

Enhanced HPN RN training improves interdisciplinary team communication

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Background

Nursing has played a critical role in nutrition support care since the first patients went home on PN in the early 1970s. Today it is estimated that more than 350,000 hospital stays include parenteral nutrition (PN) with tens of thousands of patients receiving HPN annually. Many nursing related errors associated with PN have been reported over the years with sentinel events being worst-case scenario. Over the last 50 years there have been advances in equipment, sterile technique, compounding practices, PN products, PN education and ongoing emphasis regarding the importance of interdisciplinary teams to manage PN patients. Registered Dietitians (RDs) in home infusion are essential to improved care and outcomes and they often lead education, cross training and mentoring of other disciplines. The objective of this pilot is to evaluate improvement in communication between nursing and nutrition after implementation of a monthly HPN in-service series for nursing.

Methods

Nutrition support RDs from one national provider identified geographic gaps in PN nursing practice and team communication (lack of weights on admission, errors in lab draws, etc.). This prompted development and initiation of monthly HPN in-services for company infusion nurses affiliated with 3 branches from April 2022 through July 2022. An online survey of 10 questions was created for the home infusion RN to complete after the in-services. Questions assessed HPN general knowledge, understanding of team member roles (RD), validity and usefulness of the supplemental HPN nursing education and the importance of communication between team members, specifically RN to RD. Nutrition support RDs tracked communication prior to the first in-service to the final in-service. Responses were analyzed using descriptive statistics.

Results

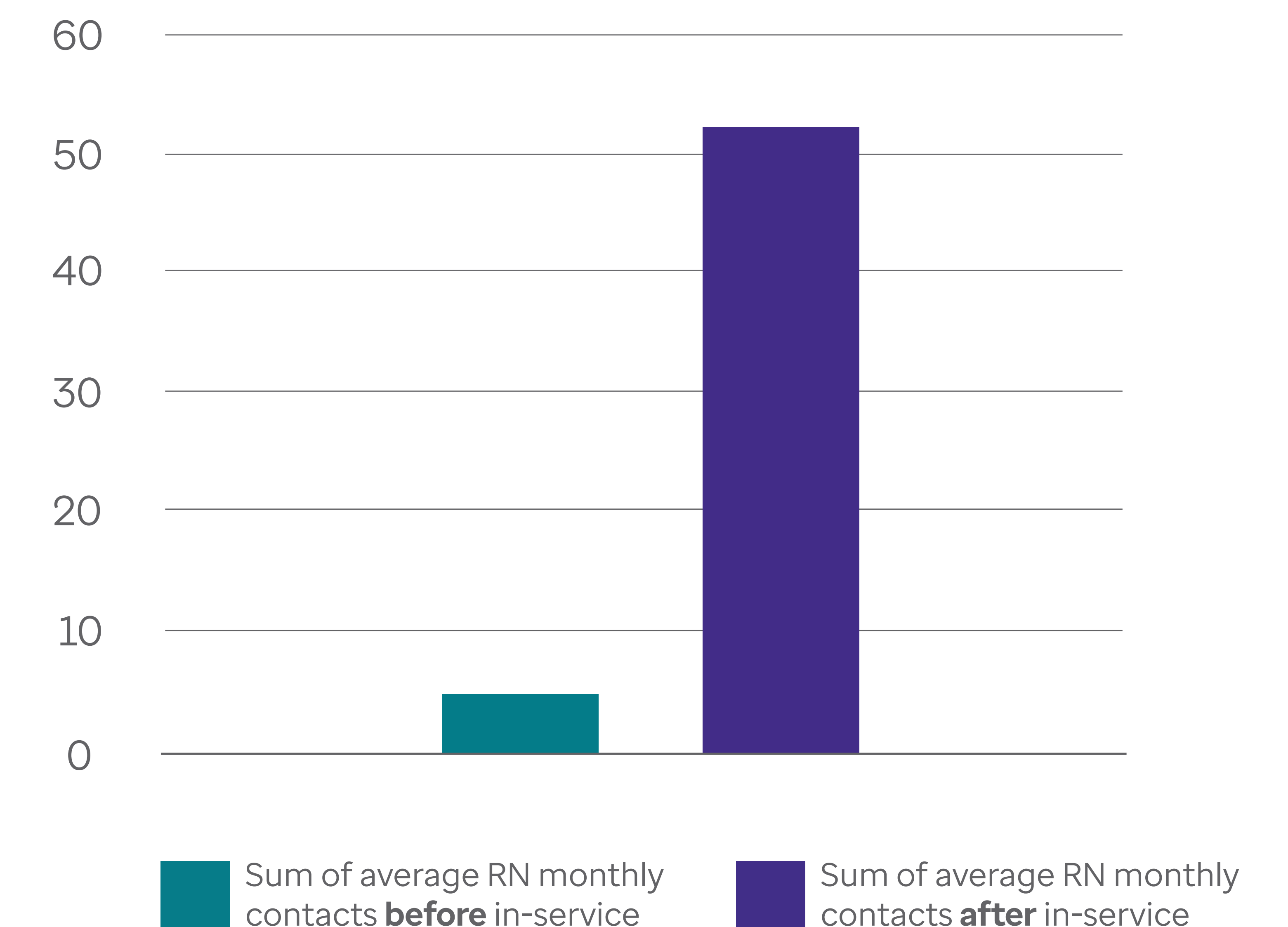
Survey responses were received from 29 company nurses in a regional area. Table 1 shows responses regarding common concerns with the HPN population. One hundred percent of the RNs felt the presentation was beneficial, 100% felt they gained stronger knowledge of HPN and the role of the RD.

Interestingly, 48% of RNs prior to the in-service had never communicated with their assigned RD; 93% stated they would reach out to the RD in the future; with 100% reporting they now understood the role of the dietitian in the HPN process. Chart 1 shows the improvement in communication post in-service with a 766% increase of RN to RD communication. Survey results also revealed nursing receptiveness to ongoing education and implementation of knowledge, evidenced by increased communication with the RD including tangible metrics such as more frequent weights at time of patient visits and improved accuracy of lab draws.

Table 1. Nursing in-service survey results

	Value (percentage)
Nurses that reached out to RD prior to in-service	48%
Nurses that stated they would reach out to RD after in-service	93%
Nurses that felt the PN in-service was beneficial to their jobs	100%
Nurses that felt they gained knowledge upon completion of the in-service	100%
Nurses that stated they now understand the role of the RD in HPN	100%

Chart 1. Nutrition support before and after HPN in-services



Conclusion

Monthly HPN nursing education in-services have improved communication between the nurse, patient and nutrition support RD. The interdisciplinary approach has demonstrated a positive impact on patient outcomes, compliance and hospital readmissions. Nursing communication with the home nutrition support RD increased significantly through email, electronic messaging, phone calls and more detailed progress notes; ideally translating into better patient outcomes. Success of this internal pilot demonstrates the importance of expanding supplemental HPN education and training to both internal and external nursing partners.

