

## ORION Checklist of items to include when reviewing an outbreak report (OR) or intervention study (IS) of a nosocomial organism

Topic	Item number	Descriptor	Is item in manuscript?  (page numbers reference clean version)
Title & Abstract	1	Is paper described as an outbreak report (OR) or intervention study (IS)? Is design of IS described? Is Intervention & main outcomes described?	Yes  In title – page 1 In abstract – page 2
Introduction Background	2	Are background and rationale for IS/OR explained? Is organism described as epidemic, endemic?	Yes  In introduction – page 3
Type of paper	3	Is paper described as IS or OR? If OR, is number of outbreaks given?	Yes  In introduction – page 3
Dates	4	Are start & finish dates of IS or OR given?	Yes  In introduction – page 3
Objectives	5	Are objectives stated for OR? Are hypotheses stated for IS?	Yes  In introduction – page 3
Methods Design	6	Is study design described? How? Is study described as retrospective, prospective or ambidirectional? Does it state if decision to report or intervene prompted by any outcome data or not? Is it stated if study formally implemented or not, with predefined protocol & endpoints?	Yes  In methods “study design” – page 3
Participants	7	Is number patients admitted given? Is age & length of stay given? Are eligibility criteria for IS or case definitions for OR given? Is proportion inter/intra-hospital transfers or admissions from care homes given?*	Yes  In methods “case definition” – page 3 In results – page 6
Setting	8	Is unit, ward or hospital (and its units) described? Are number of beds, presence and staffing of infection control team given?	N/A – not a nosocomial outbreak  Setting is described in methods “setting and population” on page 3
Interventions	9	Are phases defined by major change in specific infection control practice (with start & stop dates)? Is a summary table given, with details of interventions, their delivery and timing given?	N/A – not a nosocomial outbreak
Culturing & Typing	10	Are details of culture media, antibiograms and/or typing given?	N/A – not a nosocomial outbreak

		Are details environmental sampling given?*	
Infection-related outcomes	11	<p>Are there clearly defined primary&amp; secondary outcomes?</p> <p>Are they given at regular time intervals ?</p> <p>Are there sufficient time points per phase? (see ORION author's checklist)?</p> <p>Are denominators given (eg admissions, discharges, bed days)?</p> <p>Is all cause mortality given?</p> <p>Is prevalence organism, or incidence of colonisation on admission at same time intervals*?</p> <p>In a short IS or OR is a chart used with duration patient stay &amp; dates detection of organism ? (see author checklist)</p>	N/A – not a nosocomial outbreak
Economic outcomes	12	<p>Is this a formal economic study?</p> <p>If so, are outcomes defined? Are resources (for interventions) described? Are costs in basic units? Are assumptions stated?.</p>	N/A – no economic outcomes included
Potential Threats to internal validity	13	<p>Which potential confounders were considered, recorded or adjusted for?(eg: length of stay, case mix, occupancy, staffing levels, hand-hygiene,, antibiotic use, strain type, processing of isolates, seasonality).</p> <p>Are measures to avoid bias described? (eg blinding; standardisation outcome assessment/provision of care).</p>	N/A – not an analytic study, but potential limitations are described on page 9
Sample size	14	Are power calculations given? (if appropriate)	N/A – not an analytic study