# Family Learning Center

**An Innovative Way to Teach**

# Family Learning Center Overview

- The Family Learning Center (FLC) has the mission of **standardizing education** to enhance the ability for families to competently care for their child at home.

- The FLC uses effective, multi-modal methods for teaching, including **teach-back, demonstration, video, handouts, and explanation**, in a focused learning environment away from the bedside.

- **Group style classes** are new and innovative, compared to other FLC programs throughout the nation.

# Why need a study?

- No current research to support this teaching method
- Collaborated with other facilities to see how their teaching programs work.  There are many different methods:
  - Group of educators do bedside teaching
  - 1:1 educational classes
  - Bedside teaching by RNs
  - Bedside teaching by educator

# The Study: Mixed Methods

**Pre-post study design**

| | |
|---|---|
| Pre: | Immediately before the class |
| Repeated time points: | Immediately after the class |
| | 1 month, 2 months after the class |

## Qualitative

- Comfort Survey
  - Repeated Time Points
- Informal Interviews
  - Emails
  - Phone calls

## Quantitative

- Comfort Survey
  - Repeated Time Points
- Readmission within 30 days related to Central Line infection
- Length of stay (average decrease) upon initial line placement

# The Basics: Intervention

**Who?** Classes are taught by bedside RNs. They come in for an extra 4 hour shift on top of their normal bedside commitment. These nurses are specially trained to teach using best practice methods.

**What?** Topics offered include CVC, NG, G tube teaching.

**When?** Classes are available 4 days a week.

**Where?** We are using a conference room (due to limited space) that we booked consistently.

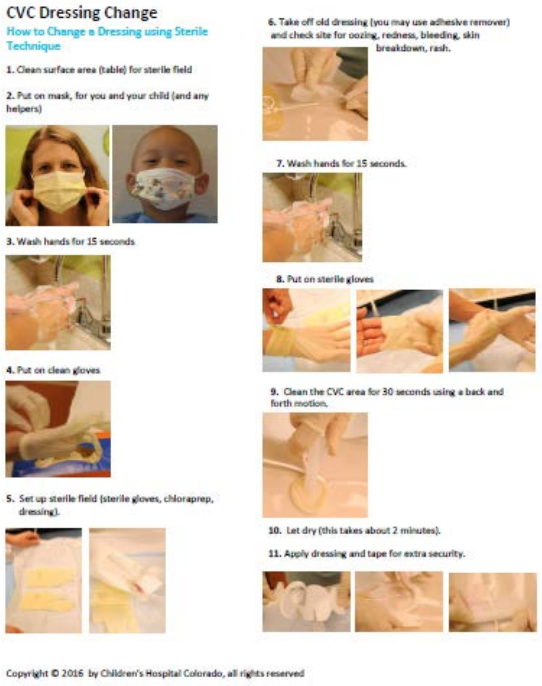
**How?** With limited resources we have leveraged various funding and support through our Child Life, Marketing, Quality and Safety and Volunteer Services.

**Patient's Seen?**

**Why?** Giving people a focused environment sends the message that this content is important. Group-setting allows families to share experiences and build a connection with other caregivers.

# Content and Curriculum

## Content (CVC cheat sheet)



CVC Dressing Change

How to Change a Dressing using Sterile Technique

1. Clean surface area (table) for sterile field
2. Put on mask, for you and your child (and any helpers)
3. Wash hands for 15 seconds
4. Put on clean gloves
5. Set up sterile field (sterile gloves, chloraprep, dressing).
6. Take off old dressing (you may use adhesive remover) and check site for oozing, redness, bleeding, skin breakdown, rash.
7. Wash hands for 15 seconds.
8. Put on sterile gloves
9. Clean the CVC area for 30 seconds using a back and forth motion.
10. Let dry (this takes about 2 minutes).
11. Apply dressing and tape for extra security.



## Videos:

CVC videos in English and Spanish, under 4 minutes long

https://www.youtube.com/watch?v=VmNXw2pOr_A&t=1s

## Curriculum (example)

| CLASS Activities | Monday 10a-2p |
|---|---|
| Set up laptop with videos | 10 am |
| Introduction to class, have them read the Information sheet on the study and fill out demographics and pre-survey | 10:15 am |
| What is a Central Line | 10:20 am |
| Emergency Care, what to call for | 10:25 am |
| How to wrap the line for a shower or bath, video then demonstration | 10:30 am |
| How to flush the line, video then demonstration | 10:35 am |
| Return demonstration | 10:45 am |
| How to change the caps, video then demonstration | 11:00 am |
| Return Demonstration | 11:10 am |
| BREAK (PICC Families can leave) | 11:20 am |
| How to change the dressing, video then demonstration | 11:25 am |
| Return demonstration | 11:35 am |
| Wrap up: have them fill out report card and take the post-survey | 11:55 am |

# The Study Environment

## Requirements for Success

### Things needed for teaching:

- Space for classes
- RN educators
- Supplies
- Educational handouts
- Educational videos

### Things needed for ordering:

- Scheduler
- EMR order
- EMR inbox

### Things needed for study:

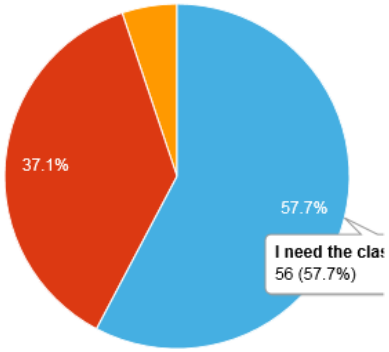
- Consent (we used a postcard consent form)
- Demographic survey
- Pre/Post Survey
- PI
- Data 1 year prior to study implementation
- Data during study implementation (6 mths)
- RedCap access

# Data

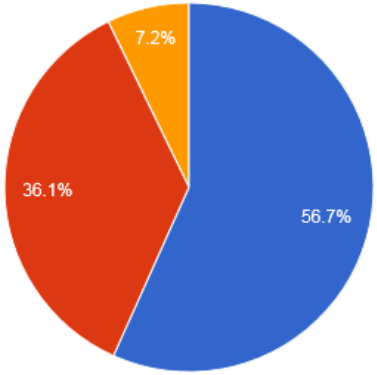
| I can teach someone | I don't need more education | I need reinforced education | I need the class again |
|---|---|---|---|

Before (n=97)

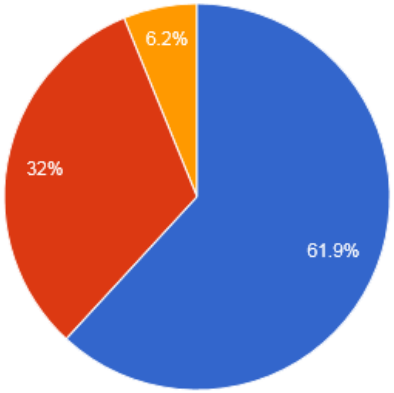
*92% response*




Skills



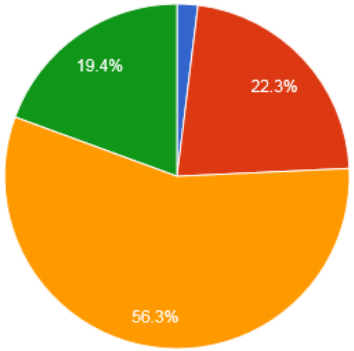

Knowledge

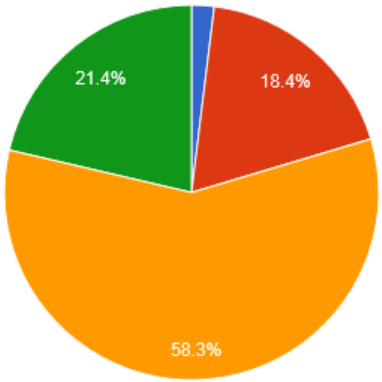


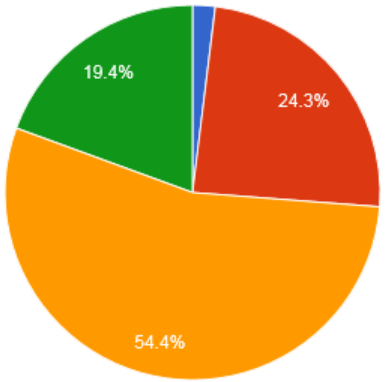

Comfort

After (n=103)

*98% response*



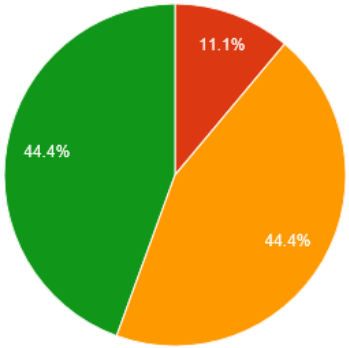



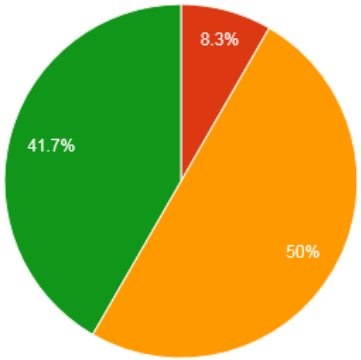
# 1 Month After (n=36)

*34% response*

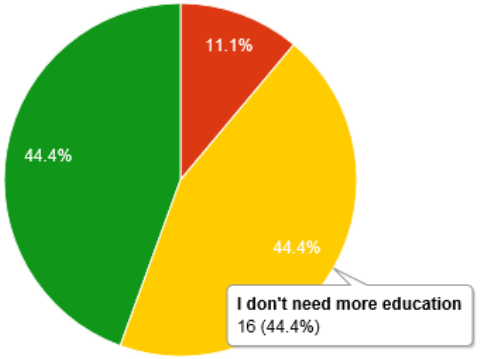
| I can teach someone | I don't need more education | I need reinforced education |
|---|---|---|




Skills



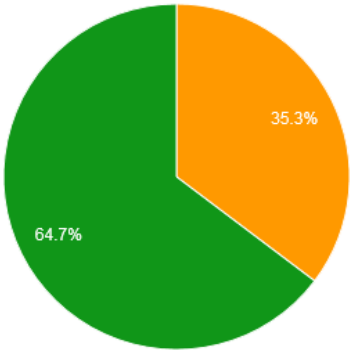

Knowledge

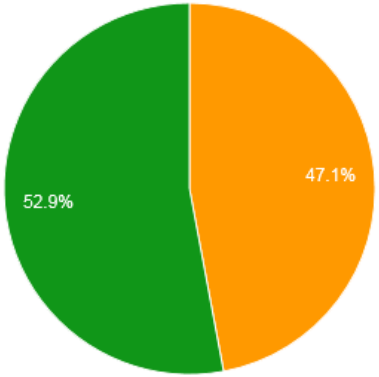


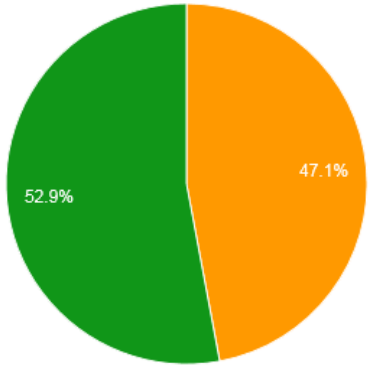

Comfort

# 2 Months After (n=17)

*16% response*



# Quantitative Data: Demographics

| Demographics | % or Mean |
|---|---|
| n=108 | |
| Age | 39.8 years |
| Gender | 69.40% |
| Line in Place before class | |
| less than 7 days | 59.30% |
| 1 week | 11.00% |
| 2-4 weeks | 7.40% |
| 1-3 months | 10.20% |
| Previous Education | 36.10% |
| From IP nurse | 33.10% |
| Number of Children in the home | |
| 1 child at home | 54% |
| 2-3 children at home | 30% |
| >3 children at home | 31% |
| Parent Education level | |
| HS diploma/GED | 16% |
| Some college | 27.80% |
| Bachelor's degree | 36% |
| Post-graduate | 17% |
| Marital status | |
| Single | 10.20% |
| Married | 66.70% |
| Divorced / Separated | 16.70% |

# Quantitative Data: Statistical Analysis

N=97

T-testing and repeated measures ANOVA results indicated:

- No significance with any of the demographic data and the pre and post test comfort levels
- No significance between the comfort levels and the pre and immediately post measures
- Significance in the comfort levels between:
  - Pre and 1 month surveys
  - Pre and 2 month surveys
  - Immediately post and 1 and 2 month surveys
- Decrease in LOS hospital wide

  from - **29.7 days** to - **27.7 days (2 day decrease!)**

# What does that mean?

It appears that the families did not change their comfort level from the pre and immediately post surveys, however, after 1 month and 2 month they had more comfort with their skills and retained it at least for 2 months.

LOS decreased during this timeframe, however we cannot say it was related to the this study's intervention.

Decrease in CVC infection rates from 12 (1 year prior) to 0!

# Qualitative Data

“I was so glad I took this class after I got home because our homecare nurse did not come around for a few days when we got home from hospital. But I was ok with that  because my class had fully prepared me. Thank you.”

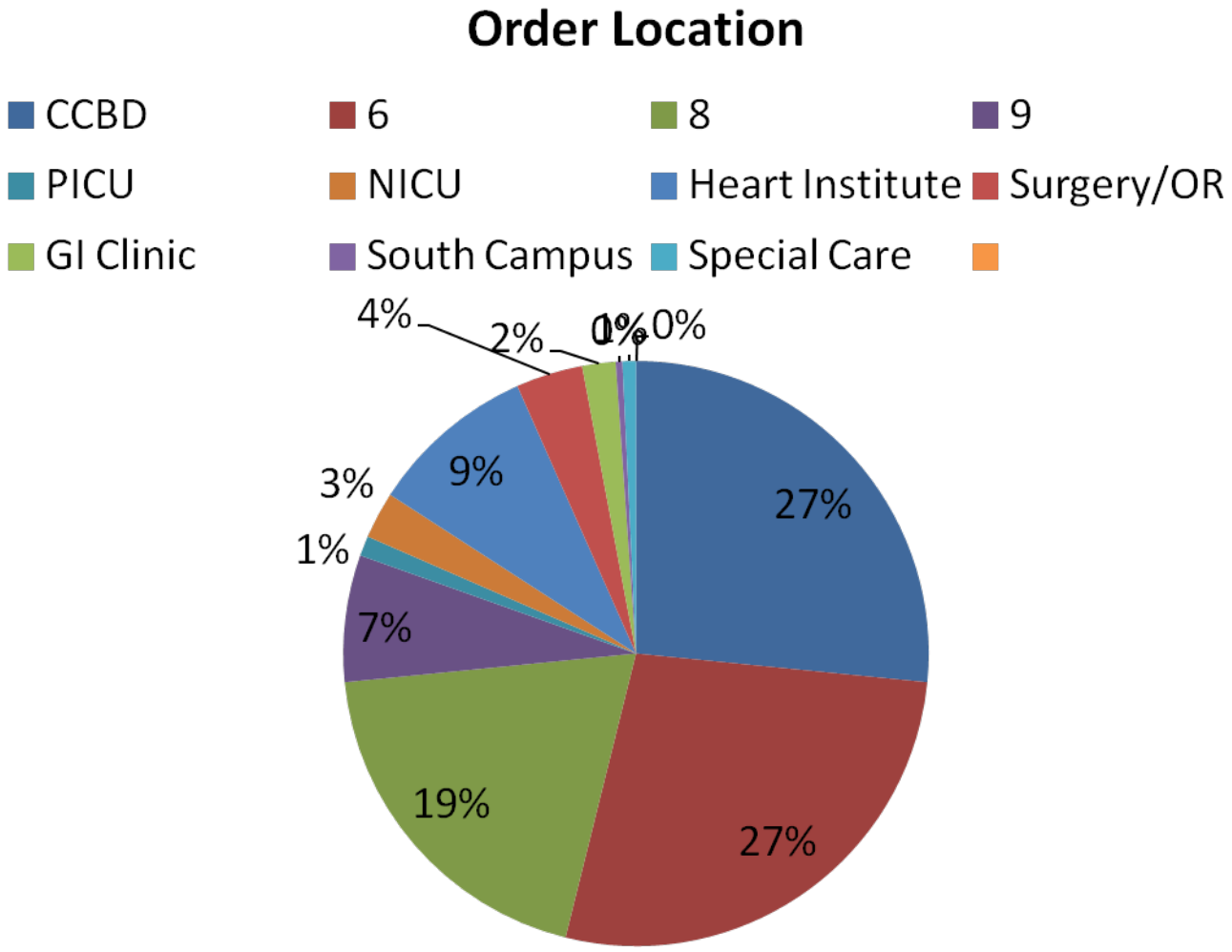
**“I feel one training is not enough.  And feel this is very important class and should be taken very seriously.”**

“Practice makes perfect!  So much more comfortable now.”

**“It was really easy to follow all the steps and I really like the caps to put on the ends. I got more comfortable with it every time I did it.”**

“I am glad I got to take the class at children's, and after coming home it took a week to feel comfortable caring for my child's central line.”

# Utilization by Location in CHCO



# Barriers to the program…

- Barriers for this work include limited resources, funding, scheduling, improving practice of teaching at the bedside and timely education
- RNs not comfortable with teaching or opting to utilize classes instead of feeling empowered to teach themselves—should not be delaying discharge.
- During the trial we did not have a scheduler and were leveraging hospital-wide schedulers
- Budget—RN funding comes out of each unit as their clinical ladder or committee work
- Space—no designated space, however were able to book a conference room consistently

# Benefits of program

- This brings a partnership with caregivers and encourages them to speak up when they do not see best care practice, which matches safety standards.
- Normalizing this change in their child's life by bringing multiple families together to support one another in the educational environment.
- By fully explaining the rationale of why cares are important, caregivers feel empowered to provide the best care for their child.
- RNs serve as education champions on their unit
- Education is discussed more often/timely than before (since classes are only offered 4 days a week)

# Next Steps

- Strengthen the study design
- Multi-site study with Children's Hospital Chicago and other sites
- Automated requests/orders (G-tube)
- Expand FLC to NOC sites and coordinate tele-health to offer classes throughout the state and neighboring states


QUESTIONS?
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