PQI project makes appetizing discoveries for long-term care residents

nstitutional food consistently receives negative feedback, whether the person rejecting it is a hospital patient or a vulnerable senior living in long-term care. As medical coordinator at Providence Healthcare's Holy Family Hospital long-term care in Vancouver, I noticed that during the annual team-family conferences with interdisciplinary staff, long-term care residents, and their families, food frequently came up as a topic of concern.

I seized the opportunity to apply for a physician quality improvement (PQI) project through Vancouver Coastal Health/Providence Health Authority. I wanted to study this patient-based issue through a quality-improvement lens, with value-based health care in mind, and with the goal of decreasing residents' food complaints by 20%.

Beginning in March 2018, I started measuring how much food was being wasted at Holy Family long-term care, and learning from the residents about their concept of the food experience and how it could be improved. Keeping in mind that 82% of the residents have cognitive impairment and some have language barriers, we enlisted volunteers to help attain direct input from the seniors about the food experience.

The quality improvement team then came together to collaborate with care aides, dietitians, nurses, and the volunteer coordinator. We took a Plan-Do-Study-Act (PDSA) approach, assessing the problem through three measures: a chart audit to see how many dietitian referrals pertained to food preferences or complaints, a food waste audit, and a patient food-experience survey.

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For the food waste audit, residential care aides-who had already observed that lunch was the most wasted meal of the day-suggested using food slips to record food consumed. At lunch, 38% of the entrées went uneaten. The aides felt this might be a matter of timing; lunch

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was served so close to breakfast that residents seemed to have little appetite for it.

Vancouver Coastal Health PQI project advisors Amy Chang and Enrique Fernandez-Rui led a root-cause analysis (a fish-bone diagram) to settle on two potential interventions.

The first was using lipped plates, which help residents (many of whom are cognitively impaired) scoop food into their mouths to prevent so much of their food landing on the tray beneath the dish.

We also switched the portion sizes of lunch and dinner, maintaining the same number of daily calories. When we assessed the amount of wastage from the main entrées from both cognitively impaired and cognitively intact residents, the rate did not change much, with an average 32% of wastage in December 2018 and 27% in September 2019.

For cognitively intact residents, however, the switch of entrée portion sizes decreased wastage from 48% in December 2018 to 24% in September 2019.

The number of times residents were referred to dietitians because they'd expressed food preferences or made food-related complaints actually increased over the course of our project, probably indicating more awareness of how to give feedback and advocate for change. We learned that for long-term care residents, food quality, including taste, temperature, texture, and the option to eat communally are more important than the dishware, cutlery, or environment that others may deem important.

With social isolation more extreme due to COVID-19 restrictions, the experience of eating is increasingly important to frail seniors' quality of life. I hope that our results will inspire other BC physician leaders and health care providers to discuss and investigate this crucial patient need.

PQI is a flagship initiative of the Specialist Services Committee, one of four Joint Collaborative Committees funded by Doctors of BC and the BC government. PQI has supported this initiative and many others that are making a real difference to promote innovation in our health care system. For more information, go to https://sscbc.ca/physician-engagement/ regional-quality-improvement-initiative. Family doctors participating in PQI are supported by sessional funding from the General Practice Services Committee. ■

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