PEER REVIEW HISTORY

BMJ Paediatrics Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	A Protocol for Quality Improvement Program to Reduce Central Line
	Associated Blood Stream Infections in NICU of developing country,
AUTHORS	Hussain, Ali Shabbir; Ariff, Shabina; Ali, Syed; Demas, Simon; Zeb,
	Jehan; Arbab, Saba; Rizvi, Arjumand

VERSION 1 - REVIEW

REVIEWER	Ul Haq, Anwar Aga Khan University Hospital
	Competing interest: none
REVIEW RETURNED	04-Apr-2017

GENERAL COMMENTS	This is a good initiative and quality-improvement project.
	Abstract should be structured according to guidelines of Author's
	Instruction
	Few typo mistakes needs to be corrected like "Clabsi" to "CLABSI"

REVIEWER	Ojha, Shalini University of Nottingham, Academic Child Health
	Competing interest: none
REVIEW RETURNED	11-Apr-2017

GENERAL COMMENTS This is an interesting paper: the authors have presented the protocol of a quality improvement project. CLABSI is an important problem, particularly in the NICUs in the developing world, and the authors should be congratulated for their attempt to introduce evidence based change in practice in such an organised manner. In view of this, sharing of the protocol by publishing should be of interest to other NICUs.	of a quality improvement project. CLABSI is an important problem, particularly in the NICUs in the developing world, and the authors should be congratulated for their attempt to introduce evidence based change in practice in such an organised manner. In view of this, sharing of the protocol by publishing should be of interest to other NICUs. Major revisions: Page 1, Line 6: please provide reference for Pronovost et al. 2006 paper referred here. Page 1, Line 11: do the authors mean CLABSI incidence of 5 per 1000 catheter days or higher as in the sub-group analysis of the quoted paper (Ista et al. 2016)? If so, please make this clear in the
 Page 1, Line 6: please provide reference for Pronovost et al. 2006 paper referred here. Page 1, Line 11: do the authors mean CLABSI incidence of 5 per 1000 catheter days or higher as in the sub-group analysis of the quoted paper (Ista et al. 2016)? If so, please make this clear in the sentence. Page 1, Line 15-16: please provide reference for the sentence Page 4, Line 55: List of data items that will be collected as given in this paragraph may be better as a table. Section on description of CPP (starting Line 20, page 5) Numbers and letter in superscript brackets: please explain what these represent (I assume they are the grade of evidence supporting the recommendation but this needs clarification and 	Page 1, Line 15-16: please provide reference for the sentence Page 4, Line 55: List of data items that will be collected as given in this paragraph may be better as a table. Section on description of CPP (starting Line 20, page 5) - Numbers and letter in superscript brackets: please explain what these represent (I assume they are the grade of evidence

recommendations (even if the evidence is of poor quality, it can be graded) Page 7: Outcomes It would be useful to prespecify the magnitude of changes that the authors expect to see in their chosen outcomes. Even in a quality improvement project, it is good to have predetermined criteria for demonstration of improvements in outcome and/or change in behaviour so that the sucess/failure of the project can be demonstrated.
Minor and typographical comments: Abstract Line 16: HAI – please expand Line 21: PDCA – please expand Lines 25, 26: CLABSI instead of clabsi Line 29: reduction instead of Reduction Line 31: t-test instead of T Test Line 32: McNemar's test instead of Mc nemar test Line 32: unnecessary capitalisation: Categorical Outcomes Line 35: Poisson instead of poison Line 38: MDRO, CRO, ERC – please expand
•
 There are many such minor typographical and stylistic errors in the manuscript. It is difficult to list all. I suggest that the authors review the manuscript consistently with a view to: 1. Correct capitalisation Start all sentences with capital letter Remove unnecessary capitalisations of words in the middle of sentences except when for pre-defined acronyms such as NICU or CLABSI 2. Ensure that all acronyms are preceded by their full forms

 when they first appear in the manuscript and from there on use the acronym without the full forms consistently Consistency in date format – such as January or jan
consistently
4. In several sentences there are extra spaces between words and in many places there is no space
5. Ensure that the font is consistent throughout the text unless a change is required.
Page 7, Line 30: should point d. be "description of"?

VERSION 1 – AUTHOR RESPONSE

Reviewers comments	Response:
Reviewer1 : Abstract should be structured according to guidelines of Author's Instruction Few typo mistakes needs to be corrected like "Clabsi" to "CLABSI"	Abstract structured and typo mistakes corrected.
Major revisions: Page 1, Line 6: please provide reference for Pronovost et al. 2006 paper referred here.	Major revisions accommodated and inserted in revised manuscript in comments. Please refer to revised manuscript.
Page 1, Line 11: do the authors mean CLABSI incidence of 5 per 1000 catheter days or higher as in the sub-group analysis of the quoted paper (Ista et al. 2016)? If so, please make this clear in the sentence.	Addressed
Page 1, Line 15-16: please provide reference for the sentence	Reference added
Page 4, Line 55: List of data items that will be collected as given in this paragraph may be better as a table.	Please see comments
Section on description of CPP (starting Line 20, page 5)	
- Numbers and letter in superscript brackets: please explain what these represent (I assume they are the grade of evidence supporting the recommendation but this needs clarification and please specify which scheme has been used for grading)	Scheme added and grading done
- These superscripts are not provided for all the recommendations: please provide the grade of evidence for all the recommendations (even if the evidence is of poor quality, it can be	Done please find in revised manuscript

graded)	
Page 7: Outcomes	
It would be useful to prespecify the magnitude of changes that the authors expect to see in their chosen outcomes. Even in a quality improvement project, it is good to have predetermined criteria for demonstration of improvements in outcome and/or change in behaviour so that the sucess/failure of the project can be demonstrated.	Added in discussion
Minor and typographical comments:	All errors corrected in abstract
Abstract	
Line 16: HAI – please expand	
Line 21: PDCA – please expand	
Lines 25, 26: CLABSI instead of clabsi	
Line 29: reduction instead of Reduction	
Line 31: t-test instead of T Test	
Line 32: McNemar's test instead of Mc nemar test	
Line 32: unnecessary capitalisation: Categorical Outcomes	
Line 35: Poisson instead of poison	
Line 38: MDRO, CRO, ERC – please expand	
Page 1	All recommended changes incorporated in
Line 46: unnecessary capitalisation – Morbidity	revised manuscript.
Line 52: CLABSI – remove full form	
Line 55: NICU – please expand	
Page 2	
Line 3: CL – expand please	
Line 7: colleagues' instead of colleague	
Line 9: ICU, please expand	
Line 15: has instead of have	
Line 21: NICU instead of nicu	
Line 27: unnecessary capitalisations – Infection,	

Infectious

Line 31: please quote reference with "first author et al." only for >2 author papers

Line 31: NICU instead of nicu

Line 38: PICC - please expand

Line 42: Approximately instead of Approx

Page 3

Line 8: PDCA – please expand

Line 10: correct capitalisation

Line 14: January instead of jan

Line 15: who instead of Who

Line 17: spelling "Operatioanal"

Line 25: PICC instead of picc

Line 25: umbilical instead of Umblical

Line 26: correct capitalisations – Central, Tunneled

Line 30: unnecessary capitalisation – Blood

Line 38: correct "°C"

Line 43: CDC and CLABSI are sufficient – full form already provided

Line 48: change in font in last sentence

There are many such minor typographical and stylistic errors in the manuscript. It is difficult to list all. I suggest that the authors review the manuscript consistently with a view to:

1. Correct capitalisation

– Start all sentences with capital letter

 Remove unnecessary capitalisations of words in the middle of sentences except when for pre-defined acronyms such as NICU or CLABSI

2. Ensure that all acronyms are preceded by their full forms when they first appear in the manuscript and from there on use the acronym without the full forms consistently

3. Consistency in date format – such as

January or jan consistently	
4. In several sentences there are extra spaces between words and in many places there is no space	
5. Ensure that the font is consistent throughout the text unless a change is required.	
Page 7, Line 30: should point d. be "description of"?	