

# Technology Enhanced Access to Comprehensive Healthcare and Buprenorphine Maintenance Therapy (TEACH-BMT)-SAMHSA



Community Health Center, Inc.  
Middletown, Connecticut

# Buildings in transformation



# Community Health Center, Inc.

**Our Vision:** Since 1972, Community Health Center, Inc. has been building a world-class primary health care system committed to caring for underserved and uninsured populations and focused on improving health outcomes, as well as building healthy communities.

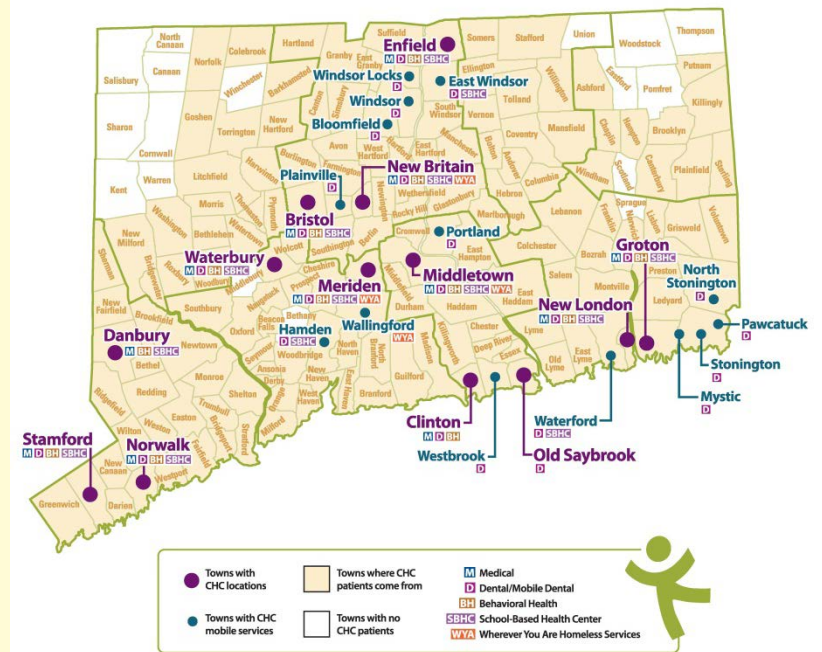
## CHC Inc. Profile:

- Founding Year - 1972
- Primary Care Hubs – 13
- No. of Service Locations - 218
- Licensed /Total SBHC locations – 26/175
- Organization Staff - 600

## Innovations

- Integrated primary care disciplines
- Fully integrated EHR
- Patient portal and HIE
- Extensive school-based care system
- “Wherever You Are” Health Care
- Centering Pregnancy model
- Residency training for nurse practitioners
- New residency training for psychologists

## CHC Locations in Connecticut



## Three Foundational Pillars

Clinical Excellence  
 Research & Development  
 Training the Next Generation



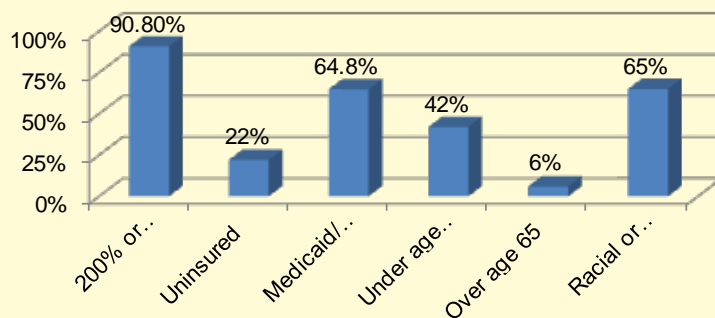
# CHC Patient Profile

- Patients who consider CHC their health care home: 130,000
- Health care visits: 410,000 per year

Top Chronic Diseases	
Cardiovascular Disease	Obesity/Overweight
Diabetes	Chronic Pain
Asthma	Depression

Care Delivery
Medical Care & Ancillary Services
Dental Care
Behavioral Health Care
Prenatal Services

CHC Patient Demographics



## Patient Care Model

- PCMH (NCQA Level 3)
- Advanced access scheduling
- “Planned Care” and the Chronic Care Model
- Integrated behavioral health services
- Comprehensive dentistry/oral health
- Clinical dashboards
- Expanded hours and 24/7 coverage
- Comprehensive HIV /AIDS & Hep C care
- Formal research program
- Residency training for nurse practitioners
- Neighborhood outreach, screening, enrollment

# TEACH~BMT Objectives

1. To utilize videoconferencing technology to help support, guide, and train providers in BMT, thereby increasing patient access to opioid dependence treatment.
2. To design and implement a program which integrates BMT with primary care and behavioral health.
3. To offer a multi-disciplinary model of substance abuse care to patients in an effort to increase retention, increase agency-wide understanding of and reduce stigma surrounding BMT.
4. To provide wrap around support services to patients who participate in BMT in an effort to retain them in care.

# Hypotheses

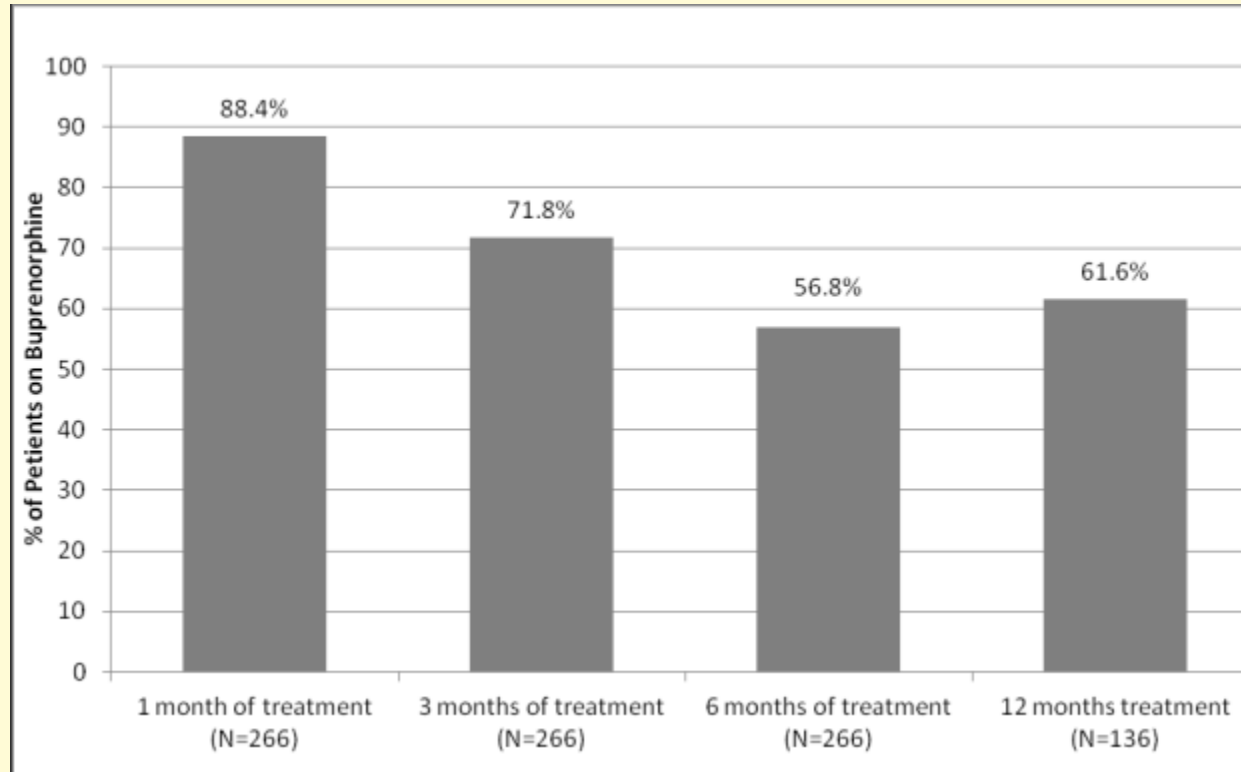
1. Members of the clinical team will show improved understanding of, acceptance of, and confidence in BMT.
2. Patients on BMT will have rates of retention similar to national rates.
3. Patients enrolled on BMT will engage in primary healthcare screenings and in chronic disease management comparable to national averages.

# BACKGROUND:

## BMT at CHCs

- Inadequate access to opioid substitution therapy for majority of CHCI patients.
- Opioid dependent individuals tend to not engage in meaningful primary healthcare.
- Buprenorphine approved in office-based settings.
- Low physician uptake of buprenorphine treatment.

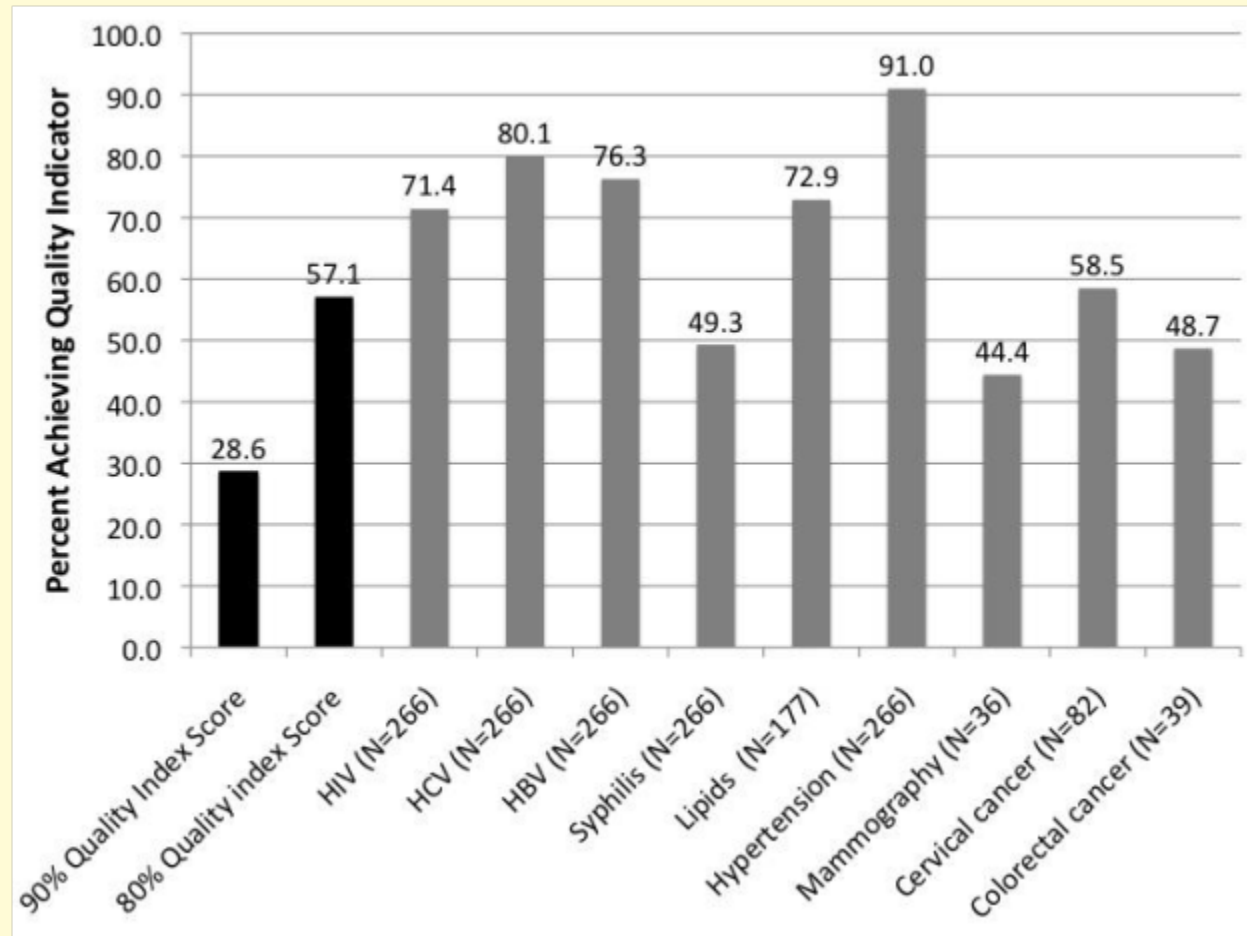
# CHCI BMT Retention Rates



\* Treatment of mental health disorders and receipt of on-site substance abuse counseling improved retention.



# Primary Care Screening Rates of BMT patients





# Project ECHO Origins

“The mission of **Project ECHO** is to develop the capacity to safely and effectively treat chronic, common and complex diseases in rural and underserved areas and to monitor outcomes.”

Dr. Sanjeev Arora, University of New Mexico



The NEW ENGLAND JOURNAL of MEDICINE

## ORIGINAL ARTICLE

### Outcomes of Treatment for Hepatitis C Virus Infection by Primary Care Providers

Sanjeev Arora, M.D., Karla Thornton, M.D., Glen Murata, M.D., Paulina Deming, Pharm.D., Summers Kalishman, Ph.D., Denise Dion, Ph.D., Brooke Parish, M.D., Thomas Burke, B.S., Wesley Pak, M.B.A., Jeffrey Dunkelberg, M.D., Martin Kistin, M.D., John Brown, M.A., Steven Jenkuskus, M.D., Miriam Komaromy, M.D., and Clifford Qualls, Ph.D.

## NEJM 6/2011

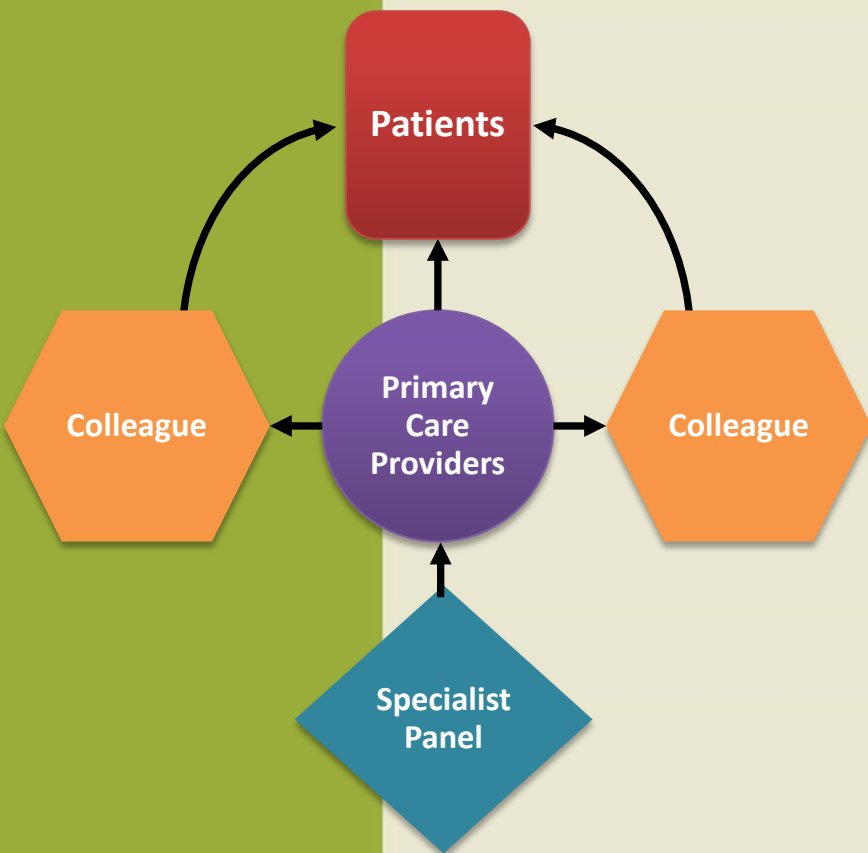
- Prospective cohort study comparing HCV Rx at UNM with Rx by primary care clinicians at 21 ECHO sites in rural areas and prisons in NM.
- 407 patients with no previous treatment
- Primary endpoint was SVR.
- 57.5% at UNM and 58.2% at ECHO sites achieved SVR.
- Serious adverse events occurred in 13.7% at UNM and 6.9% at ECHO sites



# The Project ECHO<sup>®</sup> Model

## Benefits

- Increased knowledge and confidence to manage complex chronic conditions in primary care
- Increased patient access to evidence-based treatments
- Increased provider satisfaction and retention
- Reduction in unnecessary imaging and other laboratory services
- Reduction in overuse/misuse of specialty, surgical, and procedural services
- Reduction in inappropriate medication usage





## Project ECHO at CHCI – Timeline



Hepatitis C

2012 JAN



Buprenorphine

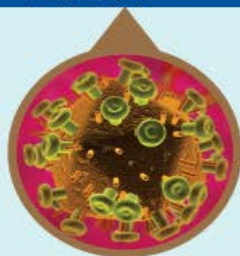
2013 FEB

2013 MAR

2013 APR

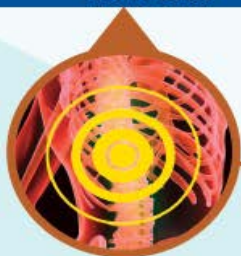
2013 MAY

2013 JUNE



HIV

2013 JAN



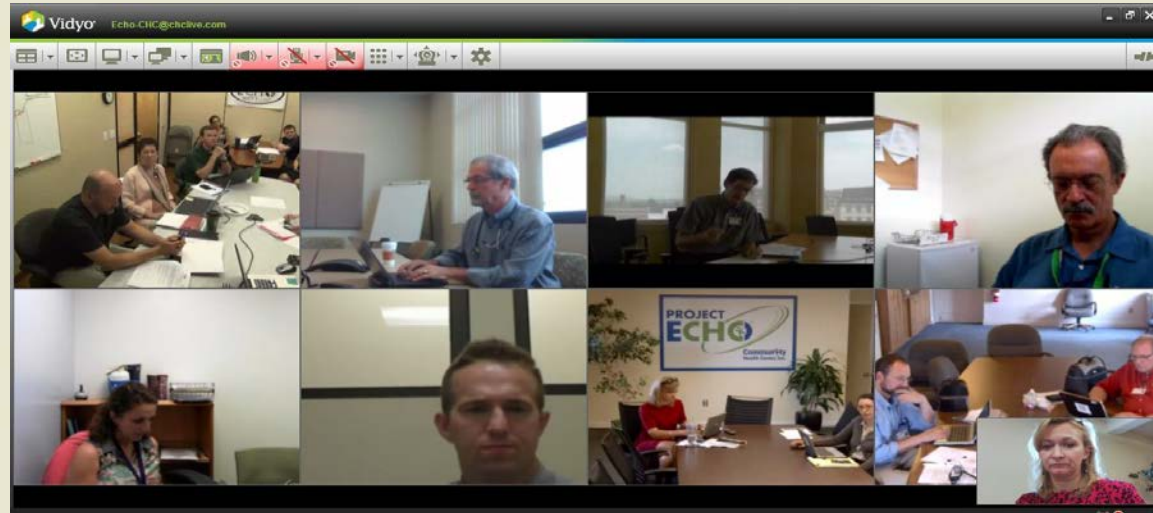
Pain Management

Coaches International





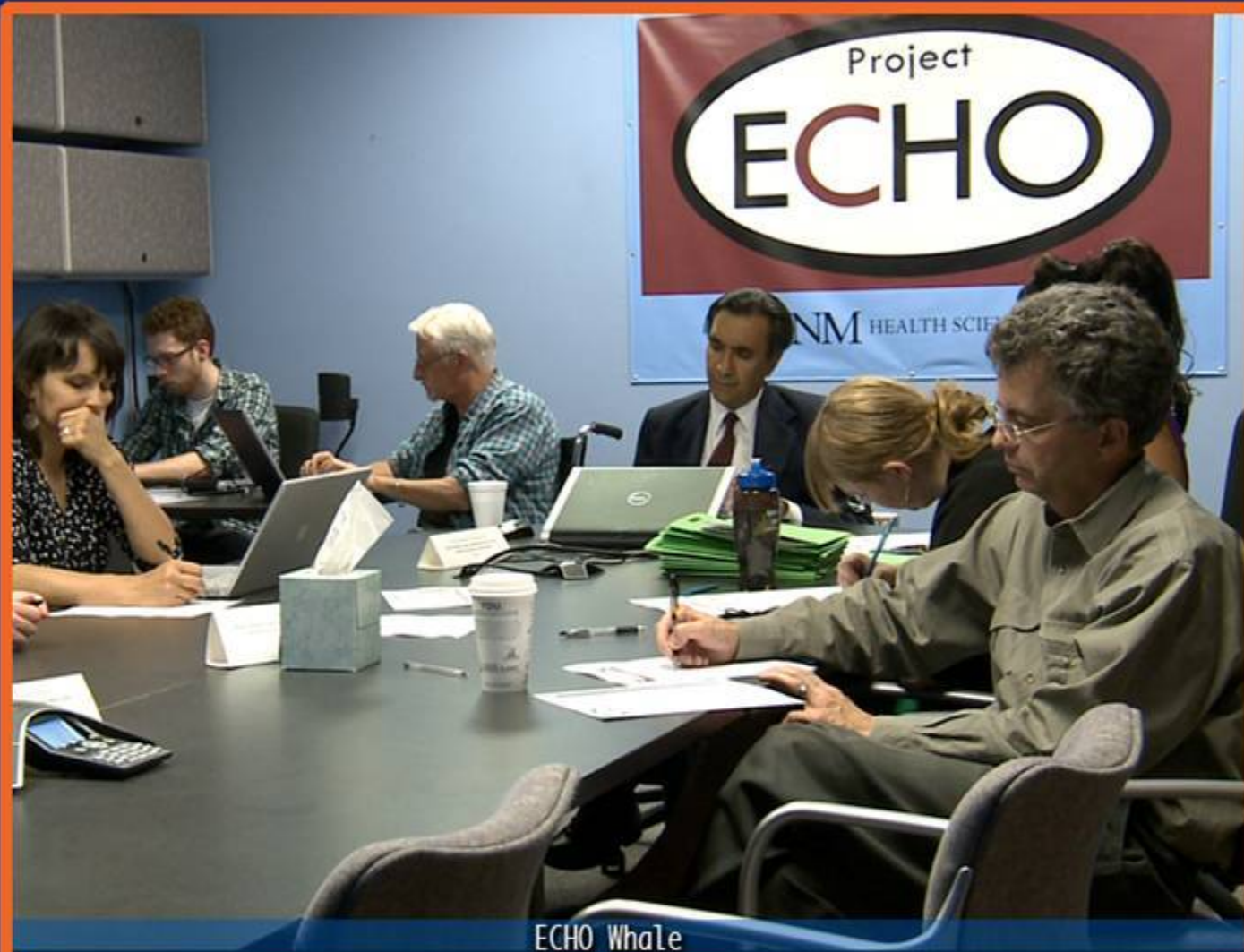
# What Does Project ECHO Do?



- Builds communities of practice
- Connects primary care providers and their teams with a panel of expert multidisciplinary faculty
- Improves retention of primary care providers
- Provides brief didactic and case-based learning and management
- Improves health care outcomes with evidence based care plans
- Improves access to specialty care
- Creates a force multiplier









# CHC Project ECHO Hep C/HIV

15

## **Structural Features**

- Friday 1230-230
- Referrals via EHR
- Documentation of recommendations within EHR
- Combined HIV/Hep C alternate weeks

## **Project Details**

CHC ECHO faculty team:

3 FP specialists (2 MDs,  
1 APRN)

Psych APRN

PharmD

Nurse Care Coordinator

Project coordinator

Participants: 6 sites, one FP  
PCP each + Homeless  
program (WYA)









# TEACH~BMT

- Project ECHO Buprenorphine
  - Launched February 2013
  - Monthly ECHO sessions
  - ECHO faculty includes FP MD, Psychiatry, BH clinician, Substance abuse counselor, PharmD, RN, MA
  - Multi-disciplinary ECHOist team including medical provider, nurse, medical assistant, behavioral health clinicians
- SAMHSA TEACH~BMT Grant Funding
  - Funding started August 2013 for 3 years



# Setting

- Community Health Center, Inc.
  - All CHC medical sites
- 2 Groups of Subjects
  - Providers
  - Patients



# Research Design

- Prospective, Pre-Post Study Design
  - Provider
  - Project ECHO Intervention
- Prospective, Observational Design
  - Patient
  - Medical record data pull/Chart review
- Timeframe: February 2013 to August 2016

# Inclusion/Exclusion Criteria

- Providers
  - Clinical providers at CHCI with BMT interest
  - participate in Project ECHO between February 1, 2013 and August 1, 2016
  - Clinical providers include physicians who have or plan to obtain DEA certification to prescribe buprenorphine, medical and behavioral health providers, substance abuse counselors, nursing staff, and medical assistants.
  - Providers who do not consent to participate in the study will be able to continue to participate in Project ECHO.
  - At least 12 prescribers and their teams will be targeted.
- Patients
  - 18 years of age or older
  - Diagnosed with opioid dependence based on DSM IV criteria
  - Received a buprenorphine prescription at least once from a CHCI ECHO provider between February 1, 2013 and August 1, 2016.
  - All patients started on BMT will be asked to consent to participate in the study.
  - Whether or not a patient consents to participate in the study will not affect whether he/she is eligible for BMT at CHCI.
  - 350 patients will be targeted for retention over 3 years.

# Intervention

- Project ECHO Buprenorphine involving medical providers, BH providers, nurses and medical assistants.
- Monthly two hour ECHO video conference sessions
- 3 Year duration
- Brief didactic presentations
- Case presentations by participants

# Instruments

- Provider~specific Surveys
  - Medical providers
  - BH providers
  - RNs/MAs
- Patient Questionnaires (SAMHSA)
  - Demographics/Record Management; Drug & Alcohol Use; Family & Living Conditions; Education, Employment & Income; Crime & Criminal Justice Status; Mental & Physical Health Problems and Treatment/Recovery; Social Connectedness
- Medical Record Review
  - Demographics, comorbid conditions, medications, social history, PMH, laboratory results including opioid, cocaine, and other illicit substance use, health screenings, chronic disease management



# Operational Measures

- ECHO clinics data
  - # clinics attended/provider
  - # cases presented / clinician
  - Mode of connection

# STUDY OUTCOMES

- Primary outcomes
  - Total number of patients started on BMT by ECHO providers
  - Retention of patients on BMT at 1, 3, 6, 9, and 12 months.

# STUDY OUTCOMES

- Secondary provider outcomes
  - Self-assessment of knowledge, self-efficacy, and outlook of BMT at baseline, 6 months, and then yearly.
- Secondary patient outcomes
  - Illicit drug free time as measured by urine/saliva tox screens
  - Rates of preventive health screenings
    - HIV, HBV, HCV, syphilis, lipid, hypertension, depression, colon, breast and cervical cancer screenings
  - Chronic disease management
    - Diabetes (A1C levels, microalbumin, retinal screenings); Hypertension (BP readings); Depression (PHQ2/9 scores); Asthma/COPD (ACT scores); Hepatitis C (HCV RNA, genotype, and ALT levels); HIV (ARVs, HIV RNA, CD4)
  - Vaccination rates
    - Tdap, Influenza, Pneumococcal, Hepatitis A and B vaccines



# CHC ECHO BUPRENORPHINE





## Connecting to an ECHO Session

### **Option 1: Connect to Vidyo/Zoom via Laptop:**

Make sure that the laptop that you are using has a functional webcam, microphone and speaker system!

### **Option 2: Connect Using the Polycom:**



### **Option 3: Connect via iOS or Android Device**

Use 'VidyoMobile' / Zoom app

### **Option 4: Connect to Vidyo/Zoom by Phone (audio only)**







## **Project ECHO sessions are PHI-free!**

- Do not use patient names!
- Do not use exact dates of visits and procedures
- Instead, you may use:
  - Descriptors (ie: 29 year old female)
  - Patient ECHO ID (ie: patient 200120)
  - Initials (ie: AE is a patient whom I have been seeing for about 6 months)
  - Approximate timespans (ie: AE had an MRI about 2 weeks ago, or AE had an MRI in December 2013)





- CME credits are available through AAFP (American Academy of Family Physicians)
  - You may earn 2 credits per ECHO session
  - If your credentialing organization is not AAFP, check to see if AAFP credits are accepted





# Operational Data

ECHO Buprenorphine Sessions	2013*	2014**
Total Number	<b>11</b>	<b>20</b>
CHC sites only	11	2
CHC + DE <sup>^</sup>	-	4
CHC + DE + NJ <sup>^^</sup>	-	5
DE	-	3
DE + NJ	-	6

\*Kick-off session 2/19/2013

\*\* Up until 12/2/2014

<sup>^</sup>DE joined ECHO as of 4/1/2014

<sup>^^</sup>NJ joined ECHO as of 7/1/2014

❖ CHC joins  
monthly

❖ DE + NJ join  
every 2 weeks





# Participant Data

Quarter	CHC Participants*	Non-CHC Participants*	CHC Prescribers^	Non-CHC Prescribers
July-Sept 2013	35	0	10	0
Oct-Dec 2013	36	0	10	0
Jan-Mar 2014	41	15	12	5
April-June 2014	44	15	13	5
July-Sept 2014	44	25	13	7
Oct-Dec 2014	49	27	13	9

\*Includes MDs, APRNs, BH clinicians, RNs, MAs

^Includes 3 psychiatrists, rest are MD primary care providers





# Prescriber Data

- CHC
  - Began with 8 prescribers at 8 sites
  - Currently have 11 prescribers at 10 sites
  - Have had a total of 17 prescribers join ECHO
    - Provider turnover
    - ‘Graduate’ from ECHO





## ***FOCUS GROUPS***

- **Provider and BH**

- Great benefit
- 12 monthly sessions for new prescribers
- Graduate to quarterly sessions

- **RNs and MAs**

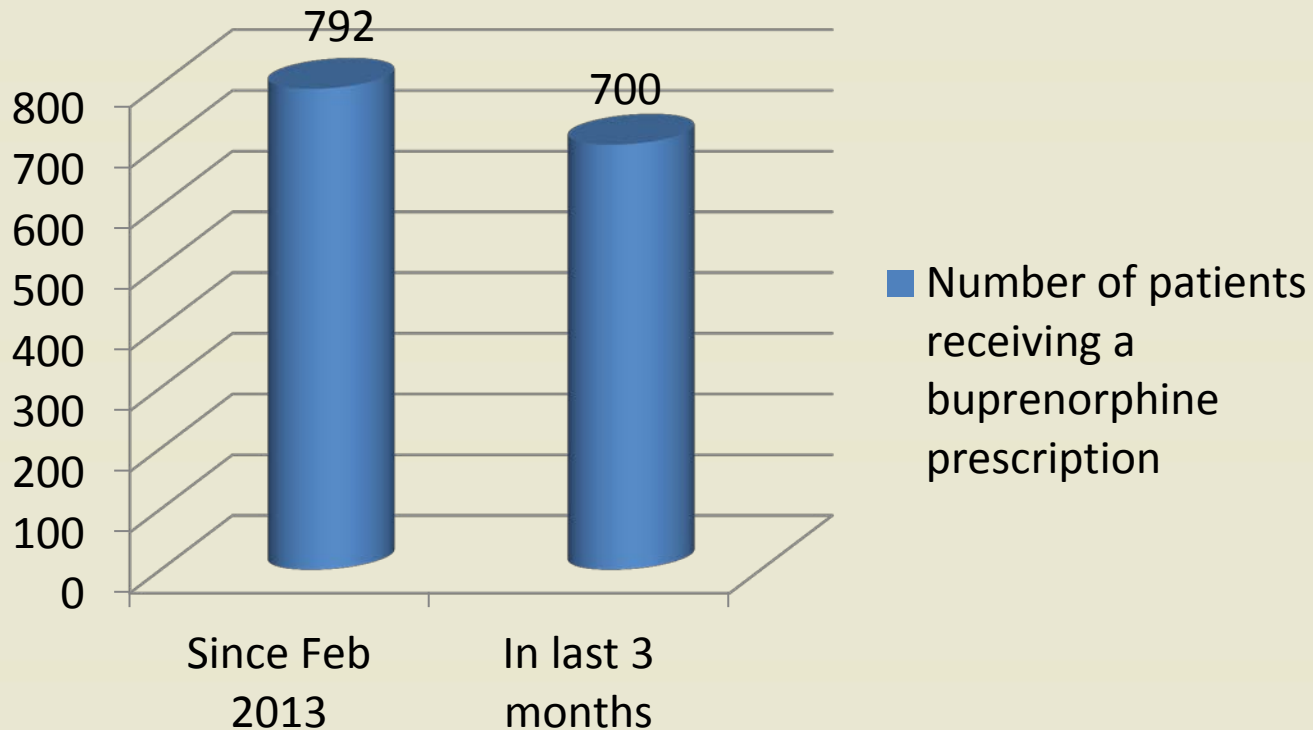
- Would like own ECHO specifically targeted to them
- Without their providers
- Twice a year sessions





# Patient Data

Number of patients receiving a buprenorphine prescription





# Enrollment Process

- Patients
  - Consenting patients began April 23 2014
  - Completing the GPRA surveys began the week of May 5th.
  - Patients Consented – 99% of patient agree to consent to be part of study
  - 92% of patients complete GPRA within timeframe
  - GPRA conducted in person by care coordinator
  - Incentives released at 6 month evaluation

# Telemedicine Pilot Project

## Background

- Initiated to cover a maternity leave of provider
- Not a reimbursable service in Connecticut
- Telemedicine visits coordinated by TEACH BMT Care Coordinator in collaboration with site support staff (RN, MA)
- Used iPads with Zoom to connect patient and provider
- Provider had access to patient record through EHR

# Telemedicine Visits for TEACH-BMT

**22**

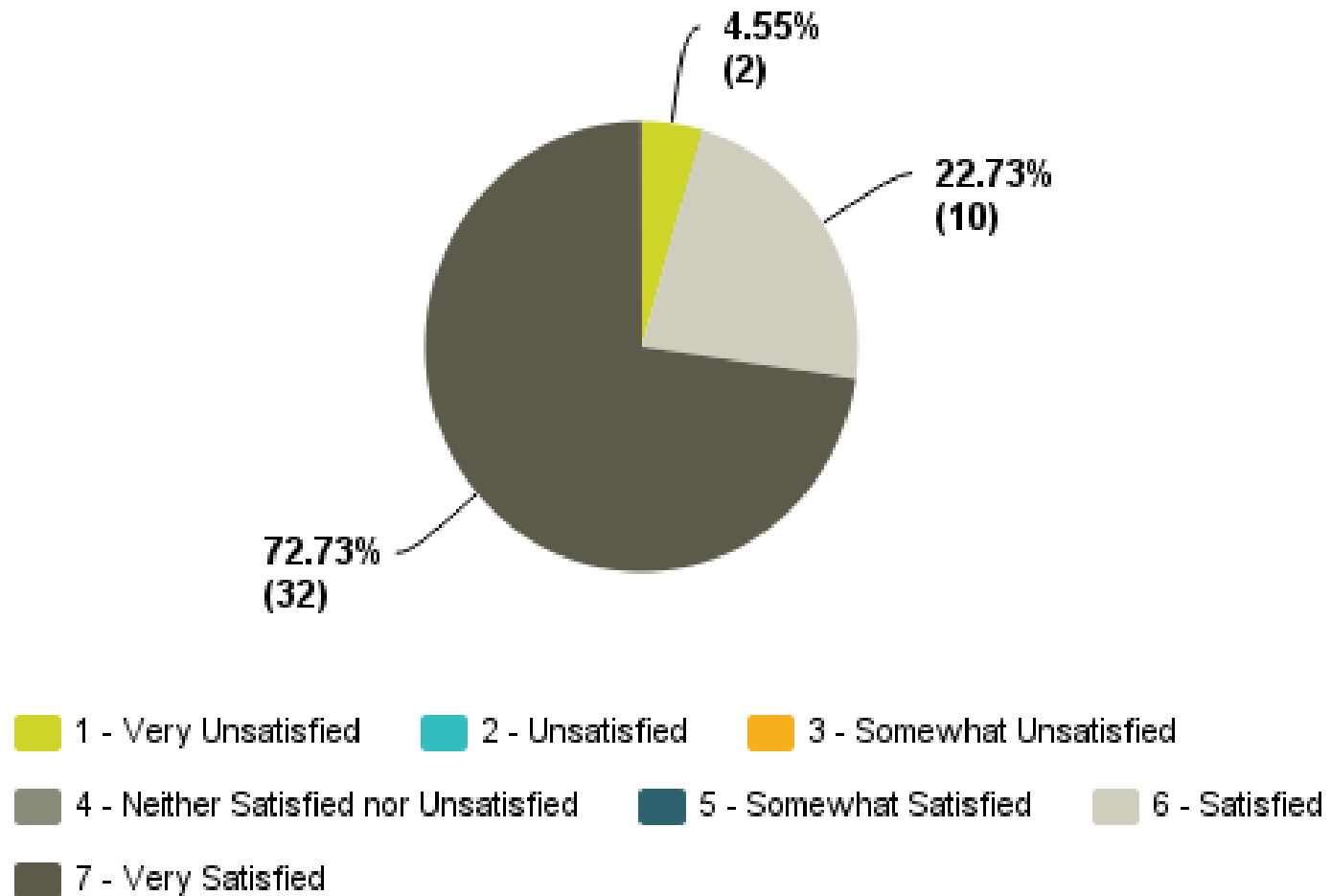
Unique Patients

**46**

Total Responses

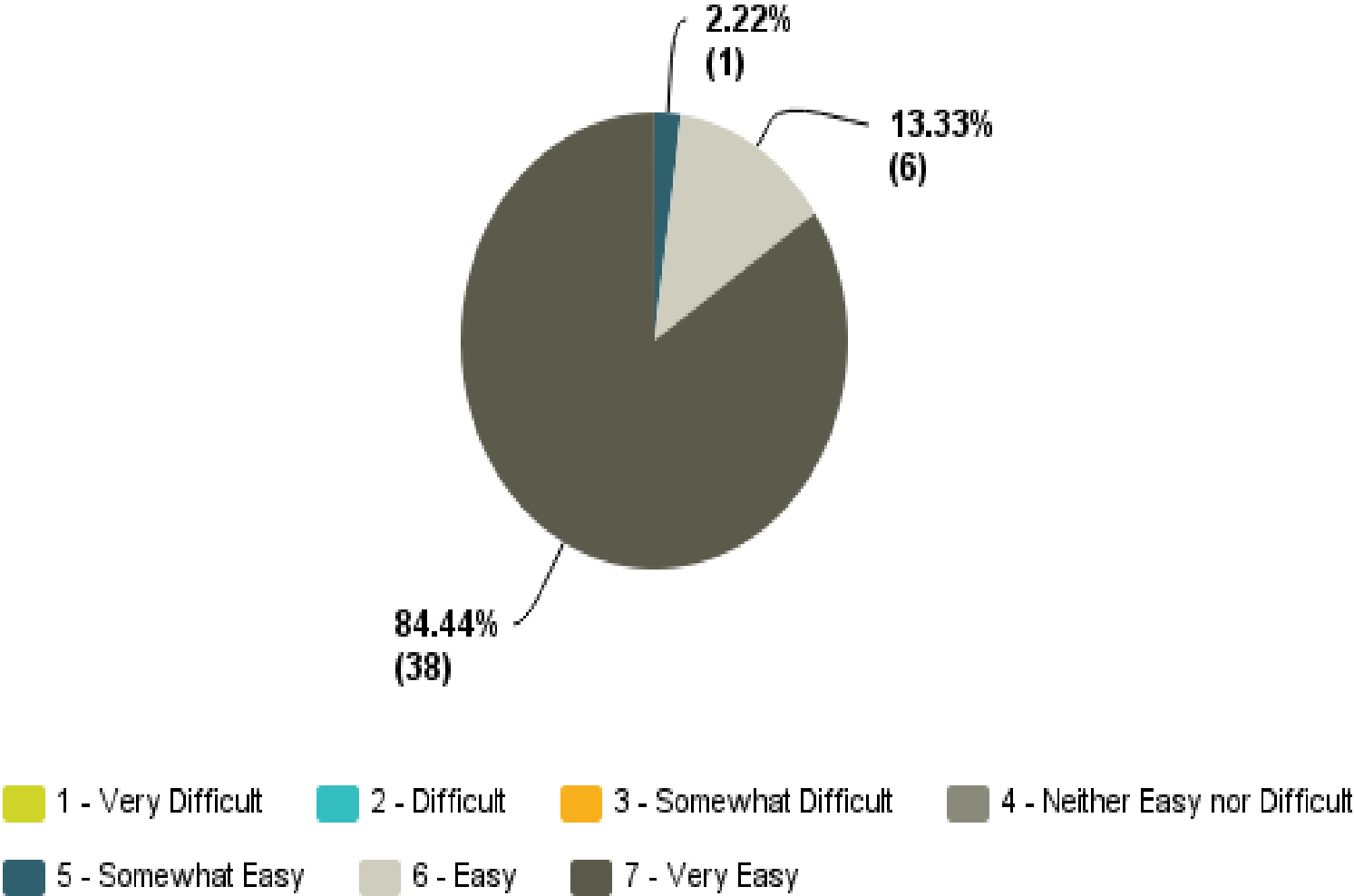
## Q1: Overall, how satisfied were you with today's telemedicine session?

Answered: 44 Skipped: 2



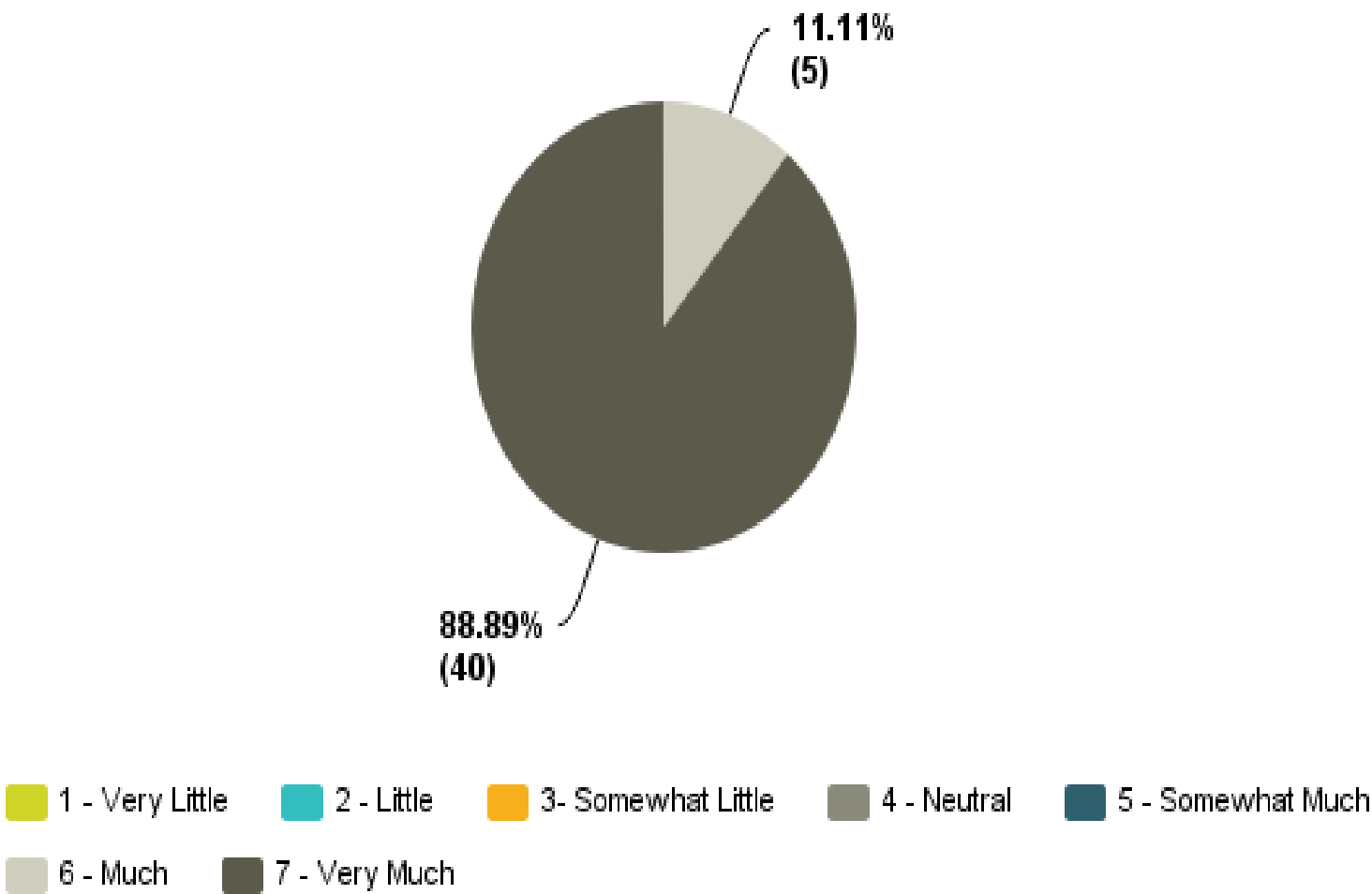
# Q2: How easy was it to talk with the telemedicine provider?

Answered: 45 Skipped: 1



### Q3: How much did the telemedicine provider seem to care about you as a person?

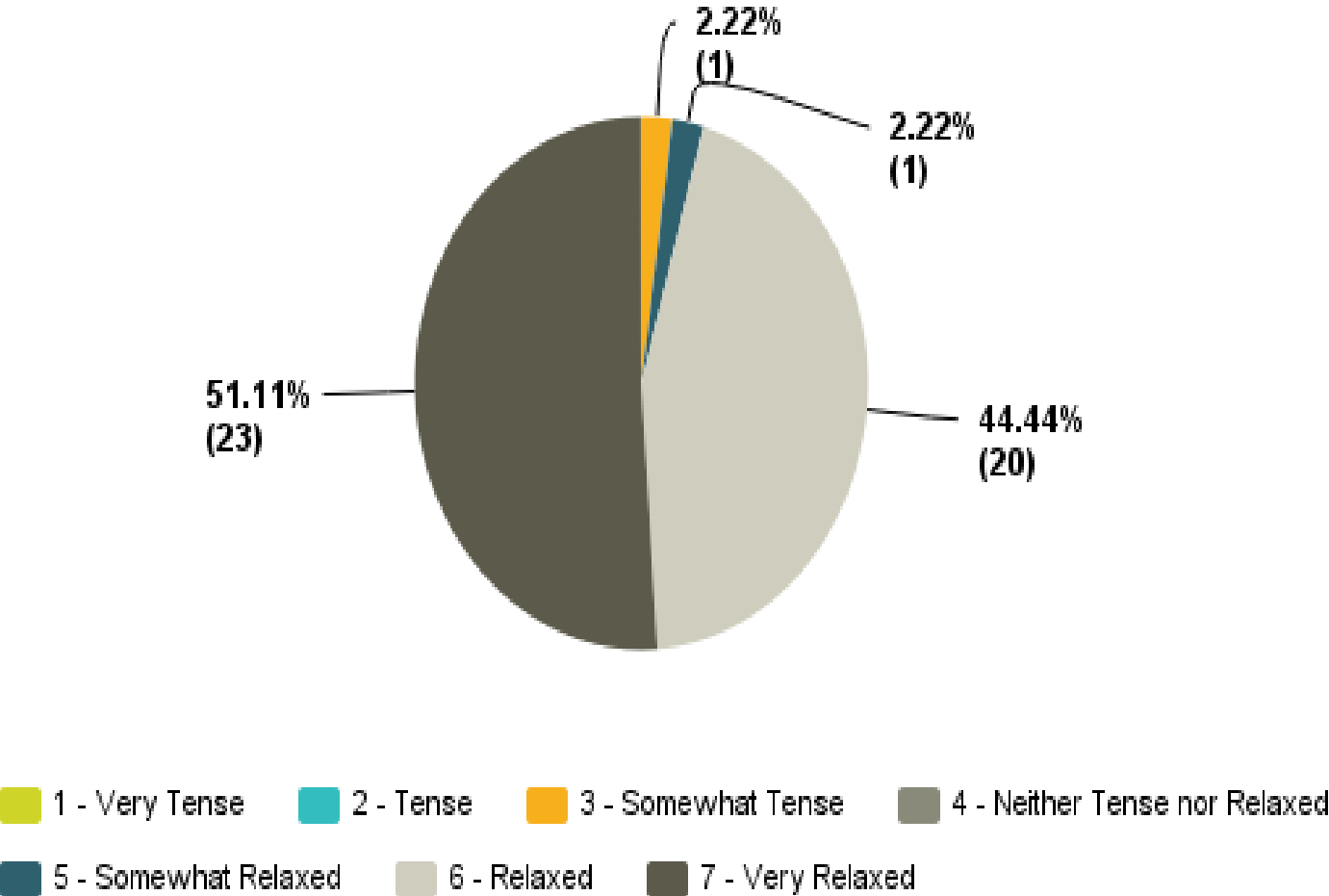
Answered: 45 Skipped: 1





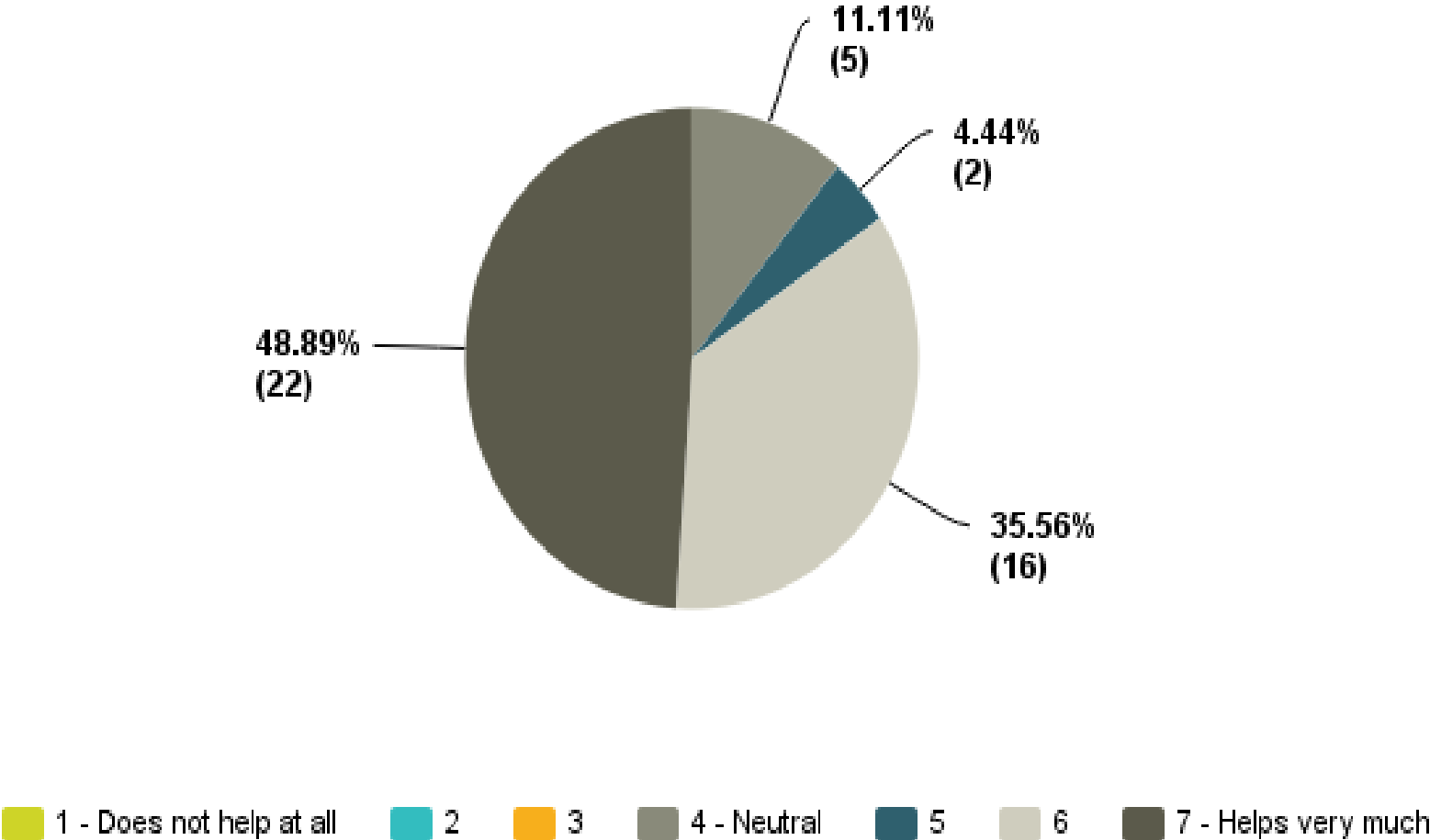
# Q4: How did you feel during the telemedicine session?

Answered: 45 Skipped: 1



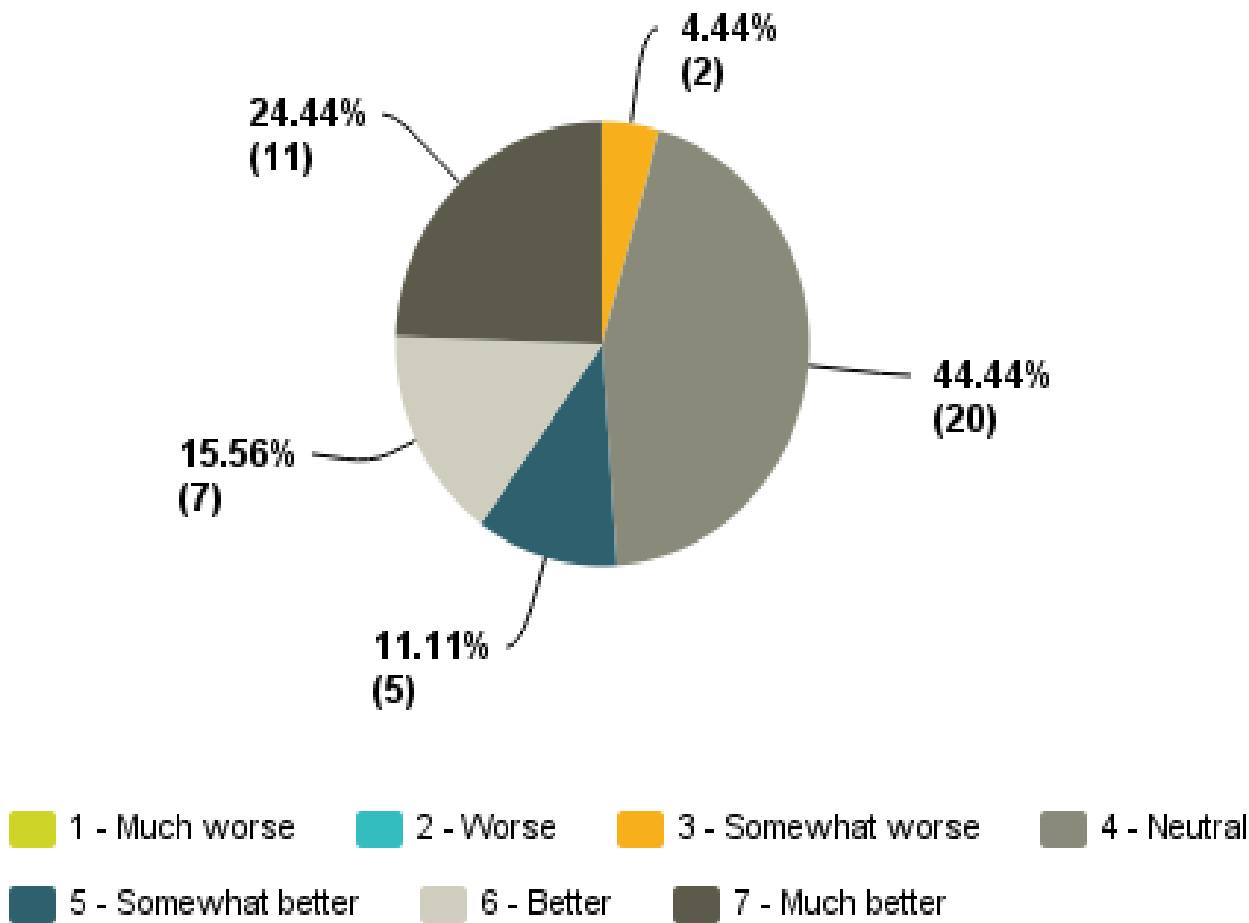
# Q5: Do you think use of telemedicine helps with delivery of your care?

Answered: 45 Skipped: 1



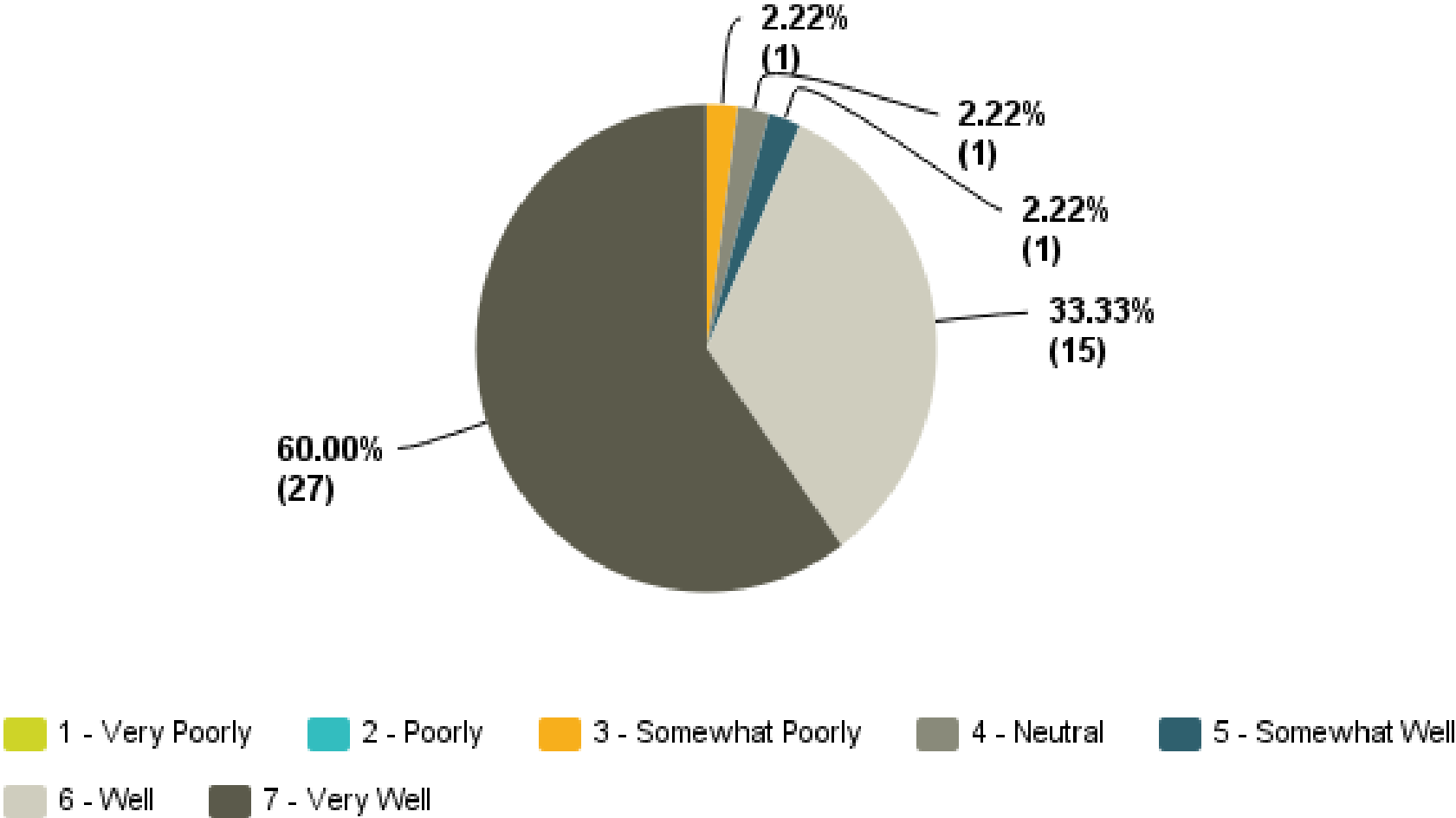
# Q6: Do you think your telemedicine session was as good as a regular in-person visit?

Answered: 45 Skipped: 1



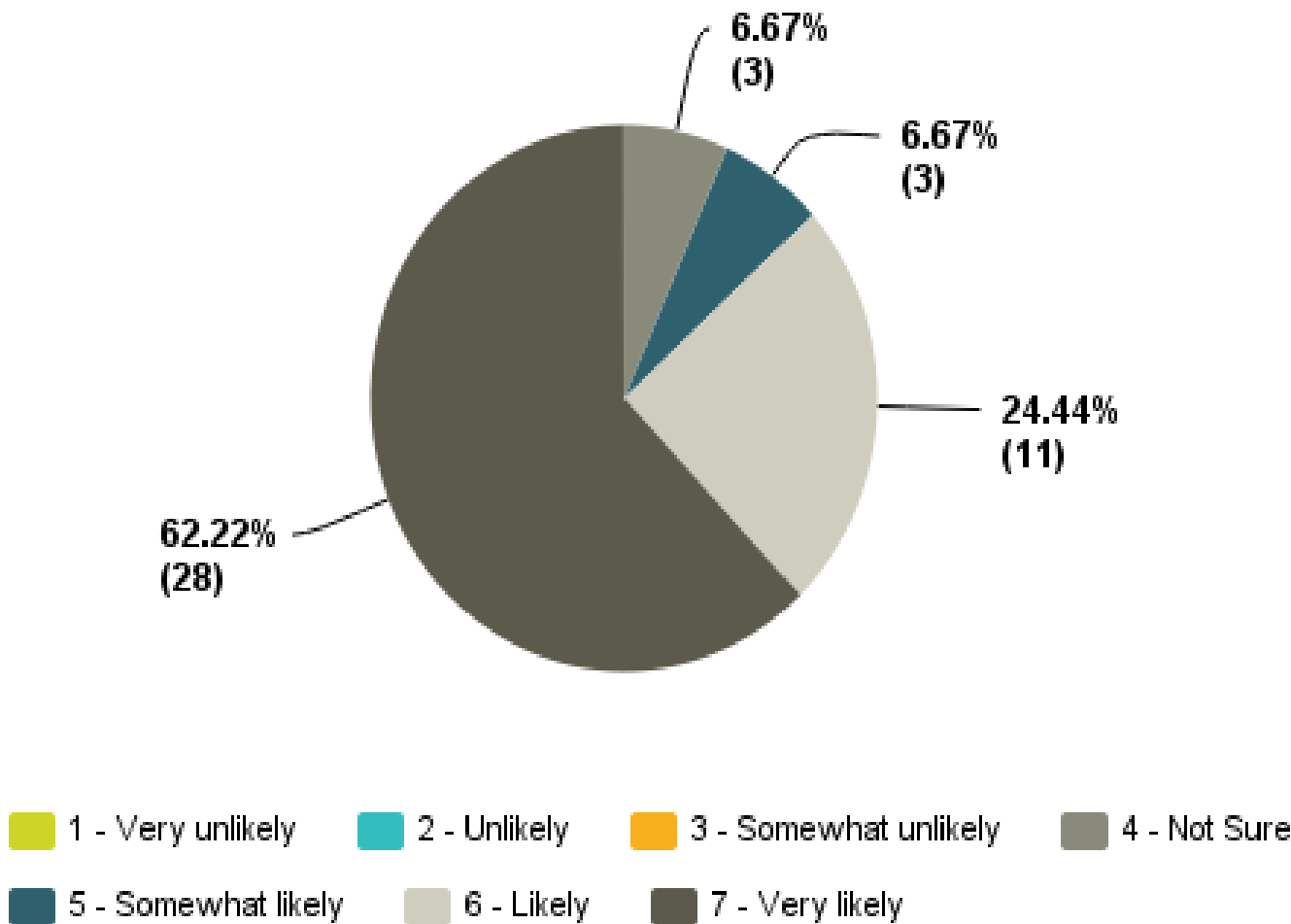
# Q7: How did the telemedicine equipment work today?

Answered: 45 Skipped: 1



# Q8: How likely are you to recommend telemedicine to someone else?

Answered: 45 Skipped: 1



# Contact Information

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