC	N				English	Dx, IPC
	2013[35]	LTCF	N				English	Dx, IPC
Europe								
ECDC	2008[29]	Nosocomial CDAD	PO	x	x	x	English	Dx, IPC
Austria	2007[24]	AC, RC	N	x*	x*	x*	German	Dx, IPC, Tx
	2014[38]	NR	N				German	Dx, IPC, Tx Position statement
Belgium*	2008[30]	AC, RC	N			x*	French	Dx, IPC
Bulgaria	2009[53]	HCFs	N				Bulgarian	Dx, IPC
Cyprus	2014[52]	HCFs	N				Greek	Dx, IPC
Denmark*	2011[46]	HCFs	N				Danish	Hygiene IPC
Finland*	2007[39]	Hospitals	PO				Finnish	Hygiene IPC
France	2010[45]	HCFs	N				French	IPC
Germany	2009[54]	AC, NH	PO				German	Dx, IPC
	2012[47]	NH, Rehab, OP-Therapy	PO				German	IPC
Hungary	2011[33]	HCFs	N	x*		x*	Hungarian	Dx, IPC
Ireland	2014[25]	AC, LTCF, GP	N		x		English	Dx, IPC
Italy	2009[28]	HCFs	N/PO	x*	x*	x*	Italian	Dx, IPC
Lithuania	2011[40]	HCFs	PO				Lithuanian	Dx, IPC
Luxembourg	2007[41]	HCFs	N				French	IPC
Macedonia	2014[48]	HCFs	N				Macedonian	IPC
Netherlands	2011 [49] (2006)	Hospitals	N				Dutch	Hygiene
Poland‡	2011[51]		N				Polish	Dx, IPC, Tx
Romania	NY[50]	HCFs	N				Romanian	Dx, IPC, Tx
England and Wales	2008[31] (1994)	AC, CH	N			x	English	Dx (2012), IPC, Tx, (2013)
	2010[37]	CH	N				English	Tx
Northern Ireland	2008[44]	NR	N				English	Dx, IPC
Scotland	2014[32]	AC, CH	N	x*		x*	English	Dx, IPC, Tx
Western Pacific								
ASID & AICA	2011[59]	AC, RCHF	PO				English	Dx, Tx, Rec. prev
	2011[60]		PO				English	Dx, IPC Position statement
Hong Kong	2014[56]	HCF, RCHE	N				English	Dx, IPC
Japan	2008[55]	NR	N				Japanese	Dx, Tx, IPC
New Zealand	2013[58]	HCF, AR-RC	N				English	Dx, IPC
Singapore	2013[57]	AC, ILTC	N				English	Dx, IPC
South East Asia								
Thailand	2009[64]	NR	PO				Thai	Dx, Tx, IPC
Latin America								
Chile	2013, [62]	AC	N				Spanish	IPC
	2012[61]							
Uruguay	2015[63]	HCFs	N				Spanish	Dx, IPC, Tx

Notes: APIC: Association for Professionals in Infection Control and Epidemiology, SHEA: The Society for Healthcare Epidemiology of America, IDSA: Infectious Diseases Society of America, AJG: American Journal of Gastroenterology, ECDC: European Centre for Disease Prevention and Control, ASID: Australasian Society for Infectious Diseases, AICA: Australian Infection Control Association; * Previously reported as based on ECDC guidelines (Martin et al 2014); LTCF: long term care facilities, ILTC: intermediate and long-term care; RC(HE): residential care (homes for elderly); NR: not reported; AR-RC: age-related residential care; N: National agency; PO: Professional organisation; Dx: Diagnosis; Tx, treatment; IPC: Prevention and Infection Control; NY: No year; ‡ Unable to review full text

