



[More on News + Events >](#)

PHC staff share learnings from the Research Challenge (Part two)

[JENIKA HAMILTON](#)

COMMUNICATIONS COORDINATOR

August 19, 2022

[#learning-forward](#)

[#phcpeople](#) [#innovation+research](#)

o



Left to right: Vini Bains, clinical nurse specialist and Laurel Aberhardt, registered dietitian

Every year, PHC point-of-care staff have the opportunity to work with a mentor to develop a research proposal centered on their clinical practice through the Practice-Based Research Challenge. From there, teams go through ethics reviews, funding proposals, and conduct research. But what happens when the research is finished? This week, two groups with published findings talk about the impact their work has on future patient care in this interview series.

For this first article, Vini Bains, clinical nurse specialist and researcher talks about the results of the study she completed with Laurel Aberhardt, registered dietitian and mentor Sameer Desai, research methodologist.

This study aimed to compare the number of nasal feeding tube dislodgments between patients whose tubes are taped in place, and those who use a device called a “nasal bridle”. A nasal bridle is a device that is inserted into the nose and loops around a bone in the skull to hold the tube in place. The research team compared adverse events between these two groups by measuring the caloric intake and number of tube dislodgements.

The research team learned that the use of the nasal bridle in the sub-population of ICU patients with a small-bore feeding tube may be associated with a higher intake of calories. However, the device did not completely prevent tube dislodgement in patients with a higher risk of dislodgement due to delirium.

Learn more about the research conducted in this below interview with Vini Bains.

What surprised you most about your findings?

Nasal bridles are not fool-proof, even confused, delirious patients can figure out how to dislodge a feeding tube without removing the nasal bridle or causing pain. Nothing stops a dedicated patient.

Nasal bridles do however, slow patients down enough that it did result in improved total caloric intake.

How will your study impact patient care?

Nasal bridles are a considerably more expensive device for securing feeding tubes than tape (i.e., \$350 vs \$3) so we reserved its use for the portion of ICU patients who demonstrated the highest risk for accidental tube dislodgement. Previous studies reported implementing nasal bridles for all ICU patients regardless of risk. For us, I think it reassures us that our strategy on how we use nasal bridles in patients at highest risk of dislodgement is both cost effective, safe and beneficial to patients. We landed on the right balance. For other places, I think we demonstrated how and when to use this device to improve caloric intake and most importantly, we highlighted the limitations of this device.

What was the most beneficial part of going through the research challenge program?

There were many! The workshops and resources were an excellent guide. The consultation and services provided for by CHEOS were amazing, particularly Sameer who was our consultant for the project. We simply could not have done the advanced methodology and statistics, and navigated publications without Sameer! Secondly, we knew about our ICU database, but we didn't fully appreciate exactly how much data we had ready to use until we actually started to look.

Do you have any advice for future applicants/presenters, and those who may be on the fence about applying?

Prepare yourself, it's more complicated than you think. But we have great resources, mentors, and CHEOS to help you along the way. Also, especially now that we have an electronic charting system, but even before, there is a lot of data out there, already collected, just waiting for your research questions.

One last thing - just take a stab at it! I believe this was the first paper we have lead and we aimed for a pretty prestigious journal just to see how it would go. The editors and reviewers were so supportive and gave us such valuable feedback that greatly improved the final manuscript.

There is more to come from the Research Challenge!

On June 28, [15 teams](#) presented their projects in the hopes of securing approval and funding to carry out their research. The presentations were judged by a panel comprised of scientific and Patient and Family Partner reviewers. Stay tuned, next week there'll be an announcement for the 2022 Research Challenge teams!

Want more information in the meantime? Checkout [Professional Practice's Research Challenge page](#) or read [this story](#) summarizing a few of the topics chosen this year.

Think you might like to participate in the program? Applications will open again in January 2023; stay up to date on [Professional Practice's Research Challenge page](#) for all the details of how to apply.