**Reviewers' comments and responses**

EVALUATION
Please list your revision requests for the authors and provide your detailed comments, including highlighting limitations and strengths of the study and evaluating the validity of the methods, results, and data interpretation. If you have additional comments based on Q2 and Q3 you can add them as well.
 **Independent Review Report, Reviewer 1**

**Comment**

This paper reports the implementation of the ISBAR mnemonic when transferring patients from the ICU to the wards in 17 general hospitals in Israel. Physician and nurse project leaders were identified from ICU, medicine and surgery wards in each hospital to implement team training. The authors mention a baseline, 6 months and 12 months satisfaction assessment of the project leaders, based on likert scales. The results only report initial and final results, with no mention of the 6 months assessments; these would be interesting because response rate for the final assessment is low (45%).

**Response:**

Thank you for this comment. Table 1 was changed, including the three points in time at which measurements were taken. There was an attrition in the response rate, but the results remained the same.

Table 1 appears on page ?

**Comment**

Furthermore, it is unclear how project leaders carried out the assessment: for example, how did the project leaders measure the frequency of communication errors? and what is meant by the "need for information flow"? This assessment seems to lack rigor (were the questions validated in a prior context?) and I would have been very interested in a much wider assessment not only of the project leaders, but also of the ward staff and doctors! Why did the authors choose the limit the assessment to the project leaders?

**Response:**

1. The project was based on subjective evaluations of the participants. No objective evaluation was performed during the project implementation. However, assessment was based on the project participants according to the five categories included in Table 1. The corrections appear on page seven.
2. The project evaluation is presented on page six, elaborating the four aspects measured prior, during, and after the implementation, in addition to the overall satisfaction with the process. The four aspects are based on the ISBAR goal for better communication. Answers were rated on a 4-point Likert scale (1= low, 4 = high) representing perceived assessment of measured aspects of the ISBAR.
3. We appreciate the comment that a wider assessment from the staff would have been ideal. We were aware of this issue prior to starting the project, but, because of its scale and the complexity of collecting data from hundreds of staff members, we decided to contain the size of the sample to maintain control over the data collection. At the end of the process, given the high attrition rate, especially in the physicians’ group, this decision could be considered a weakness of the project. However, due to its scale, and based on the analyses provided, it could well be considered within accepted limitations. Future projects based on this method could highlight more information sampling of the staff members too.

**Comment:**Can the authors provide more information about the supervisions of handoffs: it seems this was initially carried out by project leaders and head nurses, then only by the head nurses. Was the supervision for nurses and doctors or only of nurses? At what frequency? How long did this go on for during the project, was it just in the beginning or throughout the project?

**Response:**

Supervision of nurse and physician project leaders was carried out during the course of the year. However, throughout the implementation period, nurses adhered more closely to the supervision process than was initially expected. Physicians were less cooperative with the supervision process on a continual basis as the project progressed. We included an explanation of this in the revised manuscript on page seven.

**Comment:**

Of particular interest would have been more information about how the ISBAR was implemented: what adaptation measures were implemented during the project? The authors mention a quarterly meeting with discussion of problems and proposed solutions. This would have been very interesting to learn more about.

**Response:**

Some of the adaption measures included specific tools that nurses and physicians used prior to and during the transfer. Different tools were created for the physician and nurse leaders and for staff involved in the transfer process. A short description of this has been added in section 2.4.

At quarterly meetings, issues were raised by the participants, including problems related to the implementation process, raising concerns for the success of the project.

**Minor comments:**1. The abstract does not indicate any duration for the project.

**Response:**

The duration of the project has now been included in the abstract.

2. There seems to be a missing word in line 116

**Response:**

This has been corrected.

Check List
a. Is the quality of the figures and tables satisfactory?
No

**Response:**

Table 1 has been changed according to the reviewer’s comment and two additional tables have been included representing univariate analysis (correlation among variables related to the ISBAR) and logistic regression to predict project satisfaction.

b. Does the reference list cover the relevant literature adequately and in an unbiased manner?
Yes
c. Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)
Yes
d. Are the methods sufficiently documented to allow replication studies?
No

**Comment:**

The method section has been elaborated to account for this.

QUALITY ASSESSMENT:
Rigor
2
Quality of the writing
4
Overall quality of the content
3
Interest to a general audience
2

**Independent Review Report, Reviewer 3**
EVALUATION
Please list your revision requests for the authors and provide your detailed comments, including highlighting limitations and strengths of the study and evaluating the validity of the methods, results, and data interpretation. If you have additional comments based on Q2 and Q3 you can add them as well.

The study was impressive in terms of ministry of health sponsorship and care taken to present the ISBAR checklist in multiple forms for good usability, as well as defining responsibility at multiple levels. It did not turn out to be the "large scale" study that the organizers wanted to conduct, but it did yield suggestive findings that will help lay a foundation for future work.
In terms of weaknesses:

**Comment:**

The paper includes a lot of repetitive statements; writing is clear but needs a good edit for brevity.

**Response:**

The paper has been edited to reduce repetitions.
**Comment:**

Since the questionnaire sounds short, the actual questionnaire wording should be provided.
In terms of method, the team should have pilot-tested the survey in one hospital before rolling it out to 17 hospitals!

**Response:**

The ISBAR tool was modified to be suitable to the Israeli health care system by the team leaders. A content and expert validation was performed during the process of modification, and, at the end of this process, the short tool questionnaire was created. Since all the leaders and experts were part of the process of creating the questionnaire, it was regarded as sufficiently valid for use. In addition, it measured the main aspects of the transfer process. Clarifications have been added in section 2.4.

In the process of using the tool, staff was asked if there were any questions that were not clear. Nothing was noted as being unclear.

**Comment**:
Table 2 provides results for 5 questions, broken out by nurses and physicians. I want more granular reporting: by ICU vs Surgical ward vs. Medical ward and BY HOSPITAL. To claim a 74% response rate because SOMEBODY responded from each of 17 hospitals is not quite accurate. What is the number of doctors and nurses in the three wards of each of those hospitals? That should be the basis for the response rates, and also the findings should be reported at that level of granularity as well.

It would like to see a list the hospitals in order of size (measured as the sum of beds in the three focal wards at each hospital, and/or the number of nurses or number of admissions to those three wards, and then have columns for nurses vs. doctors on each of the three service units. That would give me an accurate picture of response rate.
I'd also like to see the findings reported similarly.

Did authors check correlations across the 5 items shown in Table 2? further analysis might reveal that just one or two of the five items would yield the most helpful findings. It's not easy to see the way this data was reported, since the authors combined low/very low and high/very high down to 2 categories and then took frequencies.

I noticed also that the method indicated a before, during and after survey, but then the findings are only reported for before and after. why was that?

**Response:**

We have tried to run statistical analyses based on these extremely valuable suggestions. The small sample size generated long tables with very low values in each cell that made it impossible to describe, let alone analyze, the data. Therefore, we generated two more tables to present the data. Table 3 is a univariate analysis of all respondents over the year of implementation, demonstrating correlation with project satisfaction. Table 4 demonstrates data from a logistic regression model representing satisfaction with the process of information flow between departments. Statistical analyses for these tables are described in section 2.7.

**Comment:**

In terms of the references: I noticed that 7 references were to studies published before 2010; hardly representative of current thinking about handovers/handoffs/checklists. Here are some additional papers; I urge authors to check for other more recent studies in the most prestigious journals, especially those studies that have looked more closely at information quality effects of and sociotechnical influences on handoff routinization.

**Response:**

More recent studies were added to replace the old ones.

Some of the studies mentioned below were added to the article. The article by McFarlane does not seem suitable to this report since it mainly covers the importance of checklists prior to surgery. This method is widely used in hospitals in the perioperative period. Our report aimed to intervene in a phase where a standardized tool is not common. The following references have been added:

Festila, M.S. & Muller S.D. (2021). Information handoffs in critical care and their implications for information quality: A socio-technical network approach. Journal of Biomedical Informatics (122:103914), Oct
Gogan, J. L., Baxter, R. J., Boss, S. R., & Chircu, A. M. (2013). Handoff processes, information quality and patient safety: A trans-disciplinary literature review. Business Process Management Journal, 19(1), 70–94.
McFarlane A. (2018). The impact of standardized perioperative handover protocols. Journal of Perioperative Practice (28:10).
Morrow D.G. & Lopez K.D. (2015). Theoretical foundations for health communication research and practice. In: Patel V., Kannampalli T., Kaufman D. (eds). Cognitive Informatics for Biomedicine, pp. 35–57. Springer

Check List
a. Is the quality of the figures and tables satisfactory?
No

**Response:**

Table 1 was changed in accordance with the other reviewer’s comment and two additional tables were included, representing univariate analysis (correlation among variables related to the ISBAR) and logistic regression to predict project satisfaction.

b. Does the reference list cover the relevant literature adequately and in an unbiased manner?
No

**Response:**

As mentioned above, recent articles were included replacing older ones, including some of the reviewer’s suggestion.

c. Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)
No

**Response**

Although the aim of this report was to describe an implementation project, a descriptive analysis in addition to a logistic regression was performed. The data has been presented differently in response to this comment.

d. Are the methods sufficiently documented to allow replication studies?
No

Response:

The method has been elaborated and now contains more of the information required by the reviewer.

QUALITY ASSESSMENT:
Rigor
2
Quality of the writing
3
Overall quality of the content
3
Interest to a general audience
3