

## Evidence Table

#	1 <sup>st</sup> Author	Year	LOE	Sample Composition & Size	Results/Recommendations	Limitations	Strength/Quality
1	O'Connor C.	2009	Level I Experimental study	The sample size of the study was 106 staff that completed the questionnaire. The sample staff included intensivists, nurses, respiratory therapists, pharmacists, clerical staff, and ICU leadership	<p>Most of the participants indicated that wireless e-mail enhanced speed (92%) and dependability (92%) of communication, enhanced coordination of ICU team members (88%), minimized staff disappointment (75%), and resulted in faster (90%) as well as safer (75%) patient care; Likert responses were considerably diverse from neutral (<math>p &lt; 0.001</math> for all). Staff occasionally (18%) indicated negative effects on communication. There were no reports of radiofrequency interference with medical devices.</p> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>- Wireless e-mail should further be adopted to enhance communication, relationship of team members, staff satisfaction, as well as in patient care.</li> <li>- Additionally, studies should be conducted to determine</li> </ul>	<ul style="list-style-type: none"> <li>- The research study utilizing a questionnaire for data collection purposes may have restricted the responses provided by the participants</li> <li>- The time period which the study was conducted might not be enough to come up with a concrete conclusion regarding the impact of using wireless e-mail for clinical communication in an intensive care unit (ICU).</li> </ul>	Level I

					wireless e-mail on timeliness as well as efficiency of staff workflow as well as clinical outcomes. - The study should adopted observation study in order to gather more information regarding the area of interest.		A
2	Wong H. J.	2009	Level I randomized controlled trial (RCT)	The research study involved survey of 120 participants allied to health, nursing and physician disciplines. An audit was also conducted on usage of whiteboard.	The whiteboard proves to be important, immediate patient information, in a single, highly evident, easy to use display. According to the study with a rapid glance at the whiteboard, one can get precise snapshot view of the present patient activity in the unit. About 71% of survey participants believed that the whiteboard enhances as well as regulates communication among the care team members. Moreover, roughly 62% of the respondents came to a conclusion that the whiteboard saves them time when retrieving patient information as well as their care plan. <b>Recommendations</b> -Utilization of the whiteboard can have an impact on the work practices of many	- The sample size was a bit low for generalization to the population as well as the topic of interest. -The survey research involved questions that were general hence not appropriate for all respondents as they were supposed to be. - Participants may not feel comfortable presenting honest as well as accurate information.	Level I

					<p>General Internal Medicine (GIM) care providers.</p> <ul style="list-style-type: none"> <li>- Implementation of whiteboard can significantly enhance communication within an inpatient setting.</li> <li>- In order to have a genuine generalization of the population it would be reasonable to increase the number of participants</li> </ul>		A
3	Edwards, A.,	2009	Level I Experimental study	<p>The research study employed a sample size of 9 participants of which 7 were attending physicians and 2 were nurses.</p>	<p>987 communication events were experienced within 2024.67 min. Clinicians were observed to spend the most of their time on patient care which accounts 85.4% with about 3/4 of that time spent on indirect patient care for instance, charting. Clinicians were observed to have a preference of using synchronous communication modes, which resulted to multitasking and generated a highly broken up workflow. 42% of communication occasions were coded as interruptions. Moreover, study respondents were seen multitasking 14.8% of the</p> <p>Each interruption was short-lived (on average <math>0.98 \pm 2.24</math> min for attending</p>	<ul style="list-style-type: none"> <li>- The sample size utilized for the research study was way too small for population generalization.</li> <li>- The study may also have been limited by the lack of adequate time to collect enough data.</li> <li>- The data utilized in this particular study is self-reported hence cannot be independently verified.</li> </ul>	Level I

					<p>physicians), they occurred regularly.</p> <p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>-Communication devices to be adopted in order to increase inter-clinician interaction and improve inpatient care.</li> <li>- Put more effort in deferring interruptions to more suitable times</li> <li>- In order to have a genuine generalization of the population it would be reasonable to increase the number of participants</li> </ul>		A
4.	Quan, S. D.	2013	Level III, qualitative study	The research study employed a sample size of 32 participants who included; 5 residents, 8 nurses, 2 pharmacists, and 2 social workers who were interviewed as well as 15 residents from	<p>According to the research findings interruptions amplified 233%, from 3 pages received per resident per day pre-implementation to ten messages received per resident per day post-implementation. Main themes not concerned to premeditated consequences that surfaced from the interviews comprised rise in interruptions, tactics to improve personal productivity as well as accountability.</p>	<ul style="list-style-type: none"> <li>- The study narrowed on its comparison hence not proper for generalization of the population.</li> <li>- The recommendations drawn from the study findings may not be implemented due to lack of will from the clinicians, nurses as well as pharmacists.</li> <li>- It was difficult to make systematic comparisons for example, if clinicians gave widely contrary responses that are highly subjective.</li> </ul>	Level III

				<p>5 clinical teams in both periods. Semi structured interviews were used to generate main themes associated to unintentional consequences.</p>	<p><b>Recommendations</b></p> <ul style="list-style-type: none"> <li>- In order to improve clinical communication there is need to replace page and other traditional modes of communication.</li> <li>- Carry out communication with a lot of care in order to avoid unintended health care in an inpatient setting.</li> <li>- The replacement of pagers with other advanced communication devices should be carried out in phases to avoid distractions.</li> </ul>		C
5	Gjære, E. A.	2014	Level III- qualitative study	<p>The research study employed 15 professional ward nurses. All interviews</p>	<p>The results of the study indicated that participants valued having modernized clinical information provided on a digital whiteboard. According to the respondents, that kind of information could possibly enhance inter-</p>	<ul style="list-style-type: none"> <li>- The study employed minimal participants that might read to poor representative distribution of the population</li> <li>- Researcher biasness could be experienced due to the kind of research adopted. However,</li> </ul>	Level III

				<p>were recorded, transcribed verbatim, and analyzed qualitatively.</p>	<p>departmental communication, minimize the number of electronic health record-logins, as well as make nurses more swiftly conscious of fresh information. Additionally, participants valued being able to easily access more comprehensive information and confirm inpatient identities.</p> <p><b>Recommendation</b></p> <ul style="list-style-type: none"> <li>- Always present updated information from patient care operations on a digital whiteboard in a specific format in order to support coordination of care at the hospital without interference of patient’s privacy.</li> <li>- The study should adopt both quantitative and qualitative approach to allow for a comprehensive collection of necessary data.</li> </ul>	<p>the problem could be overcome by adopting a mixed methods approach.</p>	<p>C</p>
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