

Patient safety walk rounds: views of frontline staff members and managers in Sweden

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Abstract

Background: Leadership Walk Rounds (WRs) have been described as a promising intervention to achieve a culture of safety by means of engaging leaders at different levels in patient safety issues. The aim was to investigate WRs carried out in a Swedish county council in terms of advantages, disadvantages and opportunities for improvement, as perceived by the participating frontline staff members, local unit managers and top-level managers. **Methods:** A cross-sectional study of 19 WRs. Responses from questionnaires were analysed using qualitative and quantitative methods. Content analysis was used to categorize the findings from open-ended questions regarding advantages, disadvantages and suggestions for improvement. **Results:** The response rate was 95%. The participants in the WRs were generally very positive about the intervention. They believed that the intervention had several advantages and that WRs could have an impact on patient safety. Few differences between the three personnel categories were found. **Conclusions:** A WR developed on the basis of descriptions in the literature was perceived to have many advantages according to frontline staff members, local managers and top-level managers who participated in the intervention. WRs are perceived to contribute to increased learning concerning patient safety and to influence the patient safety culture. The overall positive findings are broadly consistent with the predominantly optimistic reports of WRs in the patient safety literature. However, further research is needed to investigate how the potential of the WR can be realized, including evaluations of the effectiveness of the intervention in terms of various patient safety outcomes.

Keywords: Patient safety, walk rounds, patient safety culture, management

Background

Patient safety culture has become an increasingly important focus of efforts to achieve safer patient care. Leadership Walk Rounds (WRs) have been described as a promising intervention to achieve a culture of safety by means of engaging leaders at different levels in patient safety issues. The intervention involves leaders meeting with frontline staff members to discuss patient safety concerns. Similar interventions have been described under different names: executive WRs [1, 2], patient safety WRs [3, 4], or simply patient safety rounds [5]. The basic premise of the intervention is that leaders' visible commitment to patient safety is important in improving the safety culture [5-9]. The intervention has been likened to management-by-walking-around [10], which involves leaders listening, facilitating and reinforcing values by talking to staff and customers [7].

The WR intervention has been described in highly favourable terms as "an effective tool" (p.836) [8], "an excellent opportunity" (p.25)[6] and "a beneficial strategy" (p.19)[9], (p.83)[11]. Several studies [1-3, 5, 12-14] have shown modest improvement in patient safety culture associated with the WR.

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Other studies have focused on describing how the intervention works and process aspects such as participation in the WR and the number and types of issues identified within the rounds [7-9, 15-18].

However, despite the predominantly enthusiastic views of WR, two recent studies have raised some concern about various aspects of the intervention. Rotteau et al.[4] noted that some attitudes and behaviours of the leaders contradicted the stated goals of the intervention. Tucker and Singer[19] found that WR raised frontline staff members' expectations that problems would be resolved, concluding that the intervention worked best when the identified problems were easy to solve and when senior managers took responsibility for ensuring that.

Despite the increasing interest in WR many questions remain. Further research is required regarding how WRs should be conducted, how they could be adapted for different circumstances and how they might be further developed. It is also relevant to explore whether there are downsides that have not yet been addressed. Investigation of these issues is important because WR may entail considerable commitment of resources for development, implementation and maintenance.

The aim of this study was to investigate WRs carried out in a Swedish county council in terms of the participants' views of the advantages, disadvantages and opportunities for improvement of the intervention. We explored the views of frontline staff members, local unit managers and top-level managers (chief medical officers and executive officers) who participated in the WRs in hospital and primary care settings. The three personnel categories were compared to identify potential differences in their views of the WR.

Methods

Study setting

This cross-sectional study was conducted in Östergötland, a county council with approximately 420,000 inhabitants. The Swedish health care system is organized at national, regional and local levels. At the regional level, the responsibility for financing of health care is decentralized to 21 county councils (regions) which have full budgetary responsibility for providing health care to all citizens, primarily funded by taxes.

Ethical approval was not sought for this study as it did not obtain sensitive personal information and was therefore not required, as defined in Swedish law in the Act concerning the Ethical Review of Research Involving Humans (SFS 2003:460) from the Ministry of Education and Cultural Affairs[20].

Description of the WR

The WR intervention used in this study was developed in cooperation between the first author and patient safety experts from the county council's Department for Development and Patient Safety (DPS), a unit that initiates and supports improvement and patient safety efforts. Inspiration for the intervention came from descriptions in the literature [15, 21, and 22].

The WR consists of four steps, a preparatory stage and a subsequent stage after the completion of the WR (Figure 1). A WR is initiated by a representative from the county council's top-level management, who informs the units about the WR. The local unit manager then informs the frontline staff members. Before carrying out the intervention, top-level managers receive a written and oral presentation on the WR.

Each unit is visited by three top-level managers and one representative from the DPS. They meet with the local unit managers and frontline staff members. The main task of the representative from the DPS is to ensure that the protocol is adhered to; they have a passive role in the WR.

The WR lasts for 2 hours and begins with the top-level managers walking around the unit (step 1). They meet with frontline staff members and discuss issues concerning weaknesses and strengths in patient safety as well as concerns about patient care. The topics discussed are initiated by the top-level managers, who ask questions inspired by Frankel's descriptions of questions posed in WRs [14].

Step 2 of the WR involves a sit-down conversation between the top-level managers and approximately 7 to 8 frontline staff members. Step 3 of the WR consists of the top-level managers discussing among themselves to generate for a brief summary of their observations.

In step 4 of the WR, the top-level managers invite the local unit managers for a presentation and discussion of their impressions of what they have seen and heard. A few risk areas are chosen for improvement actions and responsible persons are appointed.

The WR ends with an outline of a short action plan including the areas for improvement and the persons responsible for them. The action plan is documented in writing by the representative from the DPS and sent to the manager of the unit.

Questionnaire

A questionnaire was developed by the authors to evaluate various aspects of the WR. Questions were inspired by Shaw et al.[3], Campbell and Thompson[5] and the Patient Safety Round Team Survey from the Dana-Farber Cancer Institute[23]. Discussion among the research team led to a draft version of the questionnaire, piloted in four try-out WRs (not included in this study). An expert on survey research scrutinized the questionnaire before a final version was assembled [24].

The questionnaire consisted of three fixed-response background questions on the respondent's role in the WR, profession and number of WRs the person had participated in. Eleven fixed-response statements dealt with the respondent's experiences of the current WR (2 items), the respondent's beliefs concerning the potential of WRs to have an impact on patient safety (4 items) and the respondent's beliefs regarding how repeated WRs may have an impact on frontline staff members' cognition concerning patient safety and risks (5 items). The items were scored on four- or five-point Likert-type scales. The questionnaire also included three open questions concerning the advantages, disadvantages and improvement suggestions of the WR. One item concerning the discussion in the specific WR was not included in the analysis.

Data collection

Data were gathered from all 19 WRs carried out in the Östergötland County Council between April and October 2013. Twelve WRs were conducted in hospital care settings and seven in primary care settings (including outpatient settings at a hospital). A total of 210 questionnaires were administered to frontline staff members after the sit-down part of the WR (step 2) and to the representatives from the managements involved in the conclusion of the WR (step 4). The questionnaires were filled in and collected during these sessions.

Data analysis

Data from the questionnaires were entered manually into statistical software. Descriptive statistics were used to describe the background data and the responses to the multiple-choice items. Responses from frontline staff members, local managers and top-level managers were compared. Analyses were also performed to identify differences between various subgroups. Frontline staff members included five different staff groups (Table 1). Non-parametric tests were used for the analysis. All three groups were compared according to the Kruskal-Wallis test to identify differences. Where significant differences were found, a second analysis was performed using the Mann-Whitney test to identify which groups differed significantly in their responses. Statistical significance was defined as a P value ≤ 0.05 . Statistical analyses were performed using the Statistical Package for the Social Sciences version 22.

Responses to the three open questions were analysed using content analysis[25]. The answers for the three personnel categories (frontline staff members, local unit managers and top-level managers) were analysed separately. Each of the authors analysed the written answers with open coding to categorize the advantages, disadvantages and ideas for improvements. During three meetings, the authors then categorized the findings into several categories, i.e. types of advantages, disadvantages and improvement suggestions. Categories that had been expressed by five or more of the responders were selected. A final meeting was held to reach consensus regarding the categories.

Results

Response rate

Of the 210 questionnaires administered, 10 were not returned because the respondents did not have the time to fill them out due to other engagements. This yielded a response rate of 95%.

Of the 200 questionnaires analysed, 98 were from frontline staff members, 53 from local unit managers and 49 from top-level managers. All frontline staff members and local managers participated in one WR each. Thirteen of the 24 participating top-level managers participated in more than one WR.

Perceptions of the WR

All personnel categories expressed predominantly positive perceptions of the WR (Table 2). There were very few low ratings for any of the three areas: experiences of the current WR, beliefs concerning the potential of WRs to have an impact on patient safety and beliefs regarding how repeated WRs might have an impact on frontline staff members' cognitions concerning patient safety and risks. Similarly, in the responses to the open-ended questions, the respondents described many more advantages than disadvantages.

When the results from the multiple choice questions were compared between personnel categories using the Kruskal-Wallis test significant differences were identified regarding four items: What was the merit of having top-level manager's representatives taking part in today's walk round? ($P=0.005$), How do you think walk rounds could have an impact on identifying patient safety risks? ($P=0.043$), How do you think walk rounds could have an impact on offering safe care for the patients? ($P=0.028$) and How do you think repeated walk rounds in your unit will impact your concerns about patient safety problems? ($P=0.001$).

A further analysis using Mann-Whitney test revealed that frontline staff members and local unit managers respectively placed higher value on the participation of top-level managers than the top-level managers ($P=0.014$, $P=0.004$). Frontline staff members, to a higher degree than the top-level managers, saw the impact of WRs in terms of increased possibilities of identifying risks ($P=0.019$) and believed WRs could increase the possibilities of offering safe care for patients ($P=0.010$). Top level managers to a higher degree than local unit managers believed that repeated WRs could lead to increased concern for patient safety problems ($P=0.005$). For this item there was also a difference between frontline staff and local unit managers with frontline staff scoring higher ($P=0.001$). No statistically significant differences were noted among different professions within the frontline staff member groups.

Advantages of the WR

All but one of the 200 respondents provided responses to the open-ended questions about the advantages of the WR. Six types of advantages (i.e. categories) associated with the WRs were identified (Figure 2). Some of the categories were the same for two or for all groups although there were some differences with regard to how these advantages were expressed.

Open and interactive communication

All three groups believed that an advantage of the WR was that it facilitated open and interactive communication about patient safety and risk issues. Frontline staff members emphasized the importance of being able to talk directly to the top-level managers and convey messages to them about issues they believed were important. Local unit managers noted that the open dialogue was valuable for the frontline staff members, whereas the top-level managers believed the dialogue with the frontline staff members was important.

[The WR enables] spontaneous communication with top-level managers and colleagues; it often leads to ideas about changes. (Frontline staff member)

Direct contact with frontline staff members provides the opportunity to see how patient safety is working in practice. (Top-level manager)

Shared impressions of everyday patient safety work

Another type of advantage expressed by all groups was the possibility of sharing impressions of everyday patient safety work. The local unit managers particularly emphasized that the WRs led to better insights into and understanding of the frontline staff members' perspectives, whereas the top-level managers pointed to the importance of learning more about the patient safety-related work going on daily in the units.

It is positive that top-level managers talk directly with the persons who actually work with the patients. (Frontline staff member)

[The WR allows for] wise feedback directly from the employees. (Top-level manager)

Increased awareness of issues of patient safety and risk

Both frontline staff members and top-level managers believed that WRs generated an increased awareness of issues of patient safety and risk. The frontline staff members used the words risk and risk identification, whereas the top-level managers were more inclined to speak in terms of identifying areas for improvement.

Outside perspective of issues of patient safety and risk

Frontline staff members and local unit managers both expressed that the WR enabled an outside perspective on issues of patient safety and risk. They believed this could be important to detect previously unknown safety hazards.

Someone outside the local organization notices things that we don't see in our daily work; it forces us to think and reflect about patient safety. (Local unit manager)

Increased attention paid to the patient perspective

Both frontline staff members and local unit managers also expressed the value of accounting for the patient perspective on issues related to patient safety in the dialogue during the WR.

[The WR enables to] see the patients' perspectives on the care and if it is similar to what we express. (Frontline staff member)

Increased involvement of all frontline staff members in patient safety issues

Many of the frontline staff members stated that an advantage of the WR was that the intervention led to the involvement of all frontline staff members in issues of patient safety.

[The WR provides a] good opportunity to tell the top-level managers one's thoughts and to be listened to. (Frontline staff member)

Increased emphasis on patient safety

Another type of advantage expressed by the frontline staff members was that the WR increased the focus on patient safety. The WR provided a window of opportunity to focus only on patient safety, something that many believed could easily be forgotten in the daily work.

Disadvantages of the WR

Of the 200 respondents, 155 provided responses to the open questions about disadvantages of the WR. More than one-third (55 respondents) said that there were no disadvantages. Four types of disadvantages (i.e. categories) associated with the WR expressed by frontline staff members, local unit managers and top-level managers were identified (Figure 3).

Time consuming

All three personnel groups agreed that a disadvantage with the WR was that it was timeconsuming.

Uncertain value

Frontline staff members and local unit managers expressed doubts about the value or the capability of the WR to actually improve patient safety, i.e. whether the intervention would really lead to actions resulting in safer care.

We don't know what the impact [of the WR] is in reality. (Local unit manager)

Incomplete picture of patient safety and risks

Local unit managers were concerned that the dialogue and communication during the WR provided a fragmented and incomplete picture of patient safety and risks in the organization. Thus, they believed that the WR might result in a somewhat superficial view and shallow understanding of the situation.

A risk is that the frontline staff members don't dare to speak up. (Local unit manager)

[The WR provides] a snapshot; it is important to gather enough facts during a short time. (Local unit manager)

Unrealistic expectations on leadership to improve patient safety

Top-level managers believed that the WR might lead to unrealistic expectations on the leadership to instigate actions that would lead to improved patient safety.

The WR may result in demands for [patient safety improvement] efforts that can be difficult to handle in a short time. (Top-level manager)

Suggestions for improvements in the WR

Of the 200 respondents, 138 provided suggestions for how the WR could be improved. Thirteen of the 138 stated that no improvements were required. Three types of categories for improving the WR intervention were identified (Figure 4).

Improved structure

All three personnel groups believed the WR could be improved by having a better structure regarding preparation for the WRs and by clarifying the specific purpose of the WR.

[There is a need to] clarify roles in the WRs and state a clear objective [for conducting the WRs]. (Top-level manager)

Longer duration of the WR

Both frontline staff members and local unit managers suggested that the WRs should last longer than 2 hours.

More frequent WR

Frontline staff members expressed a desire for WRs to take place more frequently to allow for more feedback on issues of patient safety and risk.

Discussion

This study sought to investigate various aspects of WRs carried out in a Swedish county council. We found that the participants in the WRs, i.e. frontline staff members, local unit managers and top-level managers, were generally positive about the intervention. They saw several advantages of the intervention and believed that WRs could have an impact on patient safety. Few differences between the three personnel categories were found. Overall, these findings lend certain credence to the predominantly optimistic picture of WRs conveyed in many studies [2,5,7-9,12,14,15,17,26,27].

The frontline staff expressed the most positive views, based on both quantitative and qualitative data. The frontline staff valued the WRs higher than the other groups (Table 2) and expressed all of the advantages that were identified (Figure 2). They believed that the WRs enhanced the focus on patient safety and led to increased involvement, which is in line with previous findings [2, 5, 11, 12, 14, 17, and 27]. All groups that participated in the WRs believed the intervention facilitated an open and interactive communication and made it possible to share impressions of everyday safety work. WRs have earlier been described as an opportunity for staff to discuss patient safety in an honest and open way [9], and have been found to expand communication channels and increase collaborative efforts among staff and leaders [18].

We also observed some advantages of the WRs that have not been highlighted in previous research. Frontline staff members and local unit managers in our study believed WRs provided an opportunity to account for the patient perspective and allowed for an outside perspective of issues on patient safety and risk. These findings suggest that WRs could facilitate individual and organizational learning to the benefit of patient safety. A few studies have addressed WRs from a learning perspective, describing this intervention as an opportunity for leaders to learn more about areas of risk in the organization [12,28].

The many advantages of the WRs identified in our study indicate that the intervention could have a positive impact on the patient safety culture; participants believed the WRs allowed for open and interactive communication, facilitated shared impressions of everyday patient safety work and led to increased involvement in patient safety issues. Patient safety culture is a subset of the organizational culture [29], emerging from shared assumptions, values and norms among members of an organization, unit or team [30, 31].

Studies have shown that WRs can affect the safety culture positively although this requires frequently repeated WRs and feedback to the frontline staff members and the local managers from the top-level managers [2, 8, 14, 17, and 27]. A transformational leadership has earlier been found to influence the frontline staffs' behaviours in their daily work [32].

However, despite the generally positive views on the WRs, the participants in our study also expressed some disadvantages. They suggested that WRs should be held more frequently, which has also been advocated by Tucker and Singer [19] and Sexton [27].

Perhaps the most serious type of disadvantage that emerged was the frontline staff members' and local unit managers' doubts about the value of the WR as an instrument to achieve safer care. The study by Tucker and Singer [19] showed that WRs could in fact have a negative impact on the frontline staff members' willingness to work with improvements if the issues addressed do not lead to any solutions; the senior managers' involvement in the WRs was only helpful if it enabled active problem solving. As suggested by Frankel et al. [28], it is what happens after the WR that is important. More than likely, visible effects from repeated WRs are needed to achieve legitimacy in organization. The top-level managers in our study expressed concern that the WRs might create unrealistic expectations on leadership to improve patient safety. Rotteau et al. [4] noted that leaders might avoid certain issues if they believe they are difficult to solve; the authors recommended that expectations concerning WRs should be articulated in advance, for example, concerning what specific types of patient safety problems should be considered relevant.

The importance of conducting more research on WRs before the intervention is more widely disseminated has been emphasized [14]. Thus far, relatively few studies [2, 14, 27] have investigated the impact of WRs on various patient safety outcomes. There are obvious challenges to capturing and measuring patient safety outcomes and causally link these to WRs. Most patient safety work still tends to be pragmatic and experienced-based rather than relying on solid evidence of effectiveness. However, it is important to demonstrate the value and effectiveness of WRs before widespread implementation can be suggested.

Limitations

This study has limitations that should be considered when interpreting the results. Some of the statements in the questionnaire had a ceiling effect [33]. We consulted a survey expert when we developed and tested the questionnaire in order to reduce this risk. However, the answers were more positive than we expected. Social desirability is a potential source of bias. The respondents filled in the questionnaire in the presence of the first author, who acted as the representative from the DPS. However, there were no differences in the responses between the 12 WRs where the first author participated and the 7 WRs where she did not.

The study also has considerable strengths. The response rate was very high (95%), which likely was facilitated by administering the questionnaire in direct connection with the WR. We also used open-ended questions, which gave the participants the possibility of expressing their own opinions, which has been shown to improve response rates [34]. Some of the top-level managers participated in more than one WR, and thus returned more than one questionnaire. This was not adjusted for in the analysis, as each WR was considered a new and separate event. Top-level managers' participation in multiple WRs is an important feature of the intervention protocol.

Conclusions

A WR developed for use in a Swedish county council on the basis of descriptions in the literature was perceived to have many advantages, according to frontline staff members, local managers and top-level managers who participated in the intervention. The WRs were perceived to have the potential to contribute to increased learning concerning patient safety and to influence the patient safety culture.

The overall positive findings are broadly consistent with the predominantly optimistic picture of WRs in the patient safety literature. However, further research is needed to investigate how the potential of the WR can be realized, including evaluations of the effectiveness of the intervention in terms of various patient safety outcomes.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

All authors made substantial contribution of the current project. MD conducted all of the data collection. PN and SC completed the analysis and interpretation of the data. All authors contributed to the draft of the article and revising it critically and final approved the submitted version of this manuscript.

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M.D. is an intensive care Registered Nurse, and PhD student in Medical Science, P.N. is an Economist, Professor in Implementation Science, and S.C. is a Registered Physiotherapist and has a PhD in Medical Science.

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Table 1 Distribution of answered questionnaires

Personnel category	Number
Top-level managers	49
Local unit managers	53
Frontline staff members	
Registered nurses	36
Physicians	17
Nurse assistants	19
Allied health care providers	17
Administrative personnel	9
Total number	200

Table 2 Perceptions of the WRs

Item	Top-level managers, <i>n</i>	Local unit managers, <i>n</i>	Frontline staff members, <i>n</i>	Total <i>n</i> (%)	Positive answers, proportion*
What was the merit of having top-level managers representatives taking part in today's walk round?					
Poor	0	0	0	0	
Fair	1	0	0	1 (0,6)	
Good	11	3	11	25 (13,8)	
Very good	29	45	81	155 (85,6)	99%
How do you think walk rounds could have an impact on...					
...identifying patient safety risks?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	5	1	9	15 (8,1)	
Increase somewhat	37	39	52	128 (68,8)	
Increase greatly	5	8	30	43 (23,1)	92%
...offering safe care for the patients?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	9	4	7	20 (11)	
Increase somewhat	35	37	65	137 (75,3)	
Increase greatly	3	5	17	25 (13,7)	89%
...working continuously with patient safety?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	3	7	9	19 (10,3)	
Increase somewhat	38	29	60	127 (69,0)	
Increase greatly	6	12	20	38 (20,7)	90%
...health care staff's own initiatives to identify patient safety risks in daily work?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	12	7	29	48 (25,7)	
Increase somewhat	31	32	49	112 (59,9)	
Increase greatly	4	9	14	27 (14,4)	74%
How do you think repeated walk rounds in your unit will impact your...					
...understanding of patient safety risks?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	5	8	20	33 (17,8)	
Increase somewhat	23	33	53	109 (58,9)	
Increase greatly	16	7	20	43 (23,2)	82%
...attention to identifying patient safety risks?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	6	11	19	36 (19,6)	
Increase somewhat	26	27	54	107 (58,2)	80%

Increase greatly	11	10	20	41 (22,3)	
...motivation to address patient safety risks?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	0	0	0	
No difference	14	17	20	51 (28,2)	
Increase somewhat	20	17	46	83 (45,9)	
Increase greatly	9	14	24	47 (26,0)	72%
...stress due to having to deal with one more task?					
Decrease greatly	0	0	0	0	
Decrease somewhat	0	2	2	4 (2,3)	
No difference	27	35	58	120 (69,4)	
Increase somewhat	13	8	25	46 (26,6)	
Increase greatly	1	0	2	3 (1,7)	28%
...concerns about patient safety problems?					
Decrease greatly	0	1	0	1 (0,6)	
Decrease somewhat	2	9	5	16 (9,1)	
No difference	29	30	55	114 (64,8)	
Increase somewhat	11	5	25	41 (23,3)	
Increase greatly	1	0	3	4 (2,3)	26%

* Internal data loss not included

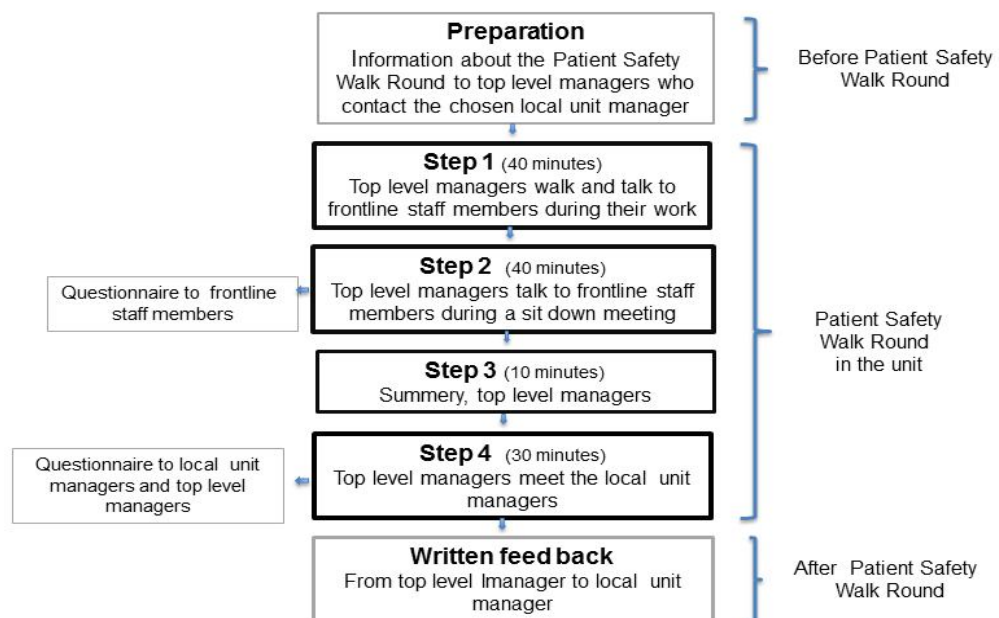


Figure 1: Description of patient safety walk rounds.

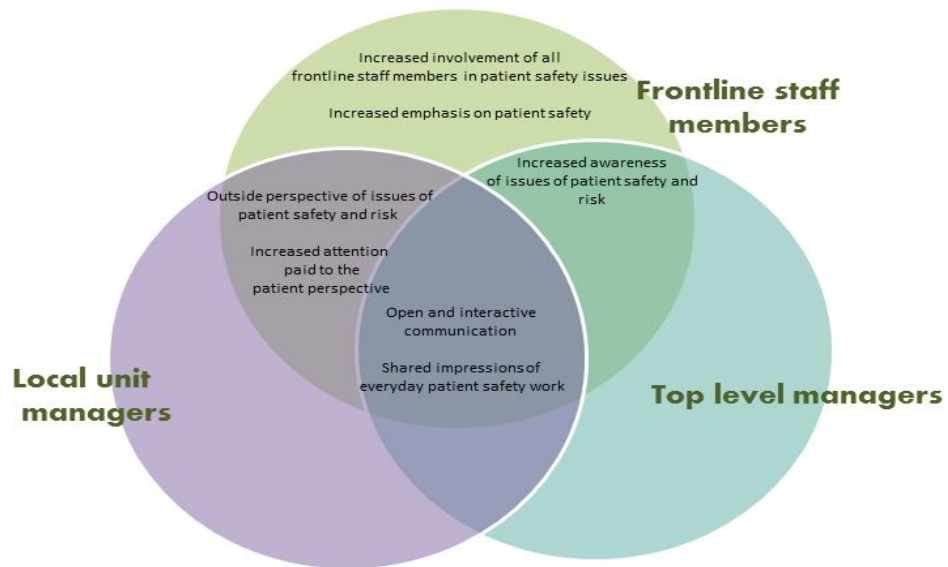


Figure 2: Categories expressed as having advantages.

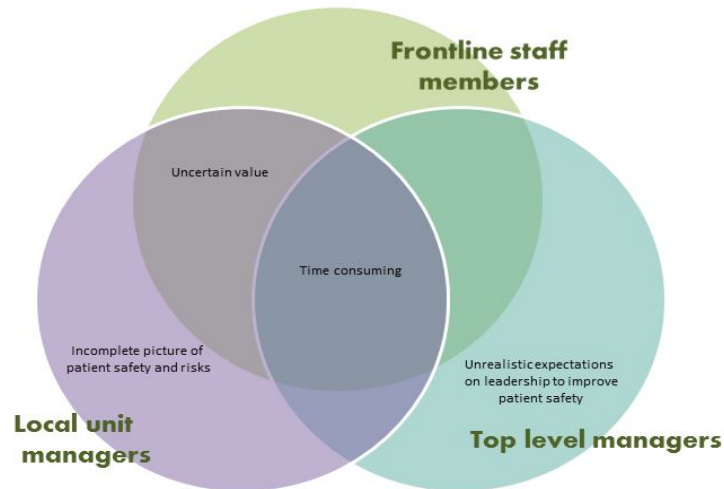


Figure 3: Categories expressed as having disadvantages.

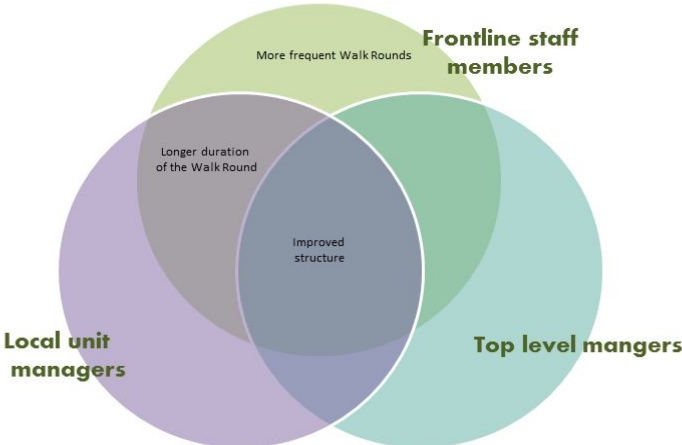


Figure 4: Categories expressed as having potential for improvement.