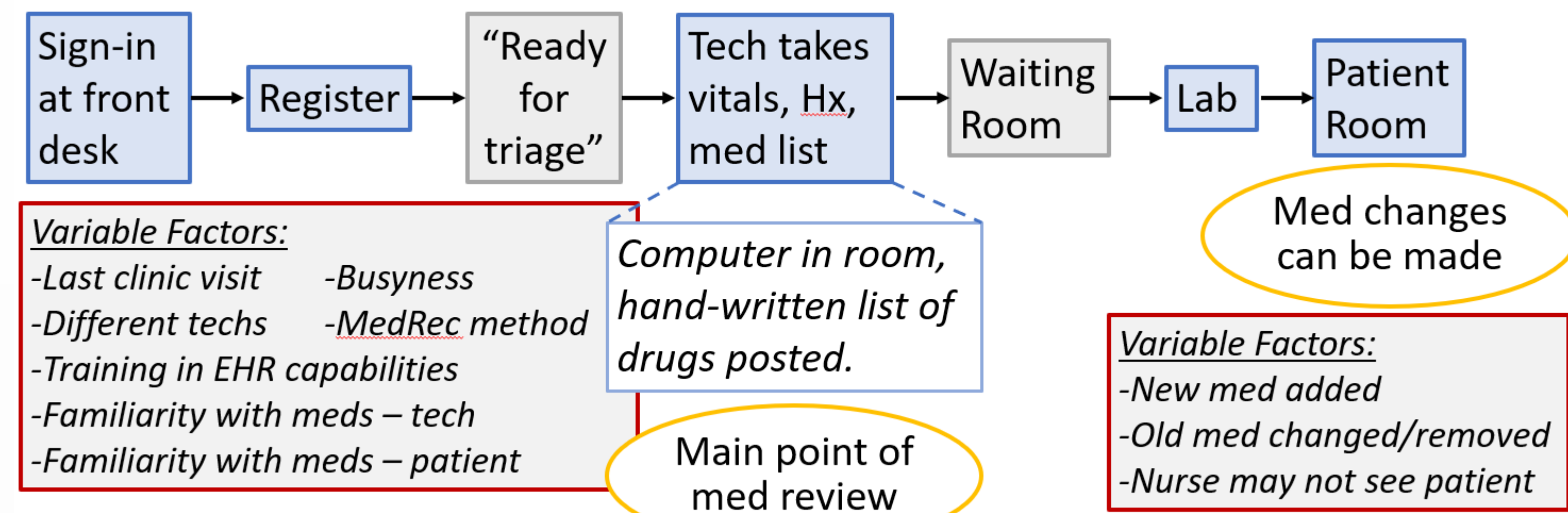


Purpose

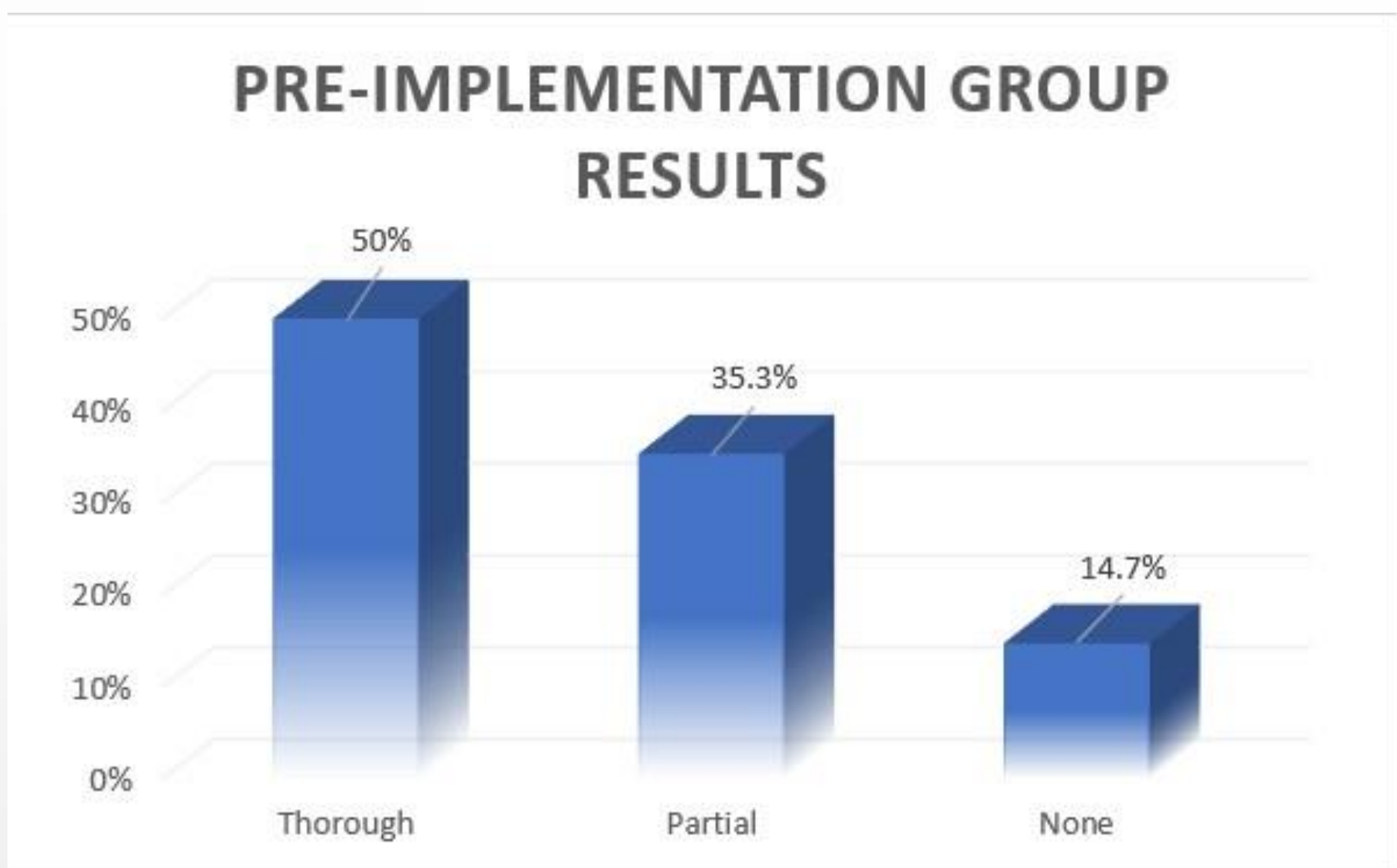
Utilizing the PDSA cycle, the purpose of this project was to identify an area of improvement and implement a change to positively affect accuracy and adherence to the practice of medication reconciliation at the University of Kentucky Markey Cancer Center, Multidisciplinary Clinic (MCC MDC).

Current Knowledge



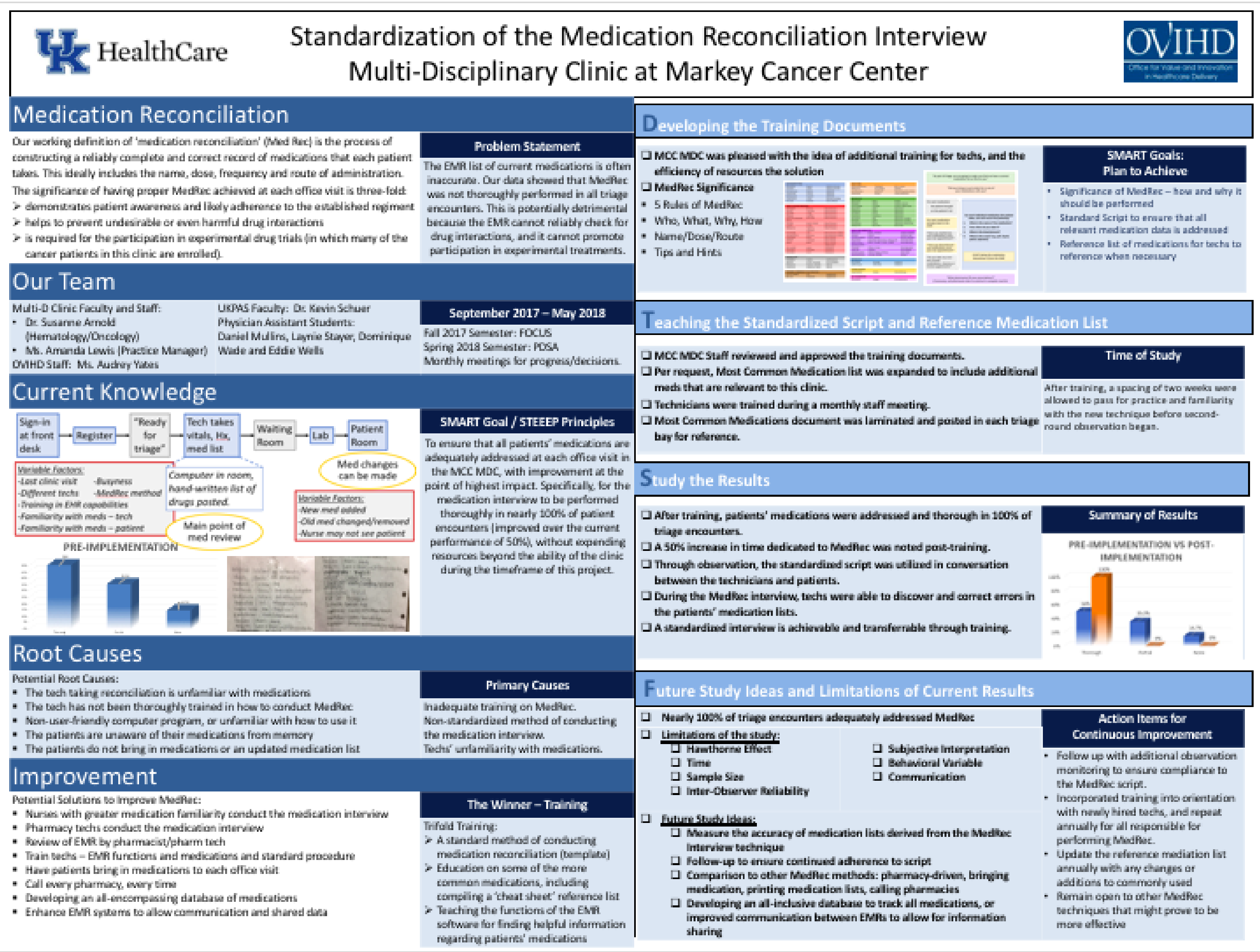
Identify the Problem

The EMR list of current medications is often inaccurate. Our data showed that MedRec was **not thoroughly performed** during all triage encounters. This is potentially detrimental because the EMR cannot reliably check for potential drug interactions, correlate medication regimen with patient outcomes, and it cannot promote participation in experimental treatments.



SMART Goal

- To ensure that all patients' medications are adequately addressed at each office visit in the MCC MDC, with improvement at the point of highest impact.
- Specifically, for the medication interview to be performed thoroughly in nearly 100% of patient encounters (improved over the current performance of 50%).
- We wanted to do this without expending resources beyond the ability of the clinic during the timeframe of this project.



Root Cause Analysis

- Inadequate training on conducting MedRec
- Unfamiliarity with medications by MedRec interviewer
- Non-user-friendly EMR program, or unfamiliar with how to use it
- Patients are unable to recall their medications
- Patients do not bring medications or an updated medication list

Select the Improvement: Standardized Training for Techs

Trifold Medication Reconciliation Training

- Importance and Relevance of MedRec
- Standardized Script for MedRec Interview
- Reference list of most common medications

"As part of triage, we are going to make sure that we have a correct medication list on file for you."

"Did you bring an up-to-date list or any of your medications with you?"

For each medication

- the patient brought
- on the patient's list

For each medication already listed in the EMR:

"Have you started any new medications since your last appointment?"

"Have you discontinued any medications since your last appointment?"

"Do you take any over-the-counter medications, vitamins or herbal supplements?"

"What pharmacies fill your prescriptions?"

If necessary, call pharmacies later to construct a complete med list.

GASTROINTESTINAL

Famotidine	Pepcid	GERD/H2 blocker
Ranitidine	Zantac	GERD/H2 blocker
Esomeprazole	Nexium	GERD/PI
Omeprazole	Prilosec	GERD/PI
Pantoprazole	Protonix	GERD/PI
Ondansetron	Zofran	Nausea/Vomiting
Docusate	Senokot	Stool softener

HEART & BLOOD PRESSURE

Amlodipine	Norvasc	Blood Pressure
Atorvastatin	Tenormin	Blood Pressure
Candesartan	Coreg	Blood Pressure
Diltiazem	Cardizem	Blood Pressure
Hydrochlorothiazide	Microzide	Blood Pressure
ACEI	Zestril, Prinivil	Blood Pressure
Lisinopril	Cosart	Blood Pressure
Losartan	Toprol XL	Blood Pressure
Metoprolol	Lopressor	Blood Pressure
Furosemide	Lasix	Blood pressure, edema
Lisinopril/ACEI	Zestril/ACEI	Blood pressure, edema
Clopidogrel	Plavix	Blood Thinner
Warfarin	Coumadin	Blood Thinner
Aspirin	Bayer	Blood Thinner, inflammation
Atorvastatin	Lipitor	Cholesterol
Pravastatin	Pravachol	Cholesterol
Simvastatin	Zocor	Cholesterol

RESPIRATORY

Claritin		Antihistamine
Albuterol	ProAir, Proventil	Bronchodilator
Fluticasone	Flonase, Cutivate	Steroid
Prednisone	Deltasone, Rayos	Steroid

VITAMINS / MINERALS / ELECTROLYTES

Ferrous Sulfate	Iron	Supplement
Klor-Con	Potassium	Supplement

ENDOCRINE

EE/Norethindrone	"Multiple"	Birth Control
Metformin	Glucophage	Diabetes
Levothyroxine	Synthroid	Thyroid (Hypothyroidism)
Tamoxifen	Floxar	Urinary Retention

NEUROLOGY

Alprazolam	Xanax	Anxiety
Diazepam	Valium	Anxiety, Seizures
Chlorazepate	Tranxene	Anxiety, Sleep Issues
Bupropion	Zyban	Depression
Citalopram	Celebra	Depression
Fluoxetine	Prozac	Depression
Trazodone	Traxodon	Depression
Paroxetine	Paxil	Depression, Anxiety
Seizures	Seizure	Seizures, Anxiety
Verapamil	Effor	Depression, Nerve Pain
Gabapentin	Neurontin	Nerve Pain

PAIN & INFLAMMATION

Meloxicam	Mobic, Violes	Arthritis (NSAID)
Sulindac	Clinoril	Arthritis, Pain (NSAID)
Cyclobenzaprine	Amitri, Fenbid	Muscle relaxant
Oxycodone	Oxycontin, Roxicodone, Xampox ER	Pain (Narcotic)
Hydrocodone	Norco, Vicodin, Lorcet, Lortab	Pain (Narcotic)
Acetaminophen	Ultram, Compap	Pain (Narcotic)
Transdermal	Celebrex	Pain (NSAID)
Celecoxib	Celebrex	Pain, Fever
Acetaminophen	Tylenol, Mapap, Offinav	Pain, Fever
Dexamethasone	Cortisone, Deltasone	Steroid

ANTIBIOTICS

Amoxicillin	Moxatag	Antibiotic
Azithromycin	Zithromax	Antibiotic

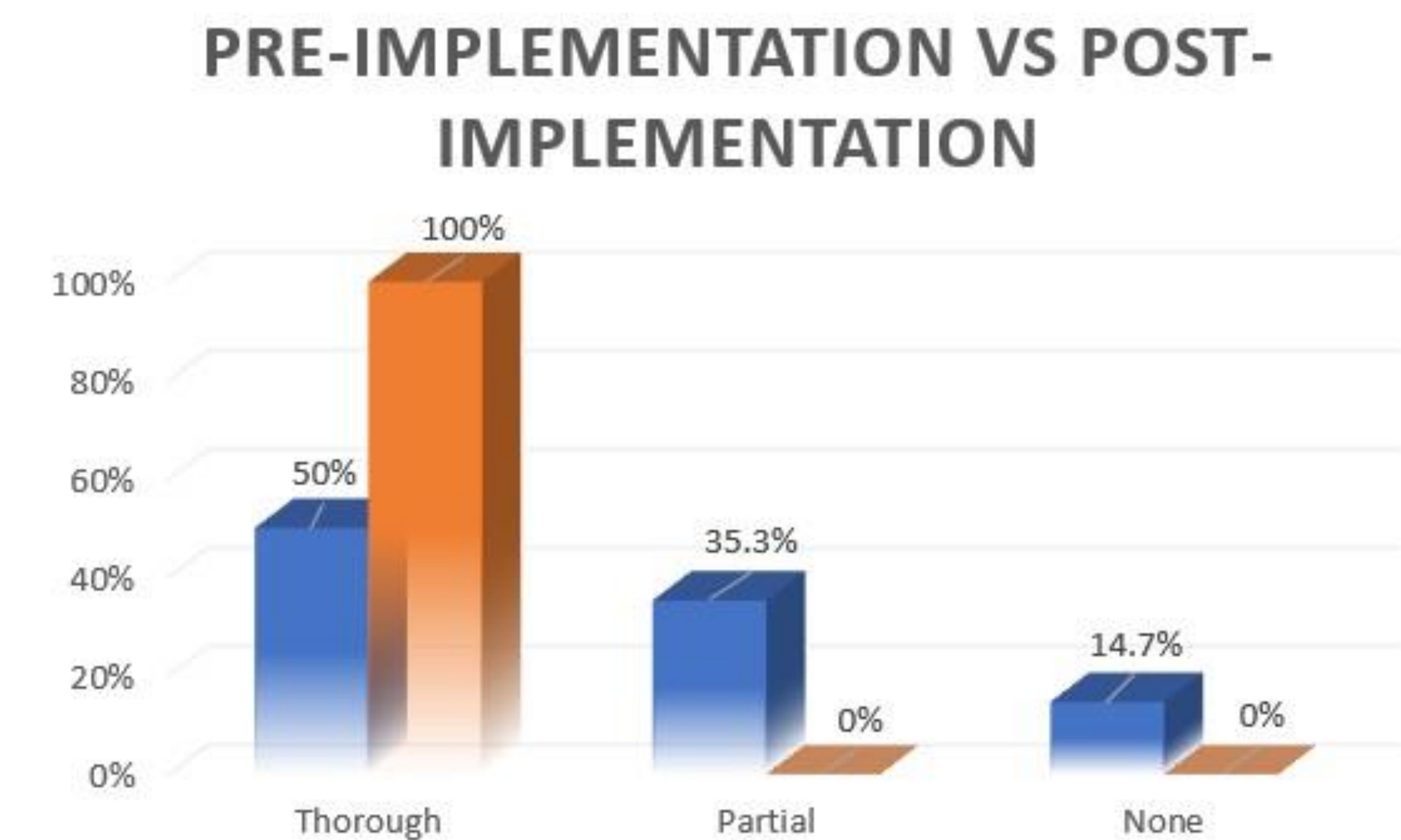
CHEMOTHERAPY

Capecitabine	Xeloda	Chemotherapy
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DRY MEMBRANES

Pilocarpine	Salagen	Dry Membranes
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Study the Results



Discussion

This project aimed to improve the process of medication reconciliation in order to prevent prescribing errors or adverse effects that stem from an inaccurate medication list. The involved clinic was found to have inconsistency in performing medication reconciliation – both in addressing medications with the patient and how medication review was conducted. Implementing a standardized training regimen with a script and reference list of common medications resulted in more consistent medication reconciliation process in the clinic, with medications being addressed for every patient. Those responsible for performing MedRec will benefit from this training material, with increased adherence to the protocol so that each patient is asked about medications. This enhancement will provide a more thorough medication review. It can serve as a starting ground for future studies to compare this standard interview to other methods of collecting patient medication information, and to study the accuracy of the resulting list.

Future Study Ideas

- Furthering our study to measure accuracy of medication list
- Comparisons to other MedRec methods:
- Follow-up to ensure continued adherence to script
- Developing KASPER-like system to track all medications