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Managing Product Development in Healthcare with Visual Management (Obeya)

LPPD Designing the Future Summit

June 27 and 28, 2019

Paul Paliani, Ian Perry, Matt Zayko

1) Clinical Design Product Development Process

LPPD Learning Group (Apr 2017 – Jan 2018)

4/4

Current Learning Group Companies

These high performing, non-competing organizations from diverse industries learn together how to better understand customer needs, effective design and development of products, processes, and creation of strong management systems.

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BOSE

TechnipFMC

HONDA

Honda R&D Americas

HermanMiller

LPPD Enablers and CDI

Topic	CDI Learning Level
PDVSM (Program Development Value Stream Mapping)	1 2 3 4 5
Obeya	1 2 3 4 5
Design Reviews	1 2 3 4 5
Milestones	1 2 3 4 5
Study Phase	1 2 3 4 5
Concept Paper	1 2 3 4 5

LPPD Principles

"A predictable schedule"

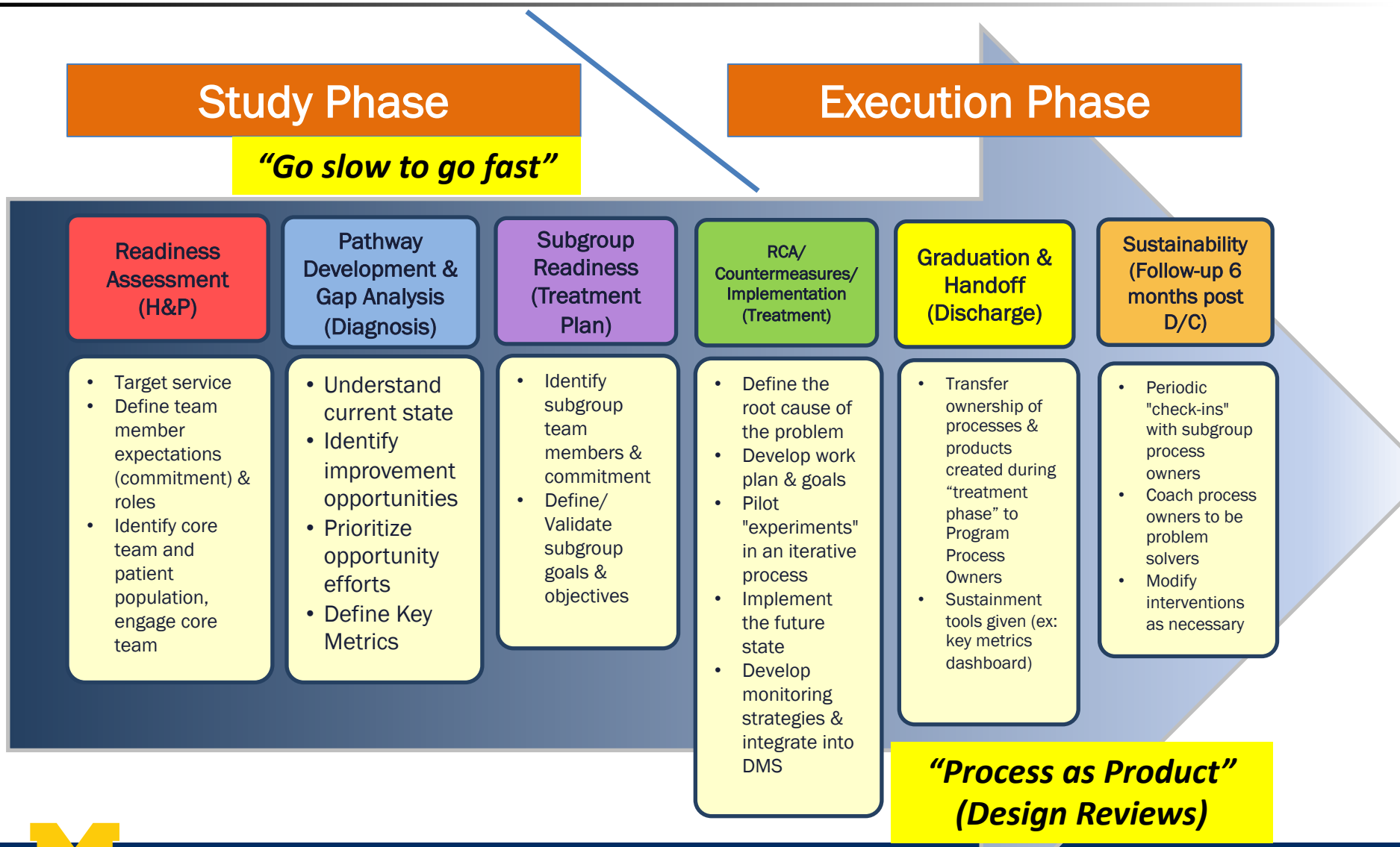
"Go slow to go fast"

"You can't manage a secret"

"It's ok to be red, it's not ok to stay red"

"Protect the milestones"

Clinical Design Product Development Process



Clinical Design Engagement Timeline

Clinical Design Engagement - Timeline Overview

	Program Phases		Time	Meeting Cadence	Who involved	Goals
0	**Program Intake**	*Referral*	Variable	Conversations	Dr. Marentette, Paul, and program faculty	Define program engagement, leads, and determine readiness
1	**Scoping: Readiness Assessment** *Observations, Interviews, and Gather Data*	*H&P*	2-4 months	2-6 meetings; *observations as needed*	Physician Lead, Dr. Marentette, Paul, PM, IE, PO, Analyst	Formalize program engagement, leads, and determine readiness
2	**Pathway Development & Gap Analysis**	*Diagnosis*	3 Months	6-7 meetings	Core Team	Understanding current state and identifying problems
3	**Subgroup Readiness**	*Treatment Plan*	2 Months	2-3 meetings	Physician Lead, Nurse Lead, Process Owner	Define expectations of subgroups and strategy, create alignment on program goals and focus
4	**RCA / Countermeasures / Implementation**	*Treatment*	7 Months	Kickoff, Subgroup kickoffs, Phase 4 Mid-Point Check-In, Ongoing subgroup meetings	Program leads, core team, and others as needed	Draft deliverables, pilots defined, pilot implementation, PDCA, final deliverables, handoff to Process Owners in meetings
5	**Graduation**	*Discharge*	1 Month	1 meeting (Larger group)	Graduation: Program leads & Core Team, Subgroup Members	Highlight subgroup work, communicate final deliverables and ongoing points of contact
6	**Sustainment**	*Follow-up*	First 6 Months Post Graduation	Periodic check-ins at discretion of PM	PM & process owners	Ensure success of implemented work
		Total:	**15-17 months**			

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"A predictable schedule"

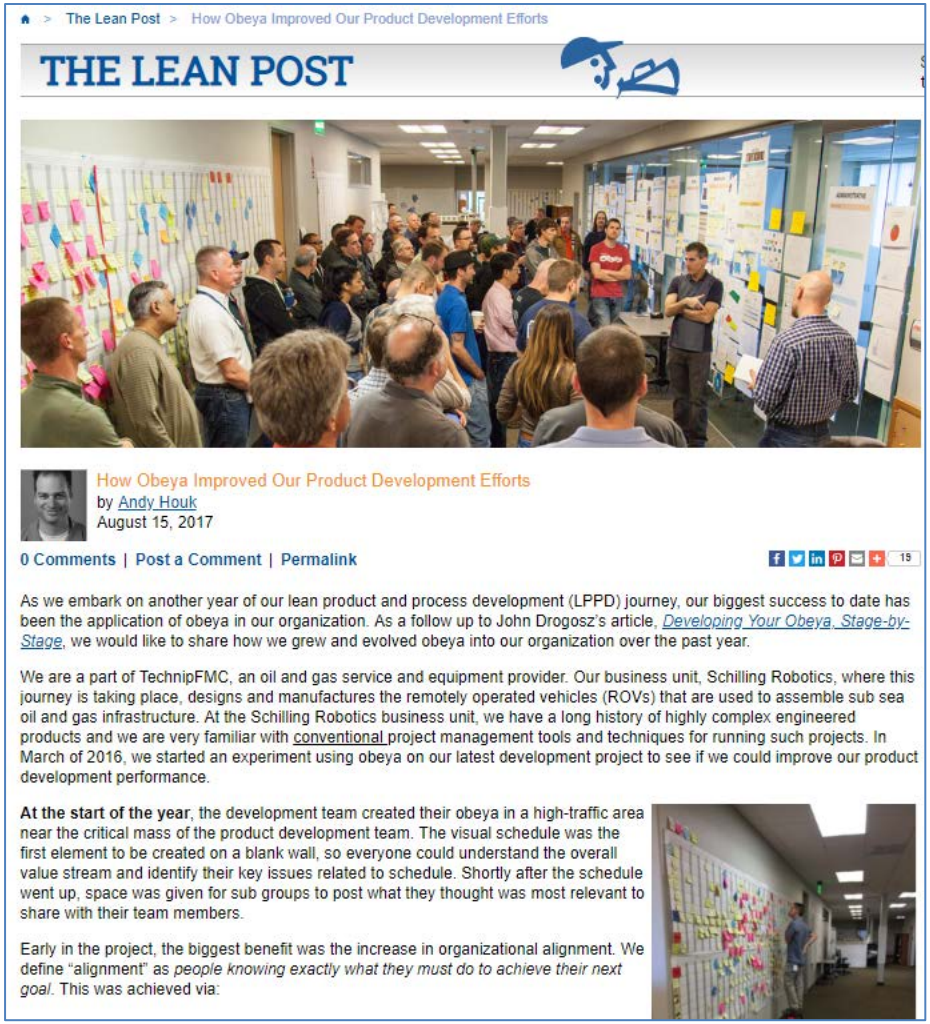
2) Clinical Design Obeya Management System

How to Get Started

1. What team project or challenge are you trying to solve?
2. Where can you post information?
    - Find a space – be creative
3. Can you carve out 2 to 4 hours to work as a team to start building your Obeya? (It's a team activity)
4. Are you willing to treat this like an experiment?
    - Deciding what to put on your Obyea (and how to display it) will change over time
    - Get started with "stand-ups" - they may be clunky at the beginning
5. Can you schedule in a 10 min reflection after every other Stand-up?

"It's better to PDCA your way through the fog, than trying to make everything perfect when you get started." Dr. Jack Billi

LEI Blog Posts



> The Lean Post > How Obeya Improved Our Product Development Efforts

THE LEAN POST

How Obeya Improved Our Product Development Efforts
by Andy Houk
August 15, 2017

0 Comments | Post a Comment | Permalink

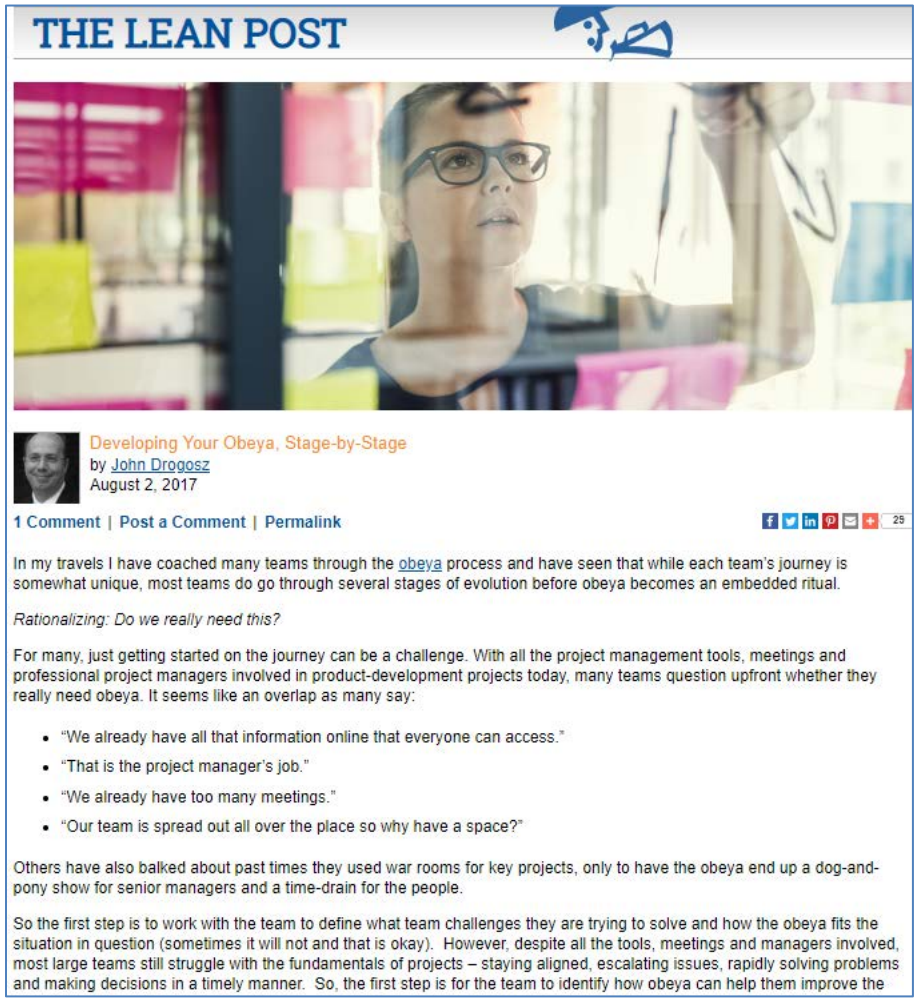
As we embark on another year of our lean product and process development (LPPD) journey, our biggest success to date has been the application of obeya in our organization. As a follow up to John Drogosz's article, *Developing Your Obeya, Stage-by-Stage*, we would like to share how we grew and evolved obeya into our organization over the past year.

We are a part of TechnipFMC, an oil and gas service and equipment provider. Our business unit, Schilling Robotics, where this journey is taking place, designs and manufactures the remotely operated vehicles (ROVs) that are used to assemble sub sea oil and gas infrastructure. At the Schilling Robotics business unit, we have a long history of highly complex engineered products and we are very familiar with conventional project management tools and techniques for running such projects. In March of 2016, we started an experiment using obeya on our latest development project to see if we could improve our product development performance.

At the start of the year, the development team created their obeya in a high-traffic area near the critical mass of the product development team. The visual schedule was the first element to be created on a blank wall, so everyone could understand the overall value stream and identify their key issues related to schedule. Shortly after the schedule went up, space was given for sub groups to post what they thought was most relevant to share with their team members.

Early in the project, the biggest benefit was the increase in organizational alignment. We define "alignment" as *people knowing exactly what they must do to achieve their next goal*. This was achieved via:

https://www.lean.org/LeanPost/Posting.cfm?LeanPostId=771



THE LEAN POST

Developing Your Obeya, Stage-by-Stage
by John Drogosz
August 2, 2017

1 Comment | Post a Comment | Permalink

In my travels I have coached many teams through the obeya process and have seen that while each team's journey is somewhat unique, most teams do go through several stages of evolution before obeya becomes an embedded ritual.

Rationalizing: Do we really need this?

For many, just getting started on the journey can be a challenge. With all the project management tools, meetings and professional project managers involved in product-development projects today, many teams question upfront whether they really need obeya. It seems like an overlap as many say:

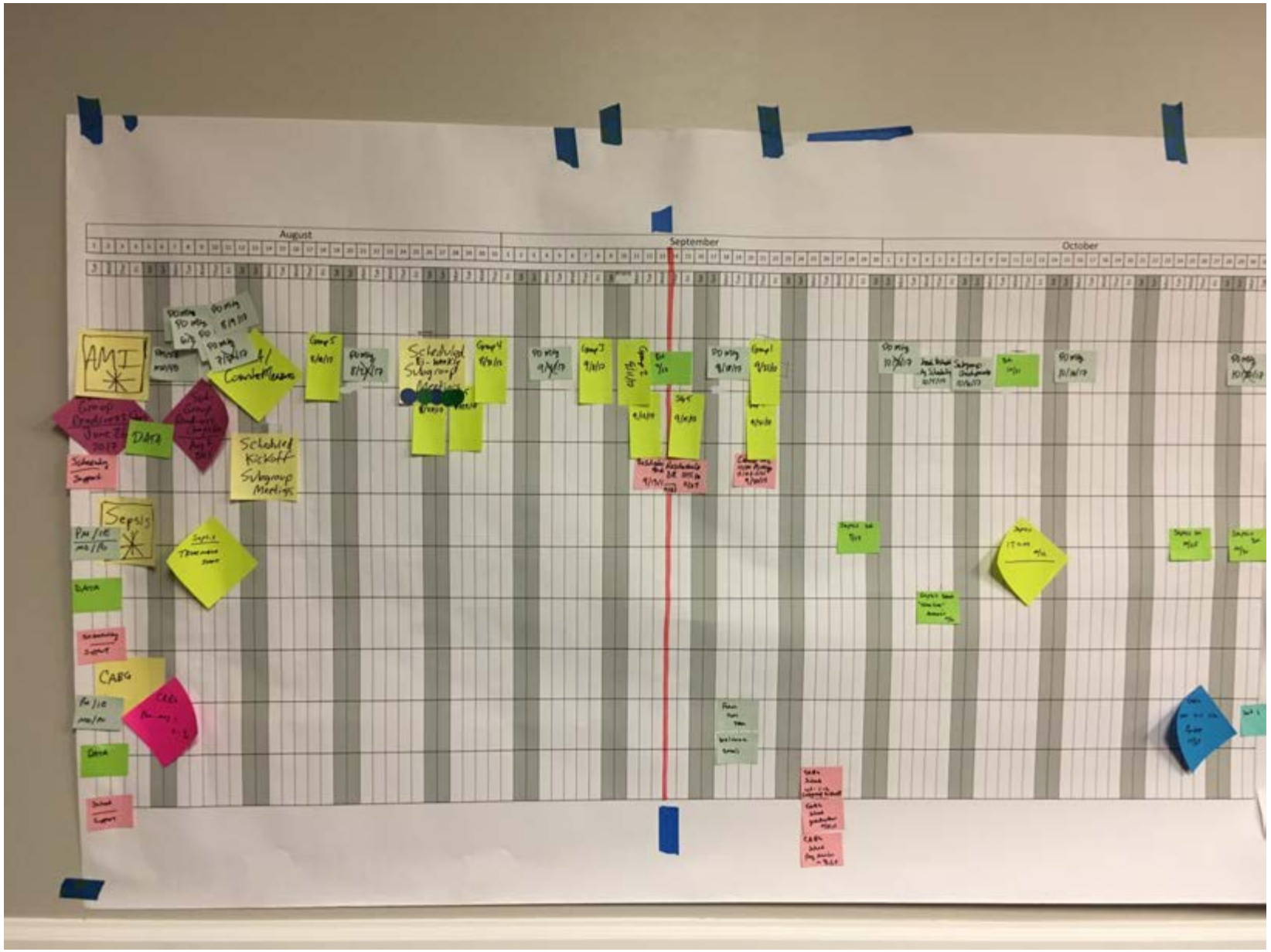
- "We already have all that information online that everyone can access."
- "That is the project manager's job."
- "We already have too many meetings."
- "Our team is spread out all over the place so why have a space?"

Others have also balked about past times they used war rooms for key projects, only to have the obeya end up a dog-and-pony show for senior managers and a time-drain for the people.

So the first step is to work with the team to define what team challenges they are trying to solve and how the obeya fits the situation in question (sometimes it will not and that is okay). However, despite all the tools, meetings and managers involved, most large teams still struggle with the fundamentals of projects – staying aligned, escalating issues, rapidly solving problems and making decisions in a timely manner. So, the first step is for the team to identify how obeya can help them improve the

https://www.lean.org/LeanPost/Posting.cfm?LeanPostId=765

Obeya Experiment (9/13/17 – 10/4/17)



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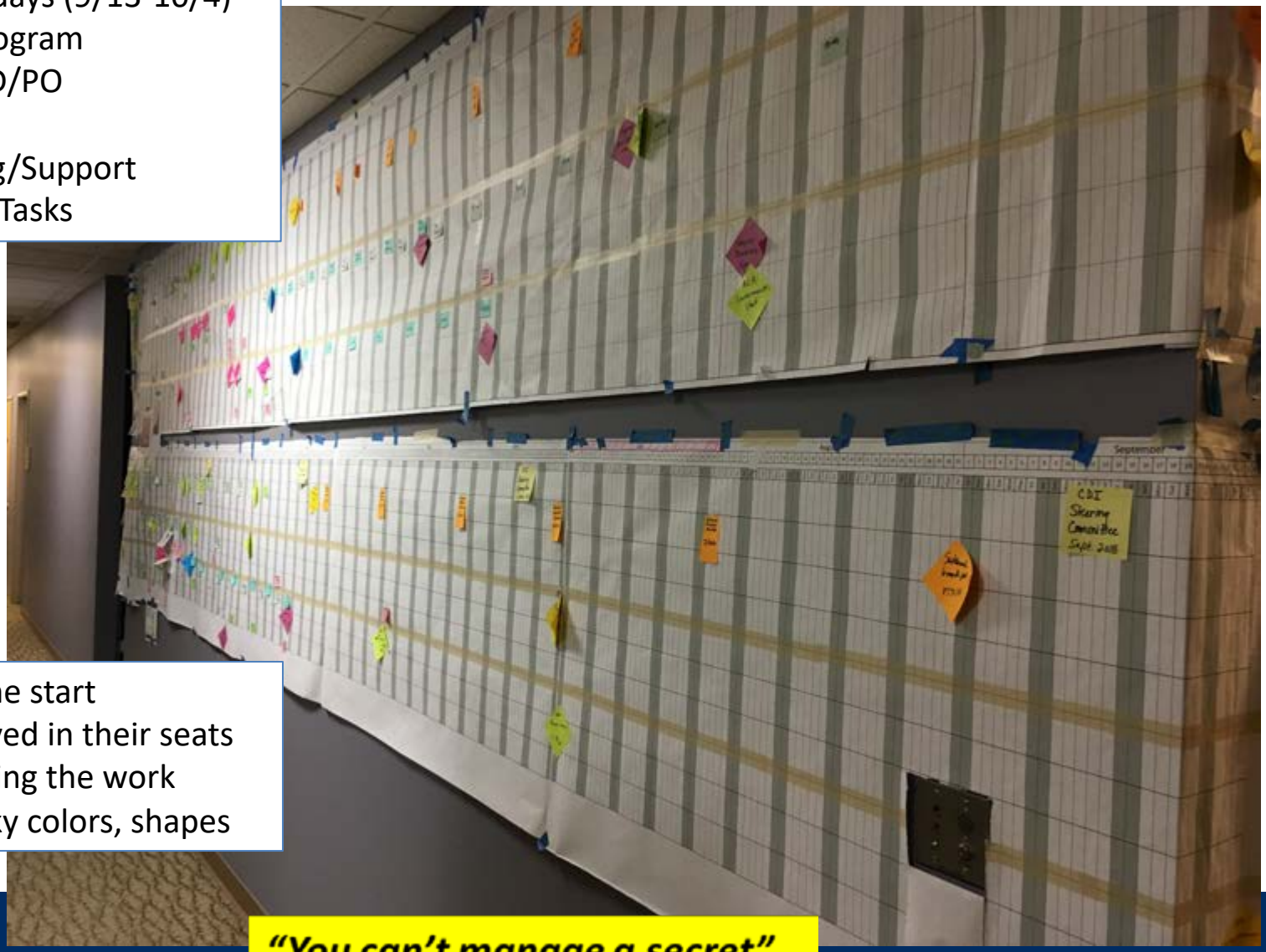
Obeya v1.0 (10/15/17)

- Four Wednesdays (9/13-10/4)
- 3 rows per program
  - PM/IE, MD/PO
  - Data
  - Scheduling/Support
- Milestones & Tasks



- Skeptical at the start
- The team stayed in their seats
- Then “up” doing the work
- Hurdles: sticky colors, shapes

“You can’t manage a secret”

Obeya v2.0 (Feb. 2018 - June 2018)

- Maintain the weekly standups
- Post timelines every week
- Continue to “get reps” on the process

- Separate timelines for each program
- Four months per scroll
- Four rows* (added overall program row, PM/IE/MD/PO, Data, Support)
- Co-locate between two buildings
- “Obeya” is more than the timelines

Obeya v3.0 (June 2018 – May 2019)

- Retreat 6/6/18
- Eliminated weekends on timelines,
- 4 months fit on one wall
- Standardized rows, colors
- Six rows (program, MD/PO, PM/IE, Data, Scheduling, Support/Partners)
- Added Pokemon cards
- Created “Program Walls”

- “Rules” for guests
- Invented the “Red Card” Andon process

Obeya v3.0

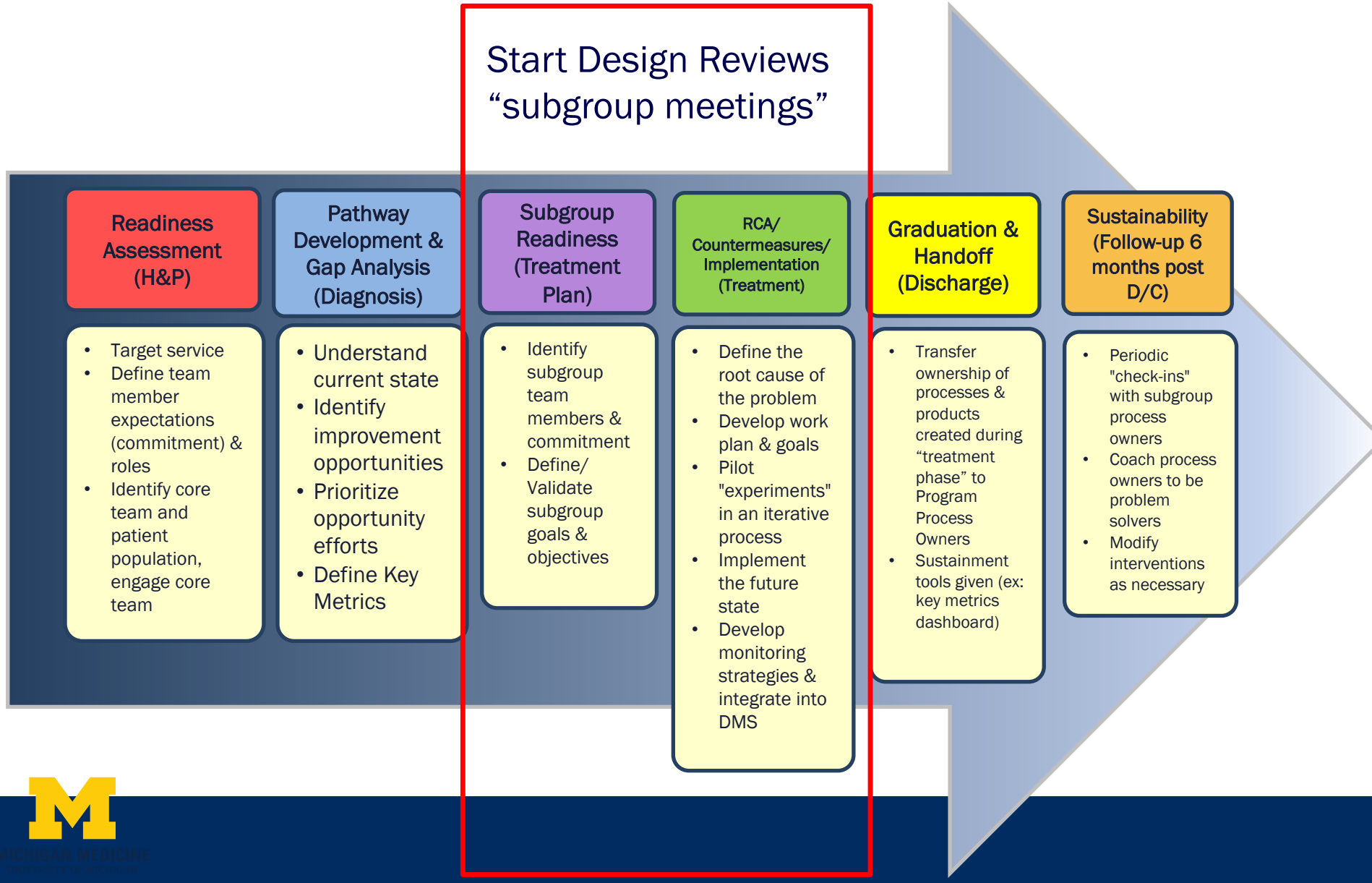
Walk Through – Sample CDI Obeya

1. Station 1
   - v1.0 Program Schedule
   - Key/directions/rules
2. Station 2
   - v2.0 / v3.0 Program Schedules
   - Red Card area
3. Station 3
   - Game Plan wall

3) How Clinical Design Develops Products

Design Reviews

Start Design Reviews
"subgroup meetings"



Design Review Experiments

1. Technical Design Reviews
   - Biweekly subgroup meetings
   - Root cause analysis, countermeasure development, product (process) development, prototypes

2. Integration Design Reviews
   - Biweekly program level meetings
   - Alignment, create product (process) launch plans, control plans

3. Summary A3 Reviews
   - Monthly intra CDI meetings (Larry, Paul and Mary)
   - Align to CDI processes, address barriers, suggest connections

AMI Technical Design Review Missions

1. Update and improve distribution of ACS patient education to AMI patients

2. Improve Cardiac Rehab referral rates for all eligible AMI patients

3. Improve transitions of care for AMI patients

AMI GAME Plan

Goal – Aim – Metric - Effort

Outcome Goal:

Reduce 30 day AMI readmissions from 17% to less than 13% by Sept. 1, 2018

Process Aim:

By Dec 1, 2018, distribute updated patient education folder to 80%+ AMI patients

Effort #1

- Update the ACS patient education folder so it contains updated, accurate, and applicable information for patients
- Ensure folder matches MiChart education module and is also available on the Clearing House for maximum use

Effort #2

- Link the ACS admission order set to:
  - A nursing order to distribute the folder
  - The ACS CPG

Metric

- % of AMI pts who have ACS CPG

Metric

- % of AMI pts who receive pt edu folder

Process Aim:

By Sept 1, 2018, refer 100% of eligible STEMI & NSTEMI Type 1 AMI patients to cardiac rehab

Effort #1

- Create automatic referral to cardiac rehab based on problem list

Effort #2

- Extend expiration date of CAR100 to 1 year, to maximize number of patients who attend; this also matches CMS

Effort #3

- Create verbiage to auto-populate in discharge summary if patient is not referred
- Provider to give reason why patient not referred
- Allows us to understand acceptable exceptions

Metrics

- % of AMI pts who are referred to cardiac rehab
- % of AMI pts who **would have** been referred if coded correctly
- Referral rate by d/c service
- Days from d/c to order
- % of AMI pts who attend Michigan Medicine's Cardiac Rehab
- Days from order (or d/c) to first rehab session
- Number of sessions completed
- Days from first to last session

Process Aim:

By Sept 1, 2018, 90% of eligible STEMI & NSTEMI Type 1 AMI patients will receive a follow-up appt. within 14 days of hospital discharge

Effort #1

- Create AMI Discharge Checklist
- Post checklist on 7th floor workroom monitors
- Monthly meetings with new Residents for education of processes
- Education for Attendings prior to Rounding on service

Effort #2

- Create AMI Discharge Summary Dotphrase

Effort #3

- Interventional Cardiology to own uncomplicated STEMIs

Effort #4

- Create STEMI Post-Discharge Appt. process from CCU

Effort #5

- Create NSTEMI & STEMI Post-Discharge Appt. process from 7A-7C

Effort #6

- Block appt. slots for Bridge patients 10am & 2pm M-F

Effort #7

- Standardize APP clinic start times 8am & 1pm

Effort #8

- Manual phone calls to APPs Patients & new patients for Providers at DF

Metrics

- % of AMI pts who received F/U appt. within 7-14 days of discharge
- No Show rates for Physicians & Nurse Practitioners at DF
- Blocked Bridge appt. slot utilization
- % of .amidischarge usage
- % of discharge orderset usage

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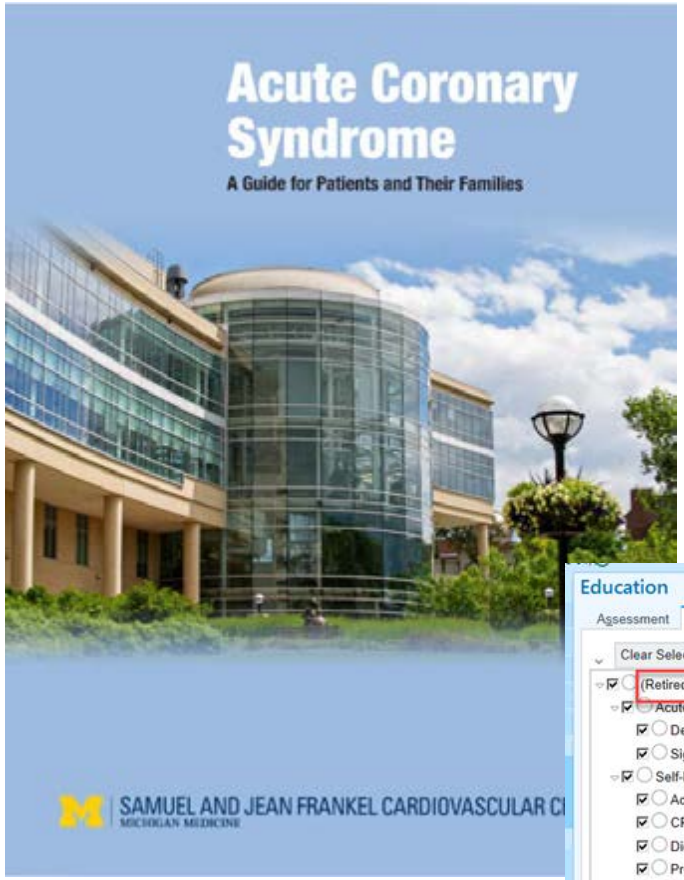
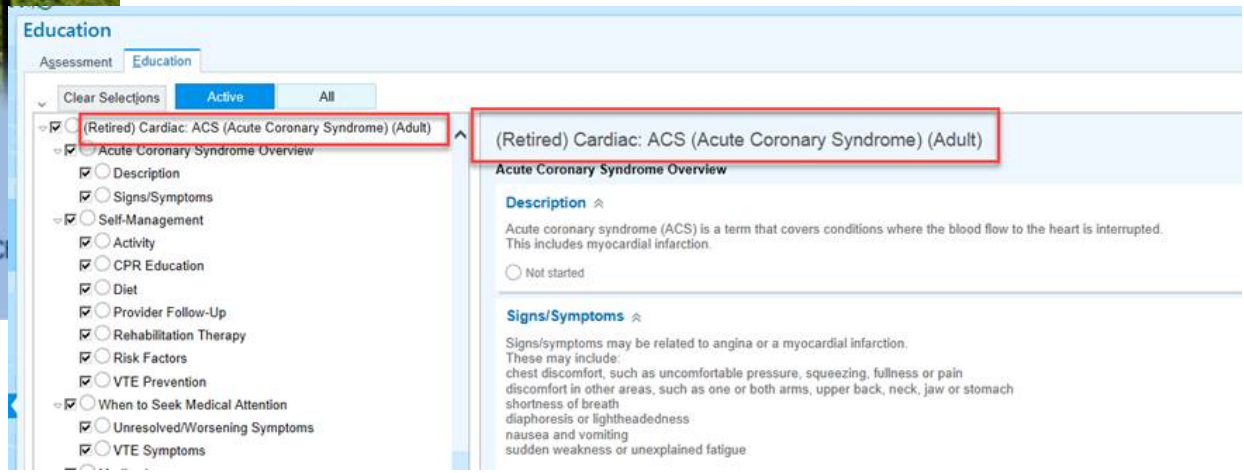
CLINICAL DESIGN AND INNOVATION

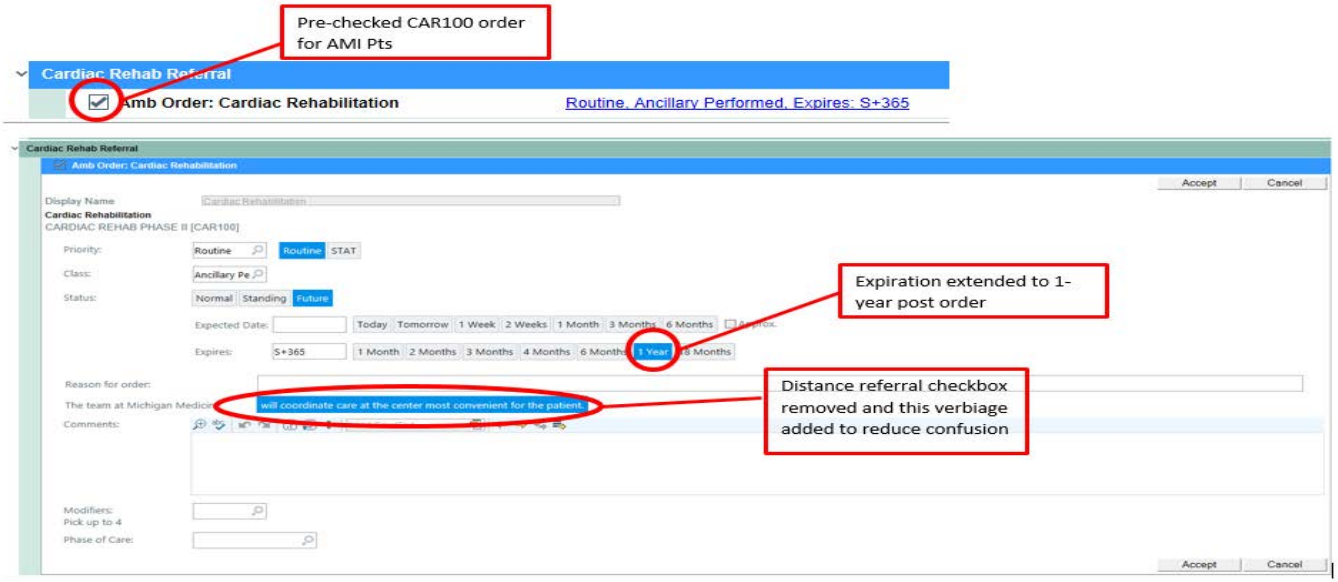
ACS Patient Education



- Updated ACS Education Module matches the content and order of updated ACS patient education folder
- Ensures that when nurse covers folder with patient they cover all necessary information



Cardiac Rehab Referral



Referral rate (5/22/2017):
STEMI = 85%
NSTEMI = 45%

Referral rate (2/22/2019):
STEMI = 89%
NSTEMI = 94%

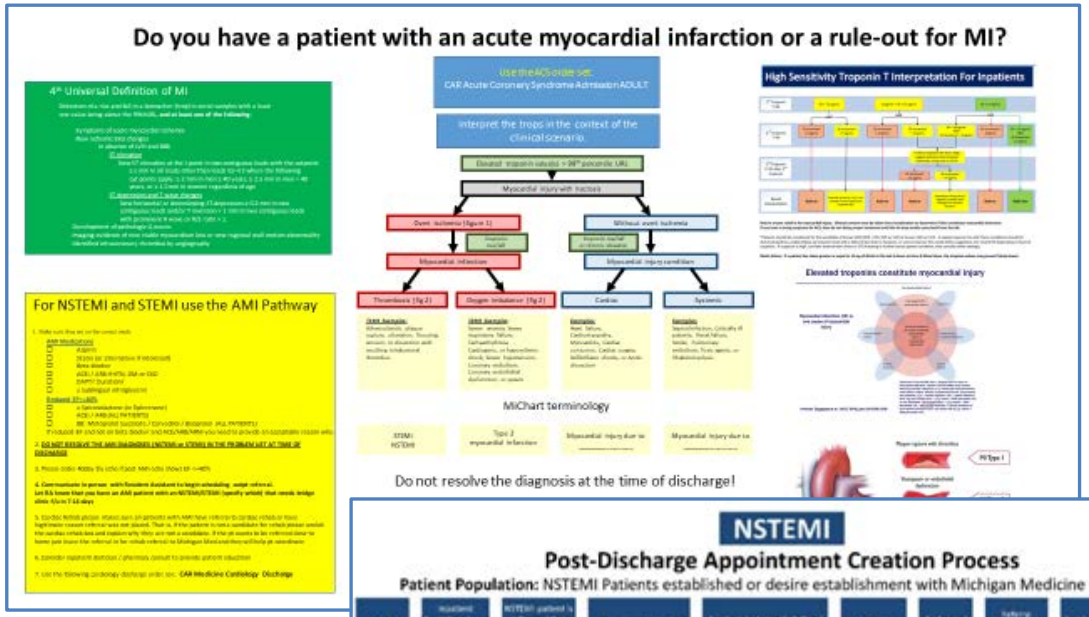
Included on Discharge Order sets:

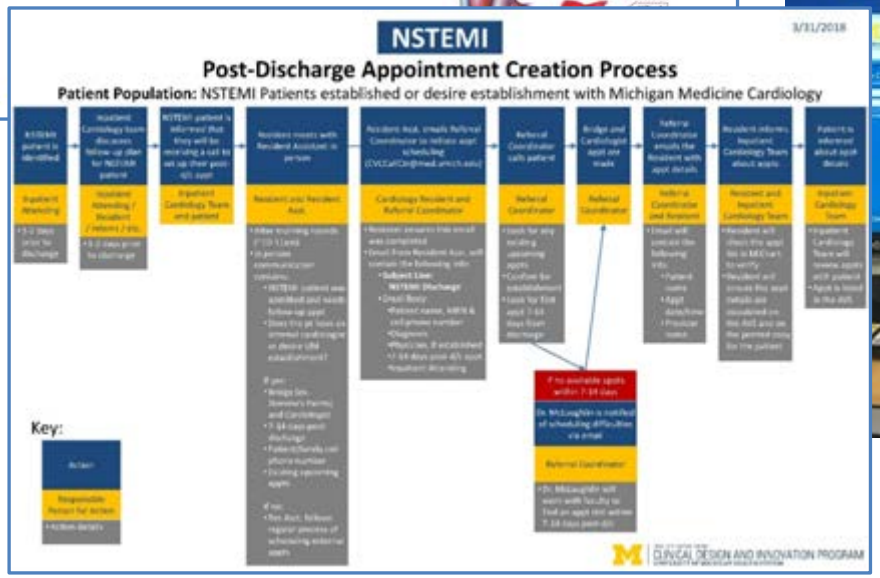
- **UM IP DISCHARGE CARDIOLOGY TRANSPLANT [3600039012]**
- **UM IP DISCHARGE CARDIOLOGY [3600039013]**
- **UM IP GEN MED DISCHARGE [3600039066]**
- **UM IP FAMILY MEDICINE DISCHARGE**

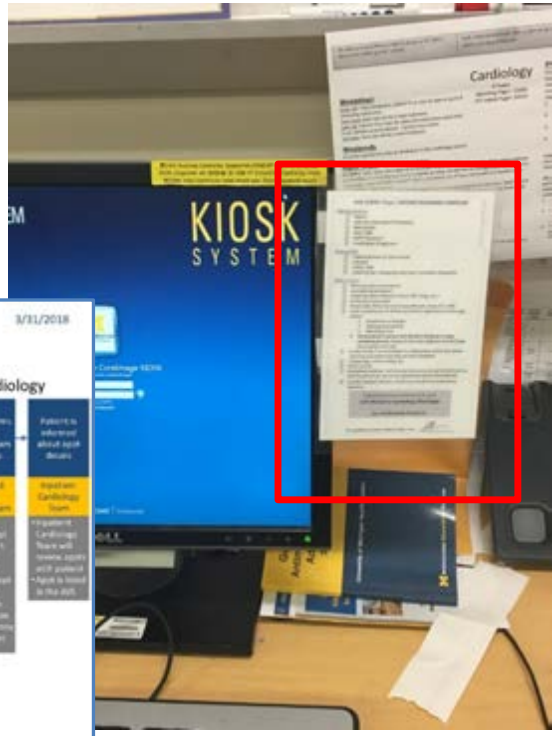
Included for patients with d/c dx of AMI, including following ICD-10 codes:
I21.01 ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02 ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09 ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.11 ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19 ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.21 ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29 ST elevation (STEMI) myocardial infarction involving other sites
I21.3 ST elevation (STEMI) myocardial infarction of unspecified site
I21.4 Non-ST elevation (NSTEMI) myocardial infarction
I21.9 Acute myocardial infarction, unspecified

New ICD10 code allows for easy separation of NSTEMI Type 1 vs. 2 (October 2017)

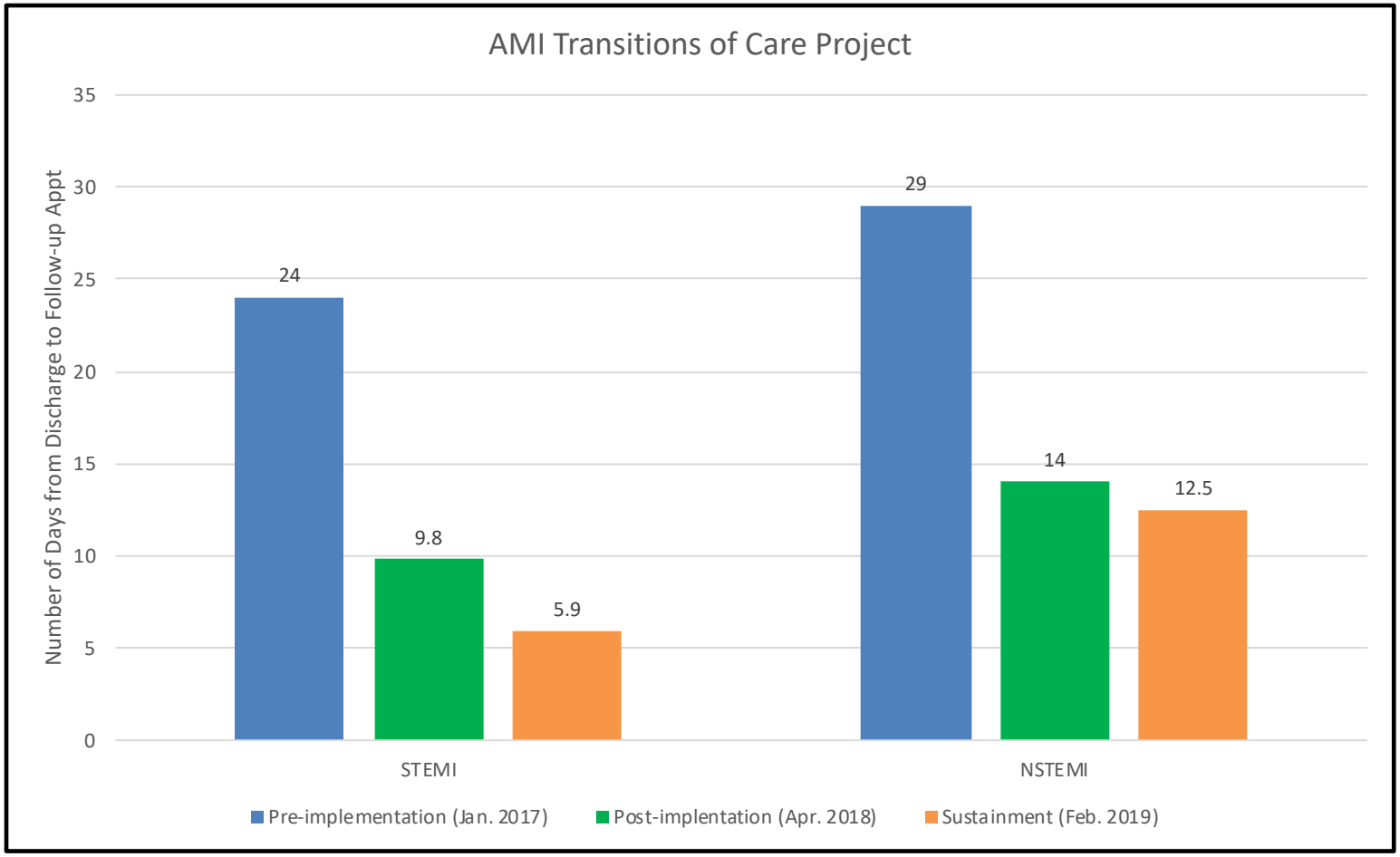
Monthly Resident Education meetings



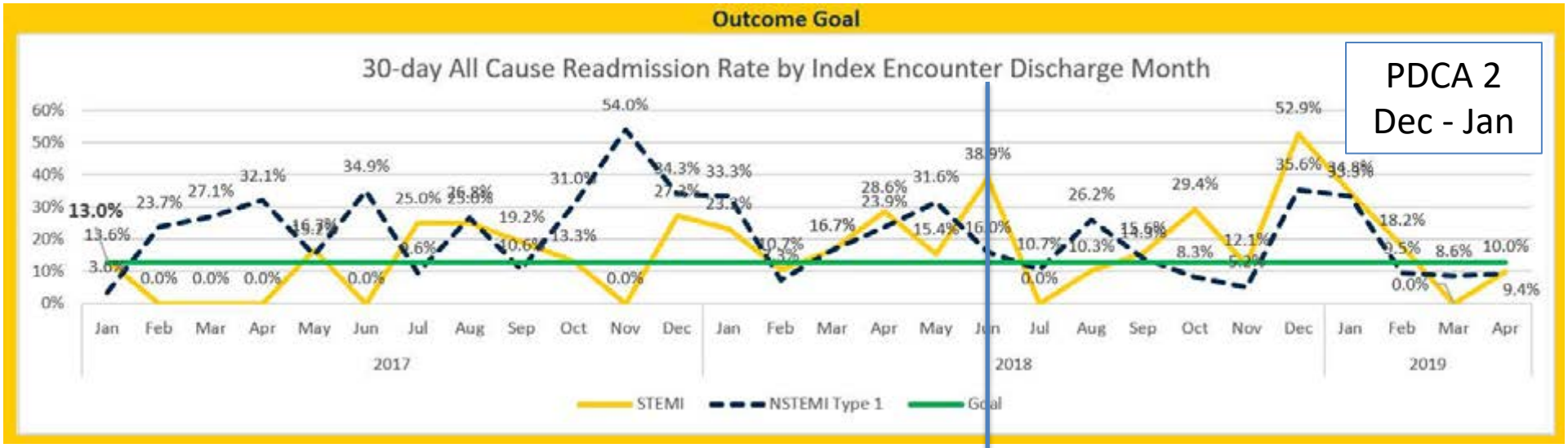




AMI Time to Follow-up Appt.



AMI Readmission Rates



Graduation
June, 2018

AMI Readmission Rates – FCVC Dashboard

FRANKEL CARDIOVASCULAR CENTER
MICHIGAN MEDICINE

Updated: 06/3/2019

	FY15	FY16	FY17	FY18	FY19 YTD	Benchmark	FY19 Q1	FY19 Q2	FY19 Q3	FY19 Q4	Measure Owner
Cardiovascular Medicine Outcomes											
Mortality											
- Cardiology O/E			0.80	0.75	0.67	0.84					
- reported as # obs dths/# exp dths											
AMI - Acute Myocardial Infarction Observed in hospital*											
AMI- Vizient O/E											
HF Heart Failure Observed in hospital											
HF-Vizient O/E											
Interventional Cardiology - Observed PCI *											
Death within 30 days of any EP Procedure											
- measure in validation phase											
30 Day Readmission Rates by dx or procedure											
Heart Failure - 30 day readmission rate*	22.6%	20.5%	20.4%	20.5%	20.1%	21.6%	22.6%	19.0%	19.1%		T. Koelling
		241	263	272	218		74	75	69		
		1173	1289	1330	1084		327	395	362		
AMI -30 day readmission rate*	14.0%	14.5%	10.3%	14.4%	10.2%	16.3%	10.3%	11.7%	8.6%		A. Stein
		64	44	55	29		10	11	8		
		441	426	382	284		97	94	93		
Unscheduled readmit to any DRG w/in 30 days											
- Cardiology											

* Measures are publicly reported. Sites include Hospital Compare, UMHS Quality and Safety, Society of Thoracic Surgeons, and Leapfrog Group

Achieved or exceeded Target
Improved from previous value but did not achieve Target
Declined from previous value and did not achieve Target

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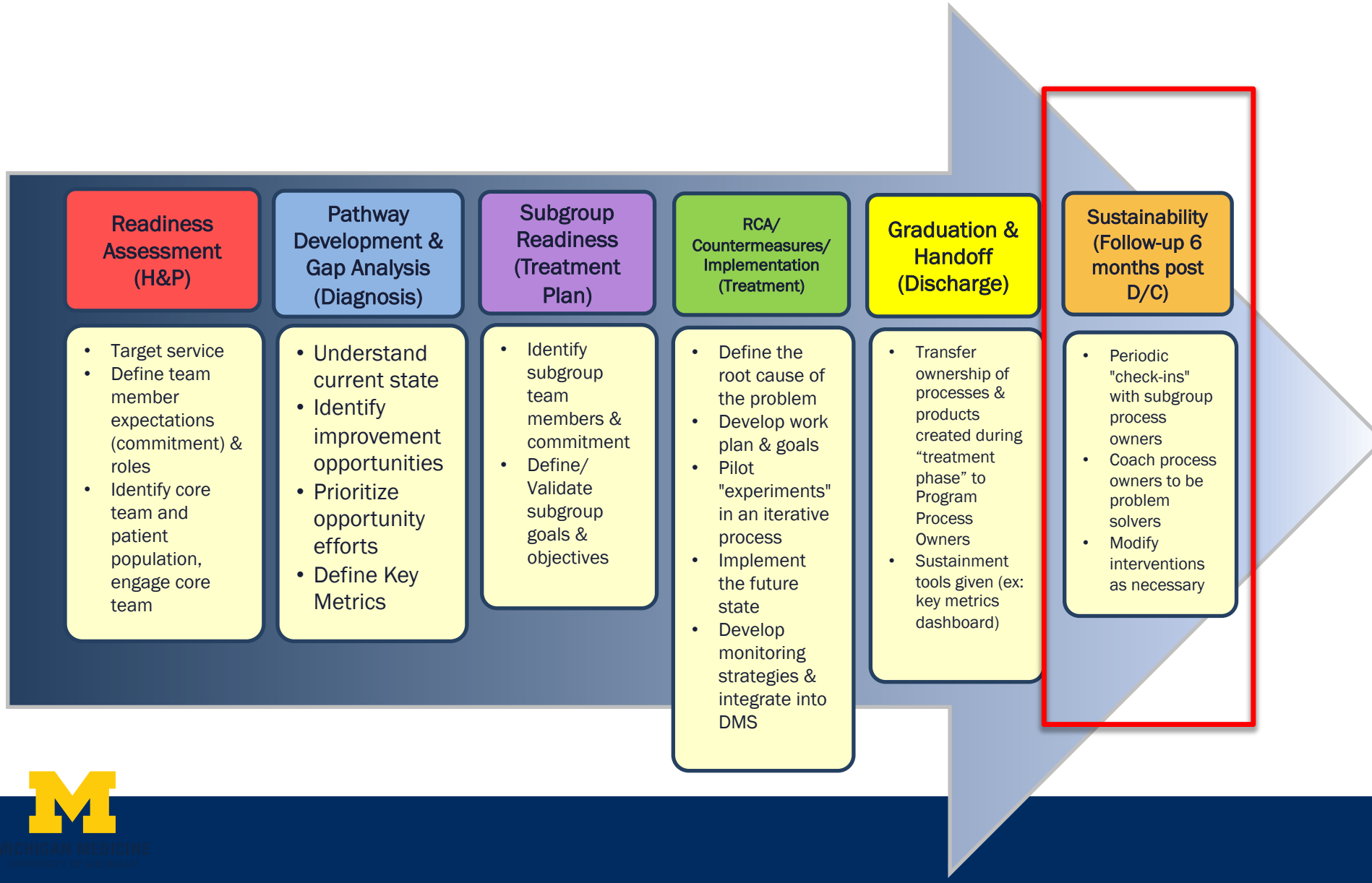
Clinical Design Product Development Process



Control Plan

AMI Process Owner Control Plan Program Sustainment

Outcome	Process Aim	Effort/Product/ Deliverable	Product "Go Live" date	Responsib	Metric(s) to Monitor	Location of Metric	Review Frequen	Sustainment Activity	Metric Goal	Control Limits of Me	Reaction Plan
Reduce 30 day AMI readmissions from 17% to less than 13% by Sept. 1, 2018	By Dec. 1, 2018, distribute updated patient education folder to 80% of AMI patients	ACS Patient Education Book	11/19/2018	Diane Lopez Bethany Lee-Lehner	% of AMI patients that receive the ACS book	Quality Analytics Report & information from BLL's team on number distributed	Monthly	*Diane and Bethany to review data together *If data <90%, then go to reaction plan	100%	<90%	*Discuss with RNs about ACS book delivery to patients *Ensure books available on the floors
		Link ACS book to Nursing order - CPG	9/27/2018	Diane Lopez	% of AMI patients that have documentation in MiChart	Quality Analytics Report	Monthly	*Diane review data *If data <90%, go to reaction plan	100%	<90%	Discuss with RNs about documenting ACS education
	By Sept. 1, 2018, refer 100% of eligible STEMI & NSTEMI Type 1 AMI patients to cardiac rehab	Automatic referral to cardiac rehab based on problem list	11/29/2017	Joseph Bryant & Sam Fink	% of AMI pts referred to cardiac rehab	Quality Analytics Report	Monthly	*Joseph (& team) review data *If data <90%, go to reaction plan	100%	<90%	If STEMI or NSTEMI Type 1 pt is not referred: 1) Look to see if pt was coded at d/c. This information is included in report sent to J. Beach & A. Stein. They will review. 2) If pt coded at d/c, look to see if valid reason given (likely included in d/c summary dotphrase. If not, chart review may be needed). 3) If pt coded at d/c AND no valid reason not to refer, reach out to discharging provider
		Cardiac Rehab Dotphrase for Non-referral	4/11/2018	Joseph Bryant & Sam Fink	Informs above metric	Quality Analytics Report	Monthly		100%	<90%	
		AMI Discharge Checklist with monthly educational meetings for new Residents	5/4/2018	Dr. Adam Stein	Educational meetings completed (Y/N)	Anecdotal	Monthly	*Continue to gather feedback and updates on cards and educational meetings	Y		Replace laminated cards with updates as needed
		AMI patients discharged on correct medications	8/9/18 Enhancements 1/11/19	Dr. Adam Stein & Jamie Beach	% of patients on the right medications/care path	Discharge AMI Meds workbench report in MiChart	Monthly	*Dr. Stein & Jamie to review data *If data <90%, go to reaction plan	100%	<90%	If AMI patients not being discharged with correct meds, chart review will be completed. Dr. Stein will stress medications during monthly orientation meeting with Residents.
		AMI Discharge Summary dotphrase	5/4/2018	Drs. Adam Stein Dr. Raymond Yeow	% of patients have the dotphrase on discharge summary	Quality Analytics Report	Quarterly	*Reach out to NPs to see if inpatient info is in Discharge Summary for next Provider appt. *If not completed, go to reaction plan	100%	<90%	*Reconvey to Residents during monthly education *Contact MiChart to update content, if needed
		AMI patients with follow-up appt. scheduled prior to discharge	4/1/2018	Dr. Adam Stein Nancy Dixson Ashley Dorton	% of AMI pts with f/up appt scheduled prior to d/c	Quality Analytics Report	Monthly	*Dr. Stein, Nancy, and Ashley to review data together *If <80%, go to reaction plan	90%	<80%	*Dr. Stein to alert Keli DeVries Add referral to AMI bridge clinic to discharge orderset (Tiffany vs. BRIDGE vs. PICCOLO) Populate AVS with educational info re: value of follow-up Create script for Ashley re: value of bridge clinic follow-up

4) Product/Process Planning Exercise
(scope a product to dev)
(create a mini program schedule)
(hands on – need sticky notes, pens)

LPPD Activity

LPPD Designing the Future Summit

Lean Product & Process Development (LPPD) Thought Exercise

Name: Heidi **Organization:** Michigan Medicine (CDI Team)

The Product or Process to be developed is….

Automatic Cardiac Rehab referral

Who needs to be on the team to create the process?

CDI team: Project Manager and Industrial Engineer

Clinic-Level: Lead Physician, Process Owner

MiChart Support

The ***Obeya Space*** where we will visually manage the work for the product will be located….

Phase 1: Green Road Hallway near Project Manager area

Phase 2: 777 building near Industrial Engineering area

Phase 3: North Ingalls Building near relocated Project Manager area

For your "product", what are the critical ***milestone points*** to determine on target vs. not on target

* Current state of cardiac rehab referral - how is it done now?

  Finalize list of diagnoses to trigger cardiac rehab referral

  What discharge ordersets contain the cardiac rehab referral

* Future state map - what do we want it to be?

* MiChart programming complete

* MiChart "Go Live" for cardiac rehab referral

LPPD Designing the Future Summit

Lean Product & Process Development (LPPD) Thought Exercise

Name:

The Product or Process to be developed is….

Who needs to be on the team to create the process?

The ***Obeya Space*** where we will visually manage the work for the product will be located….

For your "product", what are the critical ***milestone points*** to determine what is "on target" vs. not "on target"

*

*

*

*

*

LPPD Exercise for Participants

- Step 1: From top to bottom, Individually complete the exercise template for your own situation (8 minutes)
- Step 2: At your table, three people quickly share their template (6 minutes)
- Step 3: Three tables volunteer to share one template to with the audience (6 minutes)

Questions?

Appendix

Mini Obeya Calendar

2019																					2019																						
June																					July																						
3	4	5	6	7	10	11	12	13	14	17	18	19	20	21	24	25	26	27	28		1	2	3	4	5	8	9	10	11	12	15	16	17	18	19	22	23	24	25	26	29	30	31
Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri		Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed

How to Get Started with Obeya

1. Create a timeline
   - Dates across the top
   - Functions/swim lanes down the side (e.g. we stared with 3, expanded to 6 later)
2. Gather supplies
   - Sticky notes
   - Sharpies
3. Pull together a team with a project or a deliverable
4. Think of an upcoming Milestone (e.g. an important meeting, a deadline)
   - How can you measure if the meeting/deadline was “successful”?
   - Put this check list with the Milestone
5. Lay out the tasks (aligned to the functions) that would help make the Milestone successful
   - If you don’t know, make a list of tasks that will help you figure this out (“Traveling Hopefully”)
6. It’s okay to go backwards in time a bit
7. After you create a timeline (“program schedule”), start having “standups”
8. Do reflections after every other standup
9. Refer to LEI Blog posts on Obeya, and reach out to LPPD leads for advice

Obeya Experiment

Reply Reply All Forward IM

Paliani, Paul CD-WorkGroup; mzayko@umich.edu 9/8/2017

Special Guest for our next Work Group meeting (9/13/17) - Matt Zayko will be there !!!!

You replied to this message on 9/8/2017 2:14 PM.

Hi,

Matt Z is coming to our next workgroup meeting on Wednesday, 9/13. He is going to help us start building our first workplan for our OBEYA space. We are going to map out the workplan for CABG using a big calendar print out and lots of sticky notes!!!!

Please try to attend next week's meeting. It is going to be fun.

(We can have additional agenda topics as well and limit our exercise with Matt to just the first half of the meeting if that is what works best.)

Thanks

Paul P.

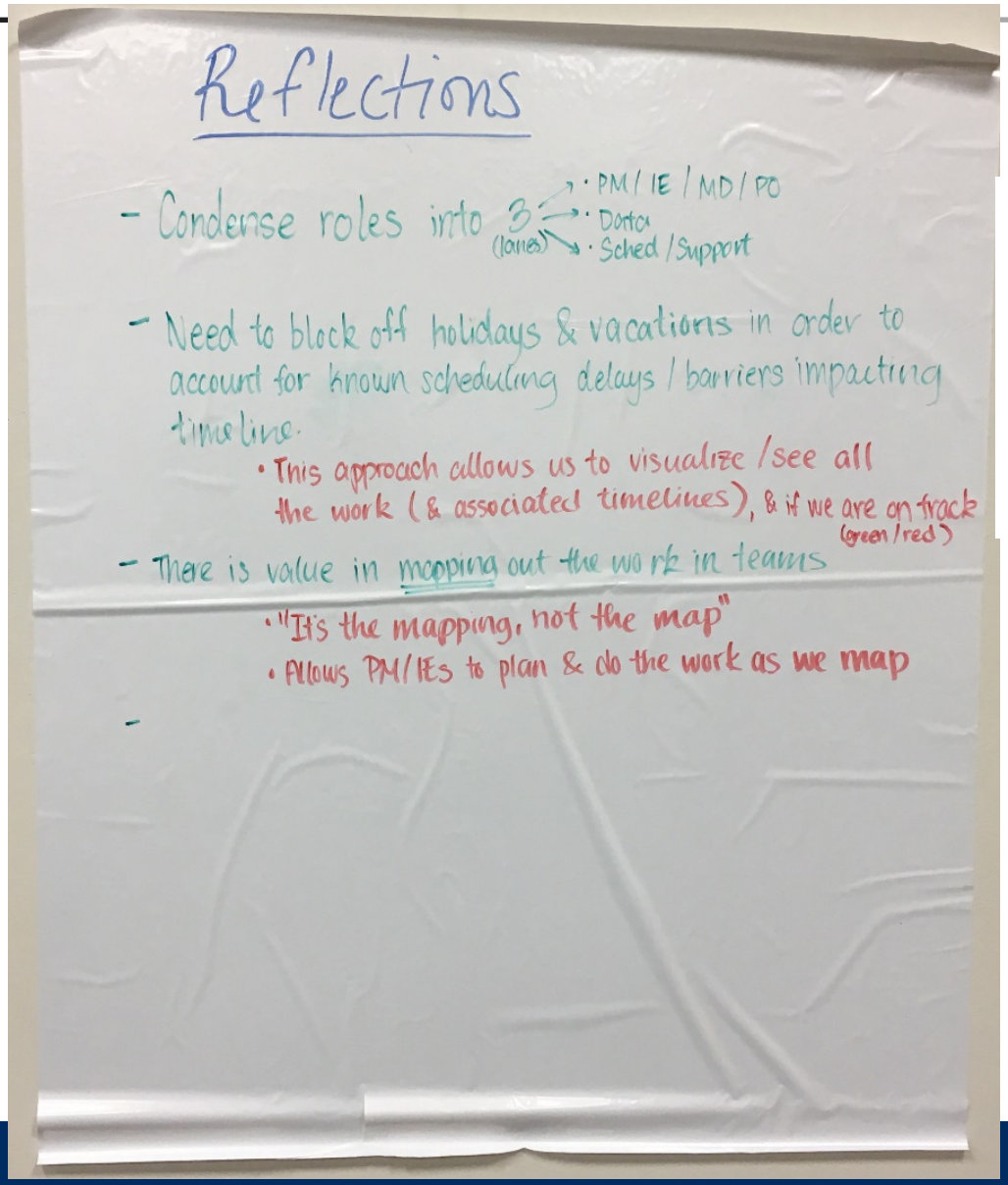
p.s. Matt is going to come back on 9/27 too. We will work on the overall CDI program tracking workplan at that meeting.

Building our Obeya

- Four sessions (regular Wednesday Workgoup meetings, 9/13, 9/20, 9/27 and 10/4, 2017)
- Decided to combine the "overall tracking" and "individual tracking" on to one workplan
- Started with AMI, laid out six programs over four sessions
- Added "supplemental Obeya" with four more programs

Obeya Experiment (9/13 – 10/4)

Obeya Experiment Reflections (9/13 – 10/4)



- Condense functions/roles into 3
- Adding the dimension of "time" to our work
- Value in "making" the plans

PDCA'ing our Obeya and Standups

v1.0 (Sep 2017-Feb 2018)

- Just get started
- Pick a topic "program"
- Dates across the top
- People/Roles/functions down the side
- Start at present time and work forward, or start with a deadline and work backwards
- Don't worry about the sticky colors/shapes
- Being able to "see" the tasks across time
- Working on the "map" was beneficial
- Have a facilitator, scribe, time keep for standup
- 3 min/program (2 min uninterrupted, 1 min questions)

v2.0 (Feb 2018-Jun 2018)

- Separate timelines
- Mobile Obeya
- Focus on Red items
- But, lose track of what's red and/or how long it's red
- Inconsistent timelines, confusing to guests
- Obeya is more than program timelines
- Getting in "reps"
- Never cancel standup

v3.0 (Jun 2018-May 2019)

- Standardized timelines
- Sticky colors match program phases
- Same roles/functions per swim lane row
- Added "Pokemon" cards for programs
- Documented standup "rules" for guests and team
- Added program "walls"
- Invented "red card" system for standup
- "Traveling Hopefully"

v4.0 (Jun 2019)

- United timelines and program walls
- Script for standup
- Visual accountability board

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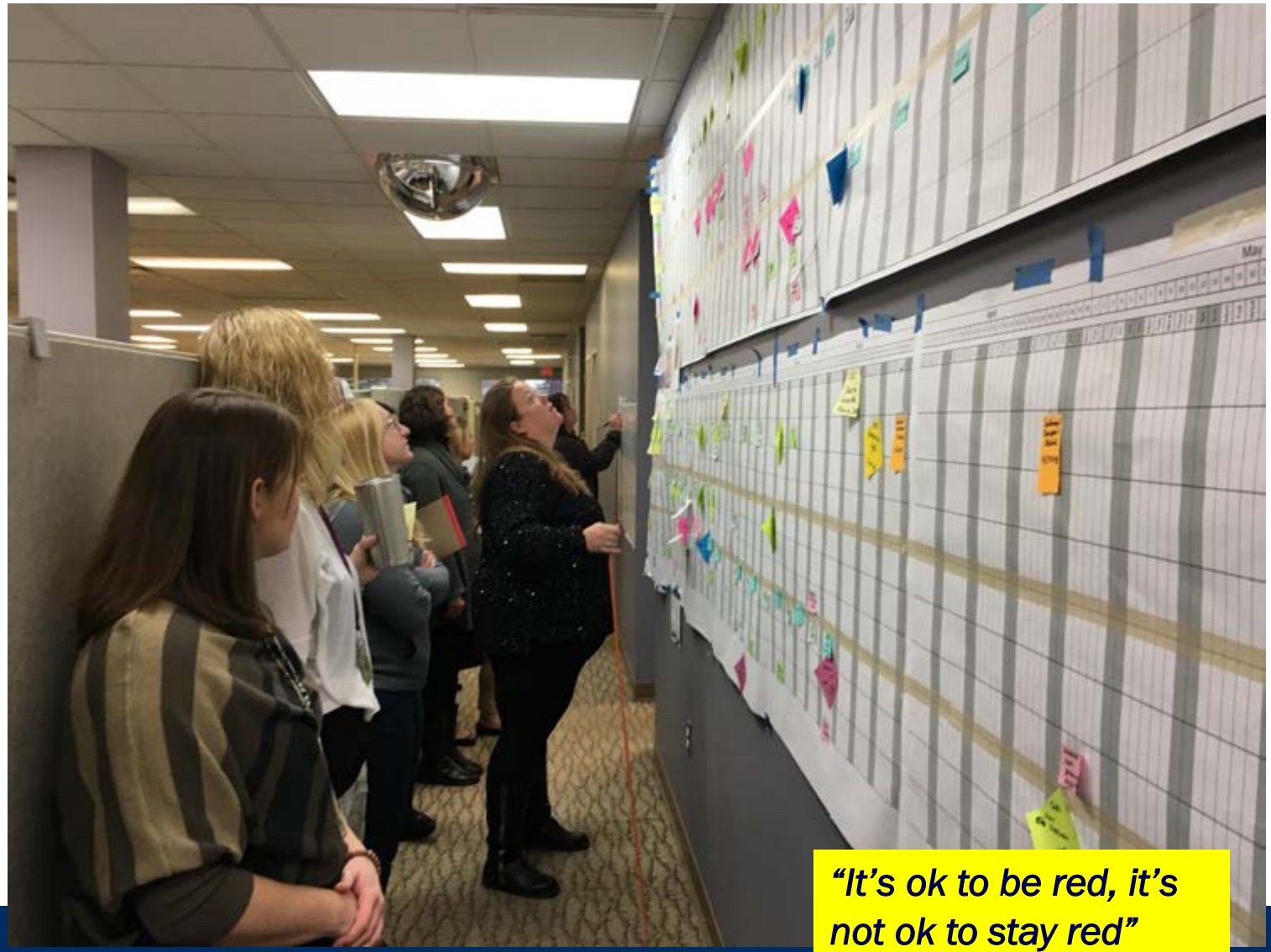
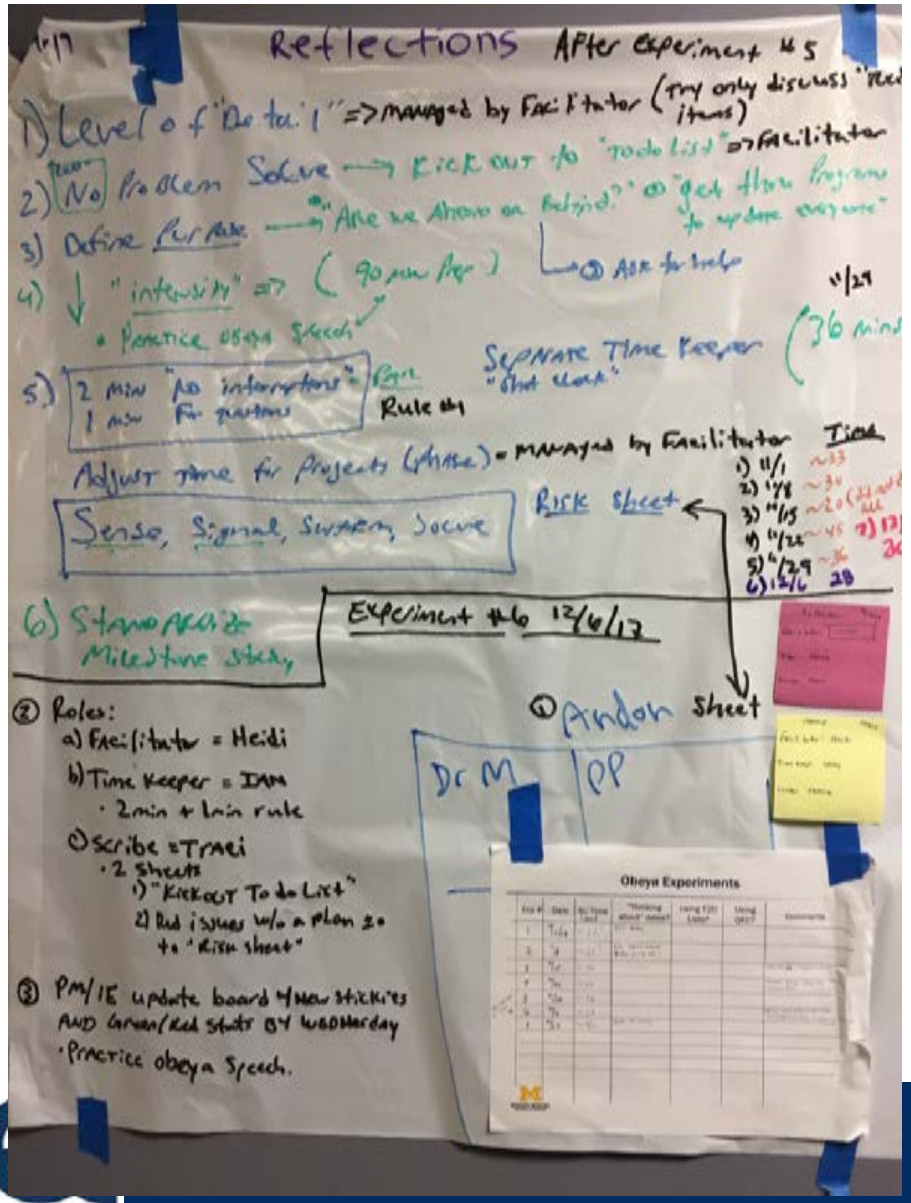
"It's better to PDCA your way through the fog, than trying to make everything perfect when you get started." Dr. Jack Billi

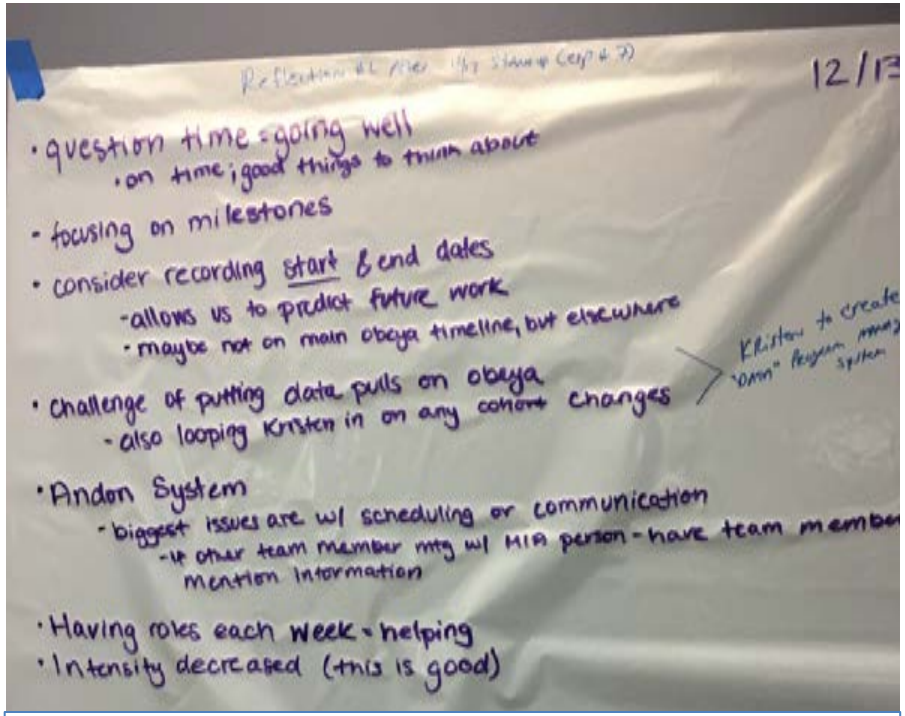
Obeya Standup v1.0 (11/1/17)



"It's ok to be red, it's not ok to stay red"

Reflections (after every other Stand up)

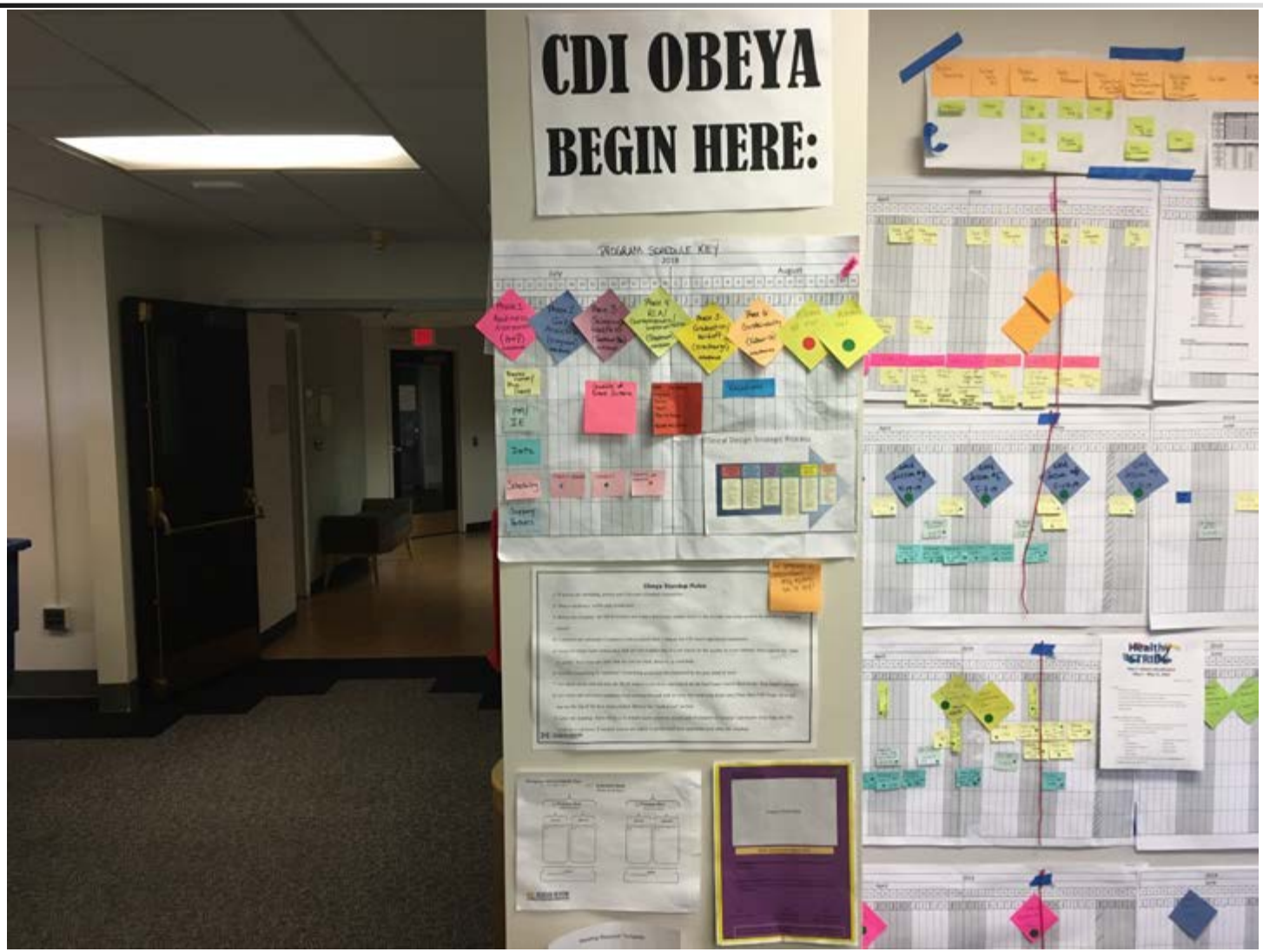




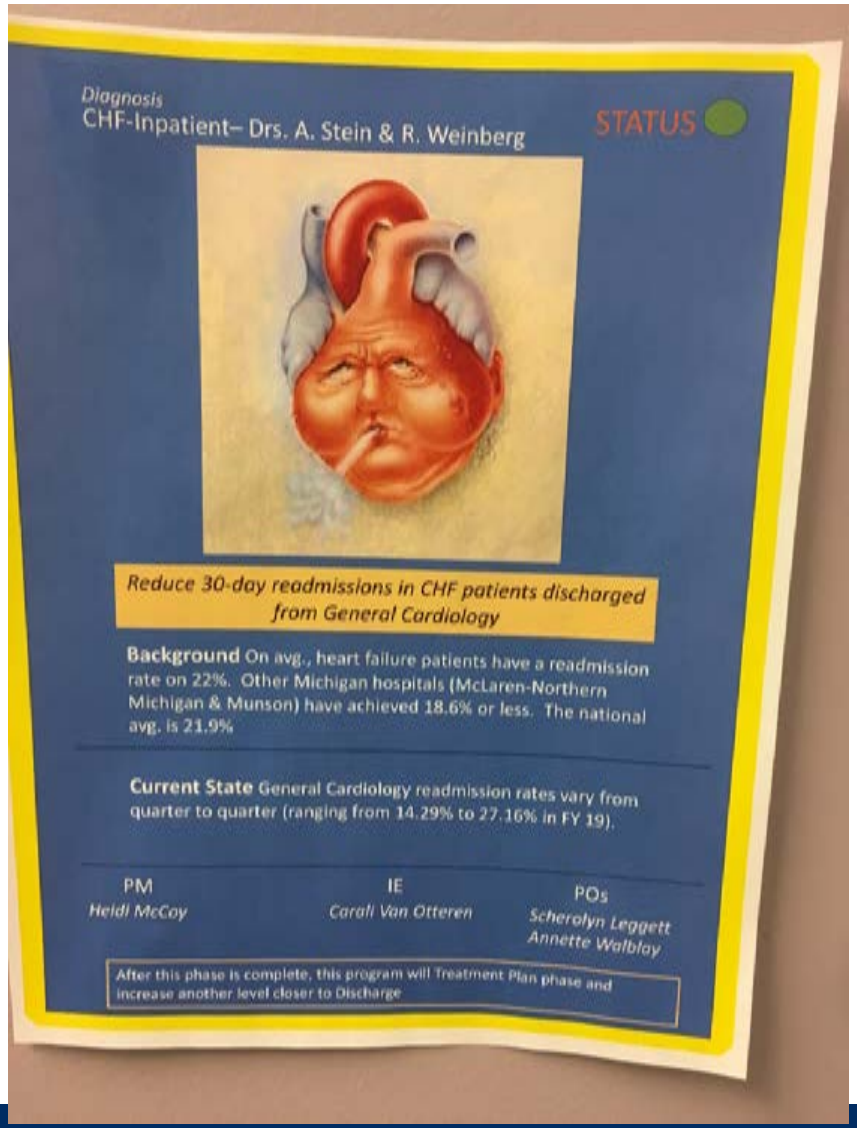
Rules/Updates:

- Have facilitator, scribe and time keeper
- 3 mins per program (2 mins uninterrupted)
- Focus on “red” and explain “plan to green”
- Andon system: quick problem solve if possible, otherwise note on sheets
- Can add “something to celebrate” from previous week

Key – Start Here Area

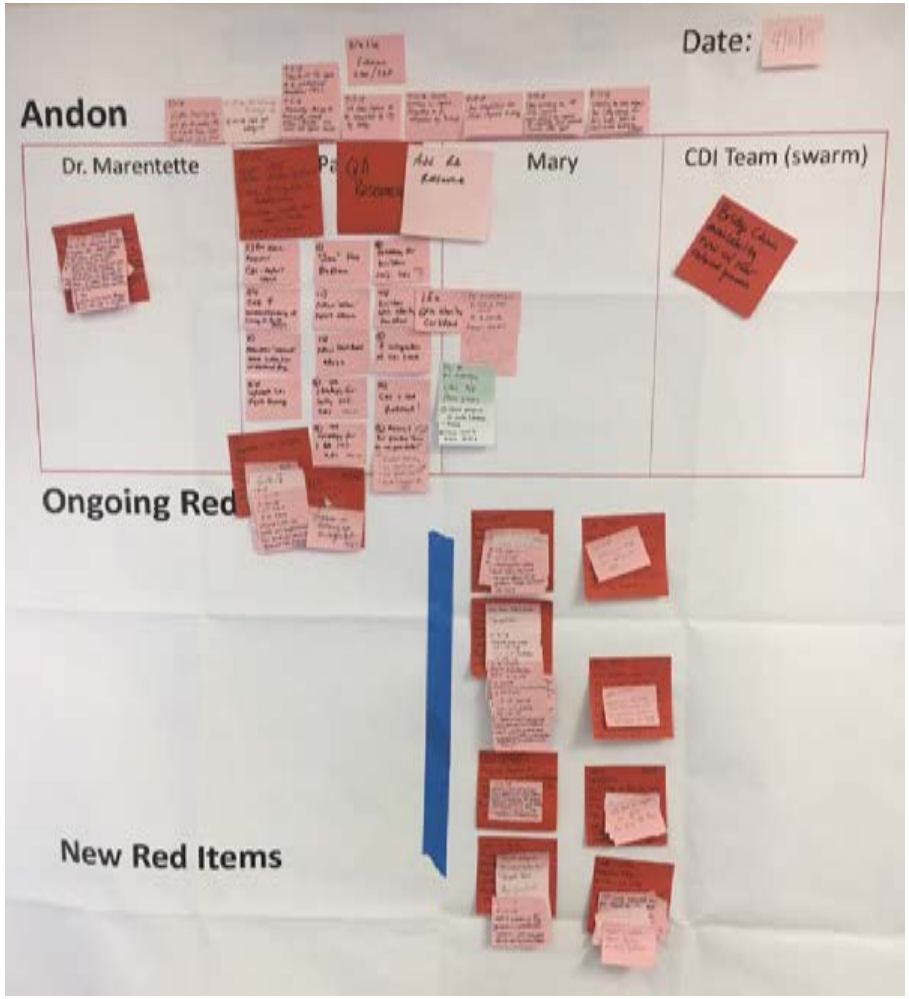


Obeya v3 – Pokémon Cards



- Provide context and snapshot in time for each project for visitors who don't have access to Project Manager or Industrial Engineer
- Fun way to associate each program with a picture

Obeya v3.0 Red Card (Andon) System

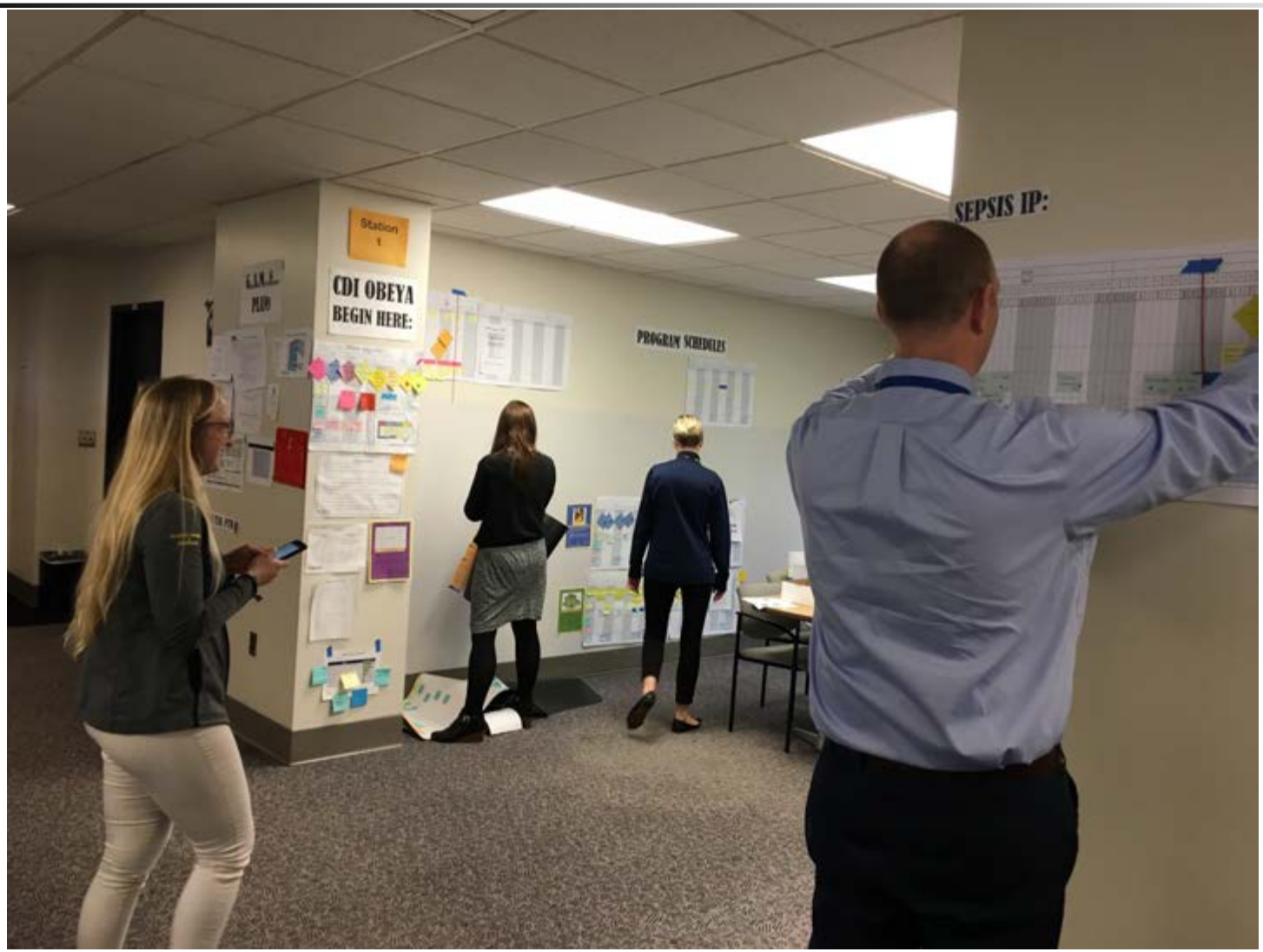


"It's ok to be red, it's not ok to stay red"

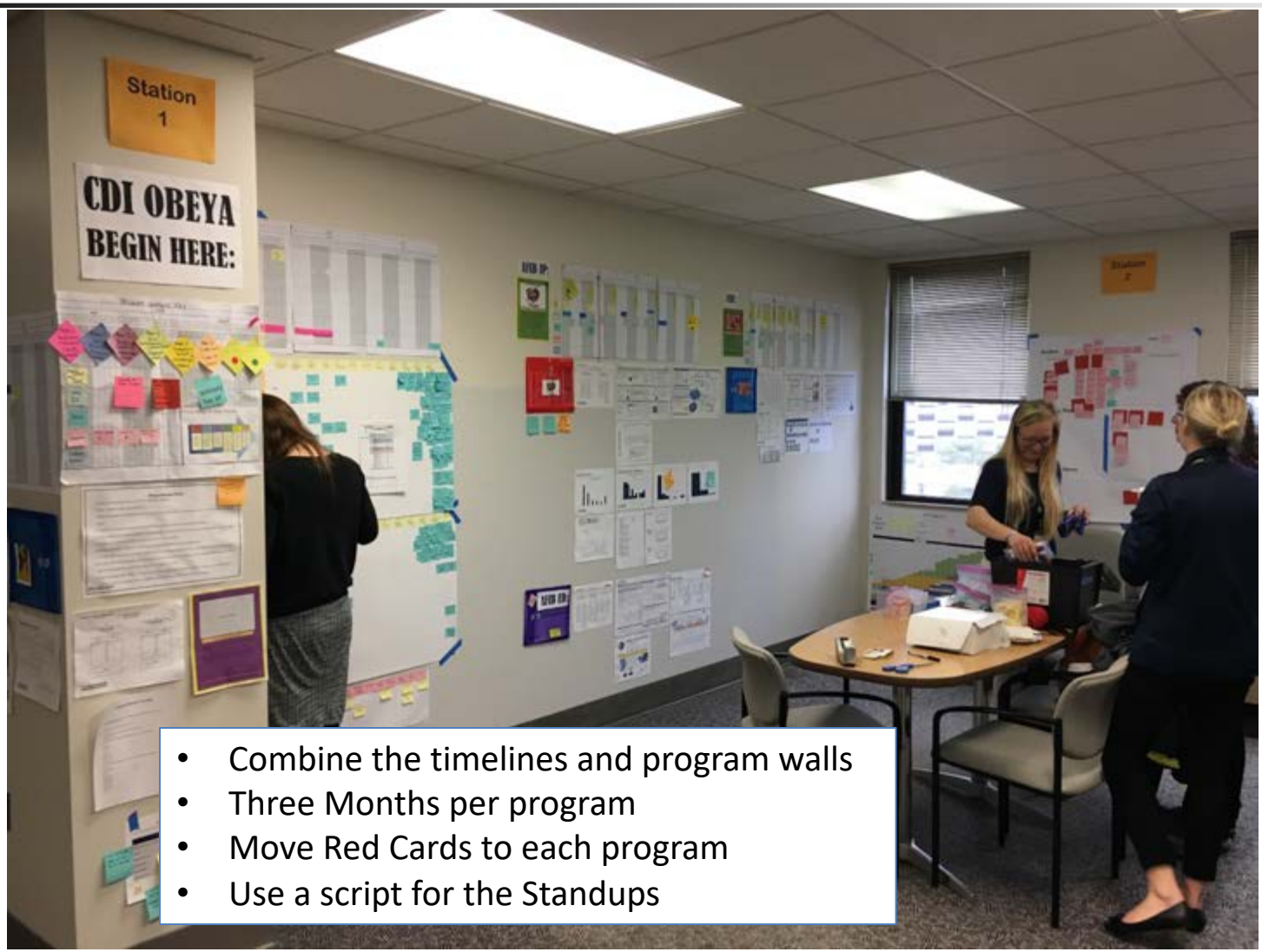
Red Card Pareto

Virtual Walk Through of CDI Obeya (v4.0) (appendix – handout UM bling prizes)

Obeya v4.0 Remodel (May 29, 2019)



Obeya v4.0 (June 12, 2019 – Present)

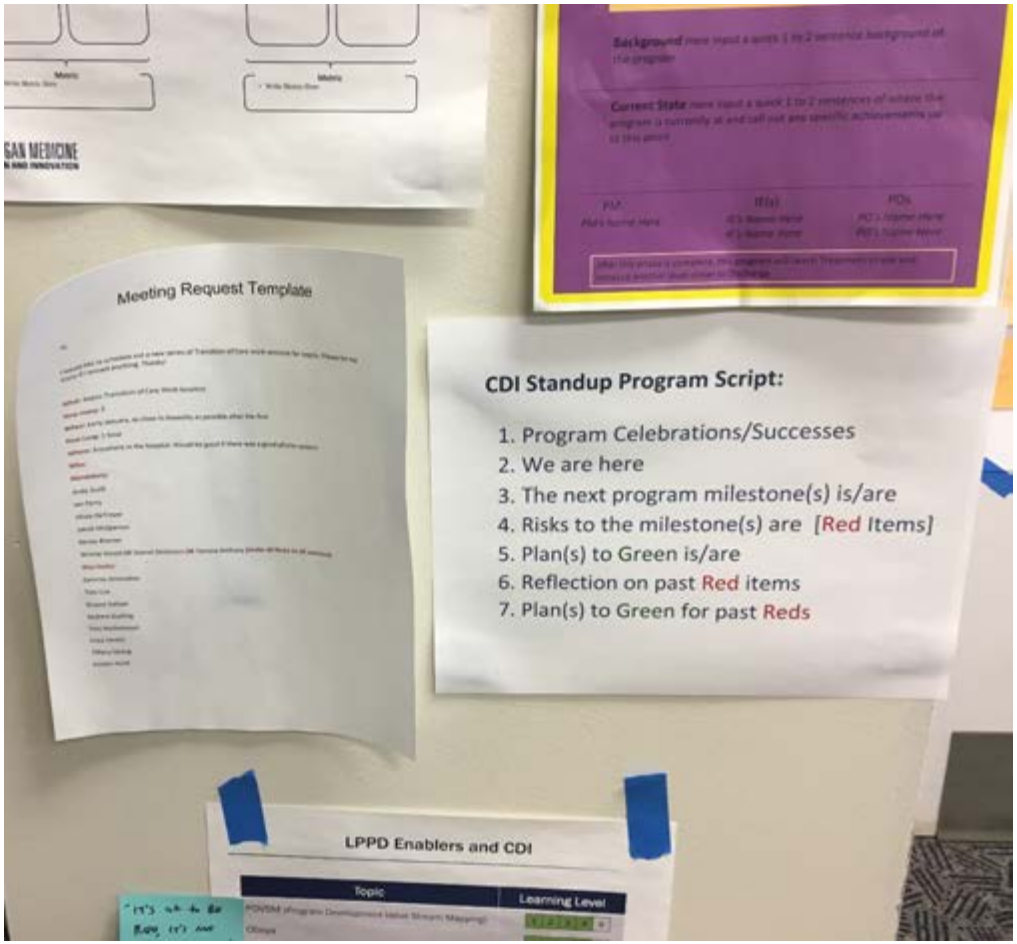


- Combine the timelines and program walls
- Three Months per program
- Move Red Cards to each program
- Use a script for the Standups

Obeya v4.0

Obeya v4.0

DATE
ISSUES TASKS
ASSIGNED TO
DUE DATE
STATUS
6/5
Jamie
6/12
Mandy
6/12
Tracie
6/11
Everyone
6/12
Everyone
6/14
Paul
7/3


Meeting Request Template
CDI Standup Program Script:
1. Program Celebrations/Successes
2. We are here
3. The next program milestone(s) is/are
4. Risks to the milestone(s) are [Red Items]
5. Plan(s) to Green is/are
6. Reflection on past Red items
7. Plan(s) to Green for past Reds
LPPD Enablers and CDI
Topic
Learning Level

LPPD Blog Posts

1) https://www.lean.org/LeanPost/Posting.cfm?LeanPostId=771
2) https://www.lean.org/LeanPost/Posting.cfm?LeanPostId=765
3) https://www.lean.org/LeanPost/Posting.cfm?LeanPostId=952
4) https://www.lean.org/balle/DisplayObject.cfm?o=4968

Study Phase

MICHIGAN MEDICINE
CLINICAL DESIGN AND INNOVATION

Meetings with Program

Work Sessions — **Clinical Design - Program Name**

Pre - 1	**Scoping**	**Clinical Lead, Dr. Larry Marentette, Paul Paliani, PM, IE**	**1 hr**	Date
	Goals:	**Related Documents:**		
	1 Establish Program Goal & Scope	1 Review Clinical Design Evaluation Form		
	2 Review Clinical Design Framework	2 Review Clinical Design Packet		
	3 Set Expectations & Validate Commitment	3 Complete Program Engagement Form		
	4 Identify Pathway/Process Owner & Program Leads	4 Review Roles & Responsibilities Form		
	5 Set Scheduling Expectations for Clinical Lead and Administrative Staff			
	6 Define Population for Metrics			
Pre - 2	**Core Team Formation**	**Program Leads and Clinical Design Core Team**	**1.5 hr**	Date
	Goals:	**Related Documents:**		
	1 Identify Gembas for CD Team	1 Review High Level Questionnaire		
	2 Identify Core Team Members	2 Complete High Level Decision Tree		
	3 Review preliminary data	3 Complete Related Services Form		
	4 Validate and Refine Population and Metrics			
1	**Visioning/Kickoff**	**Core Team**	**1 Hr**	Date
	Goals:	**Related Documents:**		
	1 Vision/Kickoff for Core Team	1 Review Meeting Slides		
	2 Review/Refine Data and Metrics	2 Review Roles & Responsibilities Form		
	3 Finalize Pre-Meeting Material	3 Review Key Metrics		
	4 Identify Observations for CDI Work Group & Core Team	4 Preview SIPOC		
	5 Introduce SIPOC Concepts			
2	**Pre-Mapping**	**Core Team**	**2 Hr**	Date
	Goals:	**Related Documents:**		
	1 Refine & Define Key Metrics	1 Review Meeting Slides		
	2 High Level Overview of Process and Steps	2 Bring Key Metrics		
	SIPOC (Supplies, Inputs, Process, Owners, Customers)	3 Complete SIPOC		
	3 Introduce VSM Concepts	4 Preview VSM		
3	**Value Stream Mapping (VSM)**	**Core Team**	**2 Hr**	Date
	Goals:	**Related Documents:**		
	1 Review/Refine Data and Metrics	1 Review Meeting Slides		
	2 Finalize SIPOC	2 Bring Key Metrics		
	3 Document Current State Process	3 Bring SIPOC		
	4 Begin Documenting Opportunities for Improvement	4 Complete VSM		
		5 Complete Opportunities Form		
4	**Improvement Opportunities**	**Core Team**	**2 Hr**	Date
	Goals:	**Related Documents:**		
	1 Review/Refine Data and Metrics	1 Review Meeting Slides		
	2 Finalize Current State Process	2 Bring Key Metrics		
	3 Document Opportunities for Improvement	3 Bring VSM w/ Opportunities Forms		
	4 Introduce Priortization Concepts			
5	**Prioritization**	**Core Team**	**2 Hr**	Date
	Goals:	**Related Documents:**		
	1 Review/Refine Data and Metrics	1 Review Meeting Slides		
	2 Finalize VSM and Opportunities	2 Bring Key Metrics		
	3 Complete Prioritization	3 Bring VSM w/ Opportunities from Form		
	4 Introduce Work Plan Concepts	4 Bring Impact/Effort Matrix		
6	**Work Plan**	**Core Team**	**2 Hr**	Date
	Goals:	**Related Documents:**		
	1 Finalize Impact/Effort Matrix	1 Bring Key Metrics		
	2 Complete Work Plan and Assign Program Leads and CDI Point People	2 Bring Impact/Effort Matrix		
		3 Complete Work Plan		
	3 Identify Subgroup Leads (MD & RN)			
7	**Subgroup Readiness**	**Core Team**	**1.5 Hr**	Date
	Goals:	**Related Documents:**		
	1 Confirm other Subgroup members	1 Bring Key Metrics		
	2 Reviewing accomplishments/ current work	2 Bring Impact/Effort Matrix		
	3 Confirm scope and objectives of each subgroup	3 Bring Work Plan		

Pre 1: Scoping
- Patient population/metrics/commitment

Pre 2: Core Team Formation
- ID people/go-sees/review initial data

Work session 1: Kickoff/Visioning
- Describe whole process/1 year timeline

Work session 2: Pre-mapping
- SIPOC / review metrics

Work session 3: Value Stream Mapping
- Current state / High Level

Work session 4: Improvement Opportunities
- Things working, not working, barriers

Work session 5: Prioritization
- Impact Effort matrix, vote

Work session 6: Work Plan
- ID subgroup Leads

Work session 7: Subgroup Readiness
- Kickoff, Design Review cadence

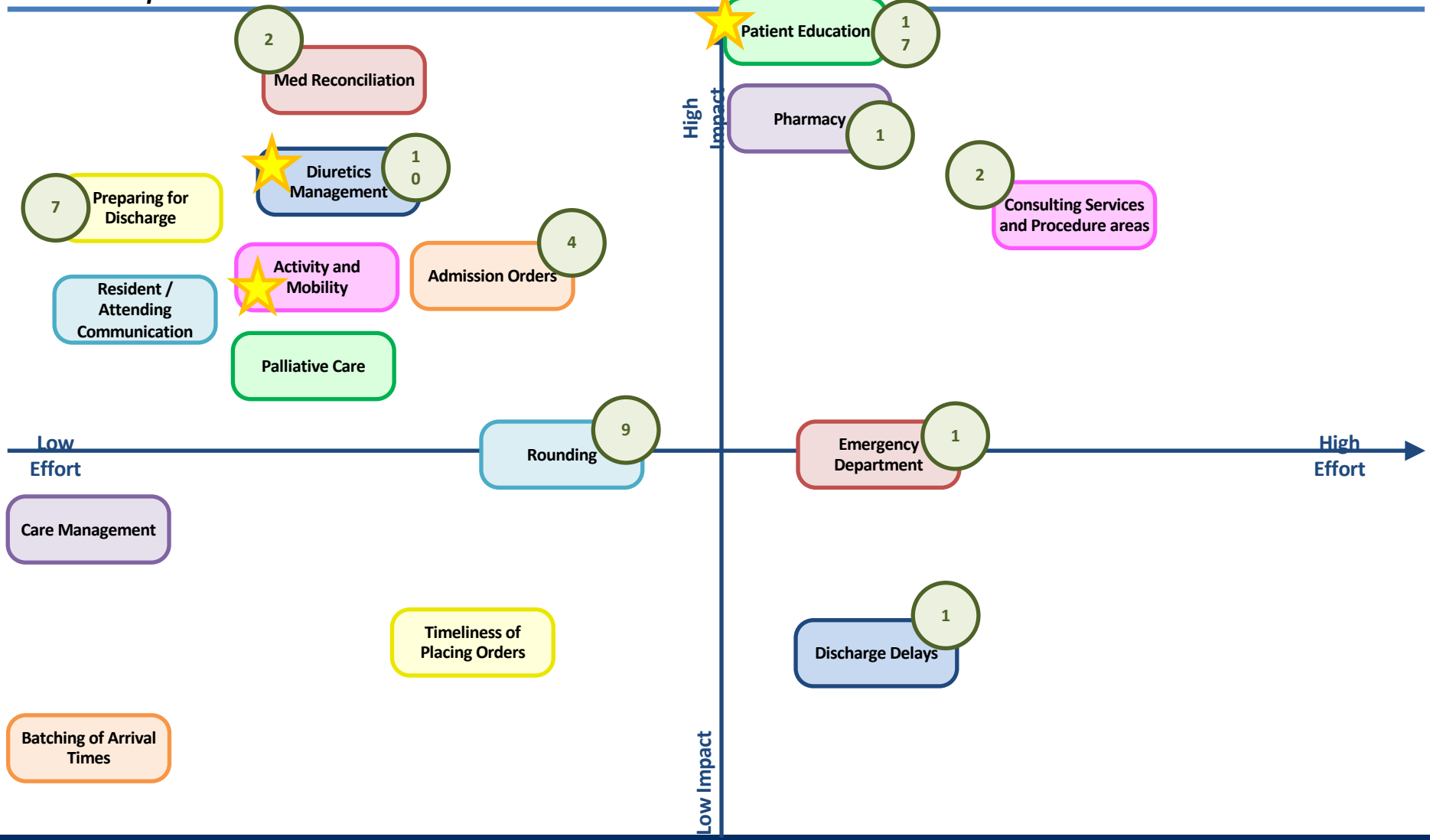
MICHIGAN MEDICINE
CLINICAL DESIGN AND INNOVATION

Impact/Effort Matrix

5/3/2019

Title: CHF Inpatient

Number of Votes



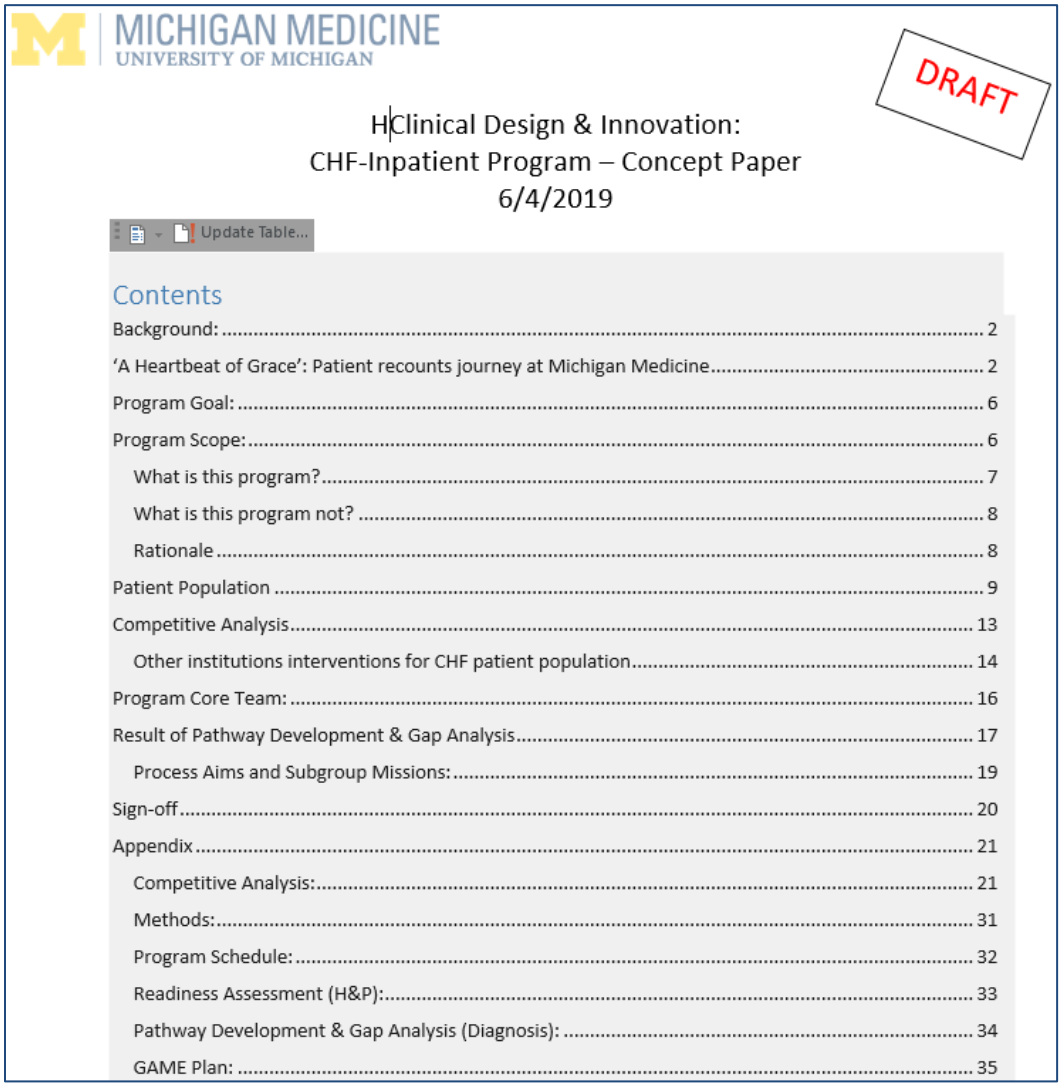
Heart Failure Inpatient Subgroups

1. Healthy STRIDE Program (increase activity while inpatient)

2. Improve Patient Education

3. Improve Diuretic Management

Heart Failure Concept Paper



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DRAFT

HClinical Design & Innovation:
CHF-Inpatient Program – Concept Paper
6/4/2019

Update Table...

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What is Clinical Design & Innovation?

- A standard approach to measure and improve value for an episode of care (e.g., total joint replacement, congestive heart failure, CABG)

- The CDI team works with engaged clinicians to measure and understand clinical variation
  - The CDI process brings together **all** individuals in the health system that touch patients across their specific episode of care to discuss problems and potential solutions
- Once solutions are identified, CDI staff helps implement them

Mission/Vision/Principles/Core Competencies/Behaviors

Mission: To establish partnerships with clinical programs to maximize the value of the patient journey.

Vision: To lead clinical programs through the creation of sound processes and products to ensure sustainable value. Value = Appropriateness x Outcomes/Cost

Principles:

1) We utilize and build upon previous work as a foundation.
2) We drive change by integrating financial, operational, and clinical data.

3) We focus on the entire patient journey, from first encounter to last encounter.

4) We consider all processes from our patients' perspectives.
5) We observe, interview and learn about actual patient care and staff work.
6) We work through a phased scientific method approach.
7) We create multidisciplinary core work groups from the care teams, which include clinical, administrative, and support staff.
8) We work across the Clinical Enterprise by breaking down silos, reducing barriers, and connecting people.

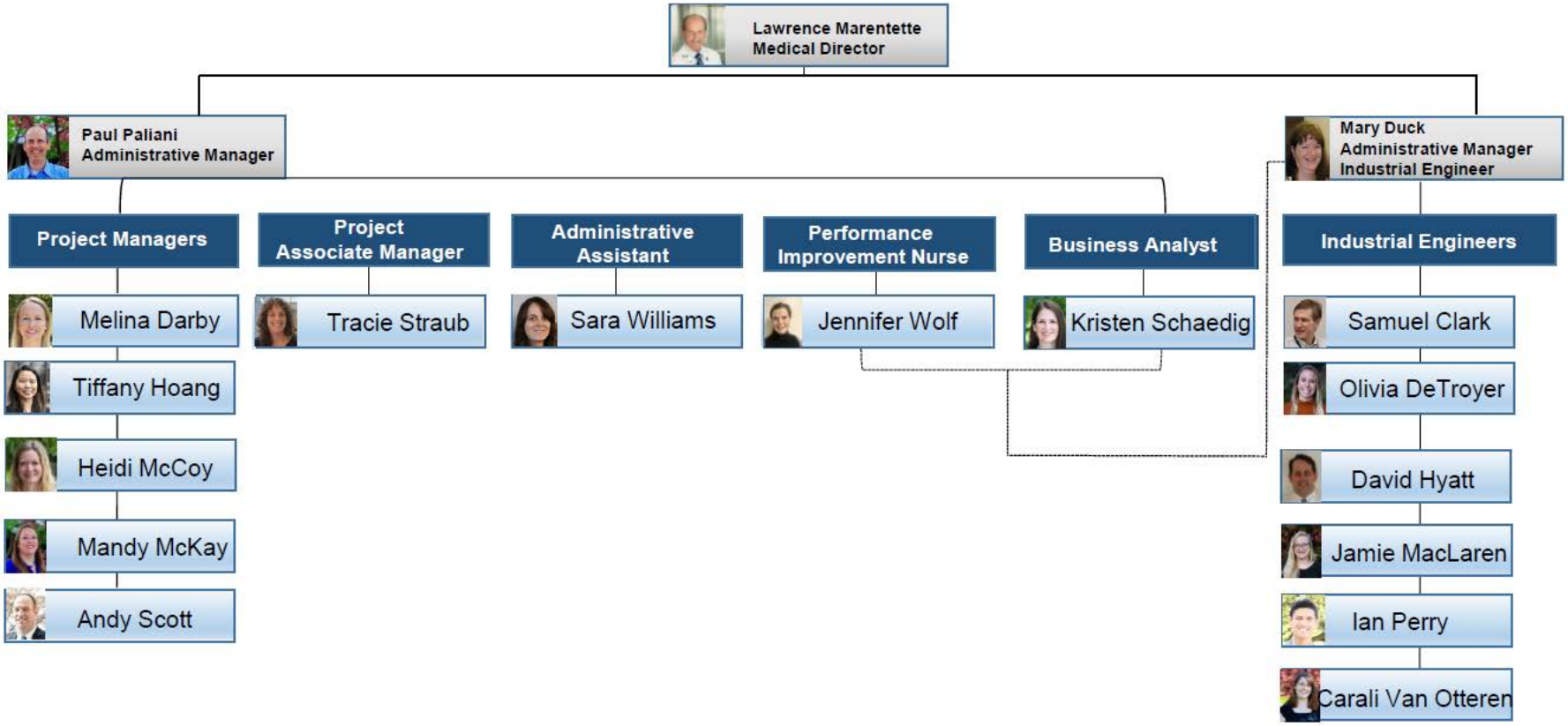
Core Competencies:

1) Patient Care Pathways (Health Literacy)
2) Integration/Connections/Collaborations
3) Dashboards
4) True Variable Direct Costs

Behaviors:

1) We don't go away
2) We finish stuff
3) We are making "normal", "abnormal"
4) We try to be nimble and agile

CDI Team



Updated 4/25/2019

CDI Programs

CDI Programs

	Program	PM/IE	Lead(s)	Status/Results
1	Orthopaedic Surgery	Heidi / Ian	Drs. Maratt, Urquhart	New cadence of Process Measurement Days to be determined from Surgical Triad and MPLAN Partners.
2	Afib-ED	Mandy / Jamie	Drs. Somand, Wesorick	Patients now being seen by EP Attending as of 1/2/19. Sent 30 ED and 33 MSSU Referrals since 1/2/19.
3	Colorectal	Mandy / Carali	Dr. Regenbogen	Implemented the Enhanced Recovery Program (ERP). SSIs have reduced from 6% but have not yet consistently been below 2%.
4	Head & Neck	Mandy / Carali	Drs. Prince, Malloy, Casper	Readmissions have trended below 8% as of October 2018. Average length of Stay has trended below 7 days but has not consistently been below 5 days.
5	Mitral Valve	Melina / Ian	Dr. Bolling	Determined direct variable costs and used as a methodology for the Cost Analytics and Decision Intelligence (CAnDI) project
6	Afib-IP	Mandy / Jamie	Drs. Wesorick, Oral, Froehlich	TEE/DCC IP Order Live 12/19/18, IP EP Consult Order Live 3/27/19. Roll out of IP CARDS Consult Order, ED Consult Orders, IP Clinical Pathway and D/C Follow Up Process TBD (coming soon). CVC D/C Follow Up Referral Smart Set and Call Center Work Queue live 4/1/19.
7	AMI	Heidi / Carali	Drs. Gurm, McLaughlin, Stein	Follow-up appointments available 14 Days from hospital discharge.
8	Sepsis-ED	Andy / Olivia / Ian	Drs. Co, Kronick	Launched detection, notification and treatment process, May, 2018. PDCA 4 – refine tools w/ new patient def
9	CABG	Melina / Jamie	Drs. Patel, Deeb, Haft	Support Coach and discharging to home expectations; OR efficiency “quick wins”; PT and Care Management during H&P pilot discussions

CDI Programs

	Program	PM/IE	Lead(s)	Status/Results
10	Patient Reported Outcome Measures	Heidi / Ian	Drs. Maratt, Talusan, Grant	• 14 weeks Post-"Go Live" for PROMIS CAT at South Main Orthopaedics. • 70% of patients signed up for Portal, started at 63%. • Developing exclusion criteria for questionnaire assignment process to exclude appropriate patients. • New physicians at Domino's Farms identified. • Define current state for each physician
11	Sepsis-IP	Andy / Ian / Olivia	Dr. King	• Launched detection, notification, treatment process, March, 2019 • Two units (5B, 6B), implemented Epic Predictive Model, • Determining timing to spread to other units
12	Sepsis Health Catalyst	Tiffany / Olivia / Ian	Dr. King	• Patients who meet the Sepsis Surveillance definition now have a flag • Tableau Dashboard nearly complete
13	Epic Pathways	Melina / Olivia	Dr. Regenbogen	• Epic Clinical Pathways was approved for concept by ITO&M
14	Congenital Heart	Mandy / Jamie	Drs. Owens, Romano	• Implementing Case Request Order Set changes, Procedure Pass, quick wins for pre-op day of procedure work group including standard line set up for anesthesia, and several others for procedure including only using core door except for patient in/out and surgical team scrub in. • Developing SSI prevention patient/family education with SMEs.
15	Heart Failure Inpatient	Heidi / Carali	Drs. Hummel, Koelling, Stein, Weinberg	• Prioritizing opportunities of improvement for future workgroups. • Beginning pilots in Healthy STRIDE program
16	Heart Failure Outpatient	Tiffany / David	Dr. Shea	• Core Team Formation Meeting on May 14 • Entering Phase 2 soon thereafter
17	Colorectal Epic Clinical Pathway	Melina / Olivia	Dr. Regenbogen	• Out-patient & peri-op have determined pathway specifics; inpatient is currently working, with final session on June 6th • Program will then go to ITO&M for definition approval

What's Next for CDI

- Work with LPPD in FY20
  - Focus on Concept Papers (alignment during the study phase)
  - Milestones (improve our management system)
- Document our "Return on Value?"
  - Categorize each product's influence on Appropriateness, Quality and Cost