

## Supplemental Information

**SUPPLEMENTAL TABLE 3** Caregiver Feedback Received During Pilot and Quality Improvement Intervention Period and Resulting Changes Implemented

Feedback	Change Implemented
<p>Extending clinic visits or adding extra visits for a teach-back is undesirable.</p>	<p>Teach-backs were incorporated during “down-time” of routine clinic visits (waiting for laboratory results to return or receiving chemotherapy infusion).</p> <p>Clinic flow was restructured (Fig 2) to incorporate teach-backs into routine visit without extending time.</p>
<p>Teach-backs are viewed as a “test” of a caregiver’s ability to perform CL care.</p> <p>Examples of initial language used during pilot teach-backs when approaching a caregiver:                      “We are asking all caregivers to participate in a teach-back program because we want to see you doing CL care.”                      “Would you like to participate in a teach-back program to demonstrate how you care for your child’s line at home?”</p>	<p>During routine visits, caregivers were now responsible for their child’s CL care (eg, flushing the CL after the nurse drew blood from the CL) with a nurse trainer coaching, instead of the CL care being done by the nurse assigned to the patient.</p> <p>Created “Ready-for-Home” kits which contained a flyer with information on the ambulatory teach-back program.</p> <p>Developed an expectation that as part of CL care training, all caregivers would participate in the ambulatory teach-back program to consolidate the initial inpatient training.</p> <p>Examples of new language developed during the intervention to increase teach-back acceptability:                      “We have learned from other caregivers that caring for your child’s line at home is very different than how you initially learned at the hospital. We want to make sure that you are comfortable at home. I (the nurse) will be by your side today while you care for your child’s CL. During that time, you can ask questions related to the CL or tell me if there are things I can help with to support you.”                      “We want to support CL care at home, so we approach all patients and caregivers and have them perform CL care in clinic after they have had some time at home and may have had new questions come up.”                      “Let’s go over what supplies you have at home to perform CL care while you show me how you care for the CL at home.”</p>
<p>A visual checklist to remember steps at home would be helpful to caregivers.</p> <p>The home tool should be water-resistant durable, with less words and more pictures. All steps should be easy to see on 1 page, rather than having to stop to turn the page.</p>	<p>Learning aids for home use were developed in English, Spanish, and Arabic.</p> <p>Two tools were developed. Both were water-resistant, easy to follow with pictures rather than words, made to fit into one page.</p>
<p>Differences in nursing practices and their caregiver training approach leads to caregiver confusion.</p>	<p>Established inpatient and ambulatory nurse champion roles as agents of change. The nurse champions communicated frequently during weekly touch-base meetings developed a process to standardize the process of training the nurse trainer.</p> <p>Developed a standardized tool for nurse trainers to use during caregiver trainer. This tool was also used for caregiver proficiency evaluation.</p> <p>Developed a standardized practice of CL proficiency documentation in the medical record. As patients transitioned outside of the hospital to the home, this documentation also served as a hand-off mechanism from the inpatient to the ambulatory nurse trainer on the training trajectory of the caregiver.</p>
<p>Learning CL care done close to hospital discharge adds stress to caregivers who are also learning other aspects of cancer care (eg, when to call for a fever, how to administer oral chemotherapy)</p>	<p>Developed a standardized curriculum that began closer to CL insertion while in the hospital and allowed more hands-on opportunities to practice CL care.</p>

**SUPPLEMENTAL TABLE 4** Staff Survey Responses After 1 Month (Timepoint #1) and 1 Year (Timepoint #2) of the Start of the Quality Improvement Intervention

Survey Responses		Timepoint 1 (n = 45)	Timepoint 2 (n = 25)
Physician or advanced practitioner's responses, n (%)			
Teach-back participation is important for the patients	Agree	43 (96)	24 (96)
	Somewhat agree	2 (4)	1 (4)
	Somewhat disagree	0 (0)	0 (0)
	Disagree	0 (0)	0 (0)
	Did not experience delays	30 (67)	15 (60)
Get annoyed if I fall behind on schedule because a family member is receiving a "teach-back"	Agree	1 (2)	2 (8)
	Somewhat agree	6 (13)	1 (4)
	Somewhat disagree	2 (4)	3 (12)
	Disagree	6 (13)	4 (16)
	Did not experience delays	30 (67)	15 (60)
Nurses' responses, n (%)			
Believe teach-backs help reduce central line-associated bloodstream infections	Strongly agree	8 (57)	7 (58)
	Agree	4 (29)	5 (42)
	Disagree	0 (0)	0 (0)
	Strongly disagree	1 (7)	0 (0)
	Don't know	1 (7)	0 (0)
Believe it is a good use of time to do a teach-back	Strongly agree	4 (29)	8 (67)
	Agree	6 (43)	4 (33)
	Disagree	1 (7)	0 (0)
	Strongly disagree	1 (7)	0 (0)
	Don't know	2 (14)	0 (0)
Get annoyed if I fall behind on schedule because a family member is receiving a "teach-back"	Strongly agree	0 (0)	0 (0)
	Agree	3 (21)	6 (50)
	Disagree	7 (50)	4 (33)
	Strongly disagree	1 (7)	0 (0)
	Don't know	3 (21)	2 (17)
Teach-backs impact workload	Not at all	4 (29)	0 (0)
	A little	6 (43)	8 (67)
	Quite a bit	4 (29)	4 (33)
	A lot	0	0 (0)