Title:
National Network Study of Operational Failures in Frontline Nursing: Scaling Up for Policy

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CLINICAL SESSION: Leaders Creating Healthy Work Environments
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Keywords:
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Abstract Text:

Nurses are aligned to drive frontline policy in quality improvement. Yet studies often lack rigor and sample sizes large enough to be definitive. While smaller studies show that frontline operational failures occur every hour of every shift and threaten patient safety, multi-setting studies are requisite in order to craft effective microsystems interventions. Such interventions will foster learning organization climates through decreasing workarounds and making system corrections.

Aims: Using a new research network for healthcare improvement, conduct a landmark national study to explain first-order operational failures in medical-surgical units in context of work environment and quality outcomes.

Methods: To broaden generalizability, a local pilot study of microsystem operational failures was expanded to 52 medical-surgical units through a new national improvement research network. Network members formed a virtual research collaborative, supported by the network coordinating center and virtual laboratory. Team science principles were employed to create a common goal around a rigorous study and strong team relations. The virtual collaboratory venue provided central databases, assured fidelity of the protocol through a specialized implementation kit and site monitoring, and supported research capacity-building.

Results: Within 9 months, the 14-hospital research team was formed, research protocol deployed, fidelity maintained, and 24,014 data points collected and analyzed. Results of the survey of virtual collaboration readiness were positive and team satisfaction was high.

Conclusions: Research network concepts were successfully applied in a national network to investigate healthcare delivery improvement. The cyberinfrastructure, networking processes, and approaches achieved research capable of producing evidence sufficient to drive policy.