THE UNIVERSITY OF CHICAGO MEDICINE

Comer Children's Hospital

AT THE FOREFRONT OF KIDS' MEDICINE®

Improving Throughput at Comer Children's Hospital

A Type 4 MOC Project

Participant Guide

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Project Overview

Background

Why do we care about discharge?

Every patient in a bed that could have been discharged keeps another patient from getting the care they need.

Why Noon?

- Improved nursing work flow (discharge in morning, admit in afternoon)
- Improved EVS workflow (shift change at 3pm)
- Easier for families who have to travel a long distance home
- Fewer missed days of school for chronic patients

Additional considerations

- Improving discharge communication and expectations
  - Among staff – consultants, primary team, nursing, case management, PT/OT, etc.
  - Between staff and patients
  - Why has the child been admitted?
- Identifying goals to be met prior to discharge
- Patient and family education around discharge plan

Project History

In July, an interdisciplinary group held a week long Kaizen event to chart the plan for **improving throughput** and **patient experience** with the discharge process. Through this process, the future state of throughput was defined. This initiative yielded several successes:

- 2 pm Huddle
- White Board in patient rooms
- Print AVS Sheet in one location/color
- Flu Shot process redesign (now stocked on units)
- Data collection and Identification (MOC type 4 for physicians)
- Review admission package
- Develop discharge pathway Get Well Network

Future Goals: 1) Get Well Network discharge module for families; 2) Work/School excuse note templates in inpatient Epic; 3)Virtual Multi-disciplinary rounds (MDR) tool in Epic; 4)Additional pharmacy work flow changes – bringing meds to bedside prior to discharge (Long-term goal).

Contact Information

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Methodology

Aim

Comer Children's Hospital will increase the percentage of patients discharged by 12 pm by 5% (absolute) over 12 months. Patients impacted will include inpatients admitted to Comer 5 or Comer 6, two multi-specialty non-ICU wards.

Measures

Name	Type	Nationally Endorsed	Calculation	Source	Benchmark	Target	Collection Frequency
Discharge by noon Comer 5	Outcome	No	% of patients DC by 12	EHR	33%	38%	Weekly
Discharge by noon Comer 6	Outcome	No	% of patients DC by 12	EHR	30%	35%	Weekly
Adjusted LOS	Balancing	No	Adjusted LOS in Comer 5 & 6	EHR	1.61 (C 5) 1.4 (C6)	No change	Weekly
Patient satisfaction DC process	Outcome	Yes	Rating of DC related questions in Press-Ganey Survey	Survey	Past 12 months data	Improve 5%	Monthly
Reason for DC delay	Outcome	No	Reason for DC delay as ID by clinician audit chart	Chart Review	None	None*	Monthly

**By providing reasons for delays in discharge, opportunities for making improvements can be identified*

Requirements

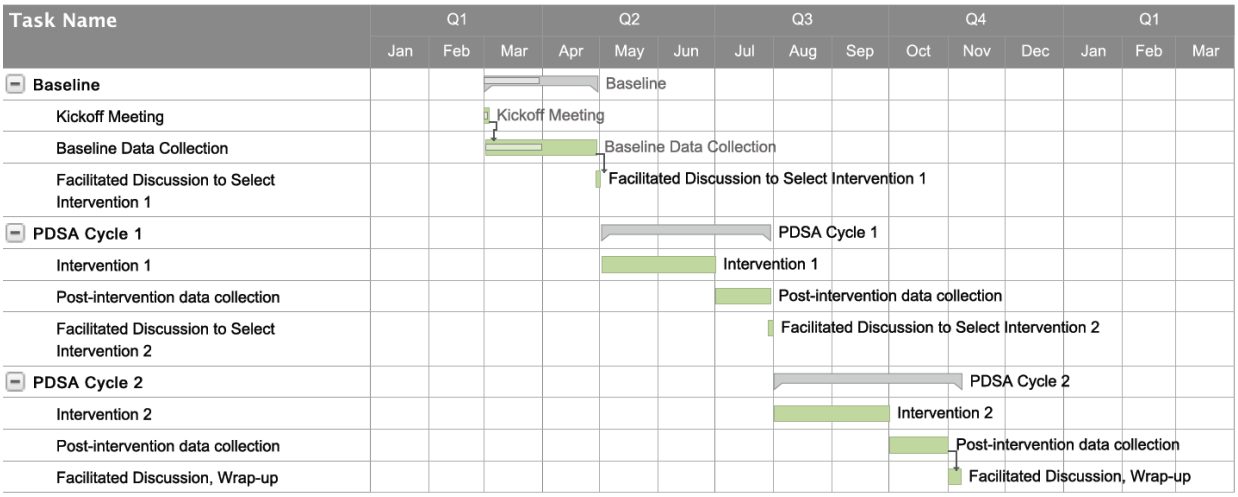
- Provide direct or consultative care to patients as part of the QI project.
- Collect, submit, and review data in keeping with the project's measurement plan.
    - Input data from 30 patients regarding reason for delayed discharge using the delay tool
- Implement the project's interventions (the changes designed to improve care).
- Collaborate actively by:
    - Participating in project meetings (below)
    - Attending at least 3 of the 2pm discharge huddles (Occur daily in K571) (see attendance sheet attached).

Project Meetings

Commit to participating in 4 meetings throughout the project period:

1. Kickoff and Orientation (1.5 hrs) (March 15, 2016)
2. Review Baseline Data (1 hr) – estimated May 1
3. PDSA Cycle 1: Post-Intervention Discussion to select Intervention 2 (1 hr) – estimated August 1
4. PDSA Cycle 2: Post-Intervention Discussion and Sustainability (1.5 hrs) – estimated November 1

Project Gantt Chart (2016)



Data Collection

Complete Delay Tool Survey

- **For each PDSA cycle**, review 10 patient charts for non-clinical, potentially modifiable reasons for a delayed discharge. For each potentially preventable late discharge, complete the Delay Tool Survey in REDCap. A minimum of 30 surveys will be captured during the project period.
- Delay Tool Survey Link: (https://redcap.uchicago.edu/surveys/?s=LC8RTL79W8)

Review Data

- A summary of your team's data will be provided to you following each of the following intervals:
  - Baseline
  - PDSA Cycle 1
  - PDSA Cycle 2
- Work with your team to hold a facilitated discussion to review the data you've collected, identify an area to focus on, and plan an intervention
- Identify additional data points as needed

Claiming Educational Credit

The University of Chicago Pritzker School of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The University of Chicago Pritzker School of Medicine designates this live activity for a maximum of 5 *AMA PRA Category 5 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This project will offer educational credit:

- 25 Maintenance of Certification Part 4 (Improvement in Practice) points (can be banked for residents)
- 5 Continuing Medical Education (CME) credits

Claiming CME

1. Go to the CME webpage: https://cme.uchicago.edu
2. Click the "Create account" button in upper right hand corner of the page
3. Click "Login with your CNetID or UCHAD account"
4. Login using your CNet or UCHAD
5. Enter your most frequently used email address and hit save
6. Changes will be saved – email will be linked with your account and your name will auto populate
7. Click the "Edit" tab followed by the "Profile" tab and fill out the rest of your information.
8. Next to the "Profile" tab please click the "Mobile" tab. Be sure to enter YOUR cell phone number so if you use the text in feature it will be linked to your account!

Claiming ABP MOC Type 4:

Residents and attendings should complete an attestation form following the completion of the project. This attestation form will be provided to you. Additional instructions are attached in this packet.

Published on *The American Board of Pediatrics* (https://www.abp.org)

Residents can now “bank” Maintenance of Certification (MOC) Part 4 credit that they will be able to apply to their MOC requirements once they’re certified.

As of Spring 2015, you will be able to earn MOC credit for approved quality improvement work you’re already doing during residency. Once you pass your initial American Board of Pediatrics (ABP) examination, you will be enrolled in MOC and need to earn MOC points to maintain your certification. Your “Banked” credit will count!

How it Works

You register for your ABP Portfolio any time after November of your PL1 year.

As part of the MOC for Residents program, you’ll have full access to all ABP-developed activities, including Self-Assessment (Part 2) and Part 4 activities. However, you can only earn bankable credit for Part 4 activities.

You can receive credit by:

- Leading or participating in an ABP-approved institutional QI project
- Participating in online ABP Performance Improvement Modules (PIMs)
- Other approved online modules (such as AAP EQIPP)
- Publication/presentation of QI articles and posters
- You can even submit your own projects for ABP approval

Our new Motivational Interviewing PIM [1] (ABP Portfolio account required) allows both you and faculty to work together and earn your MOC credit. Using feedback from patients, parents and observers, you will learn how specific strategies can be used to influence patient behavior and promote healthier actions with the intent of reducing chronic and preventable diseases.

If you wish to complete this activity along with faculty as a team, each person must enroll in this activity individually.

For QI projects already approved by the ABP, you’ll submit an MOC attestation form, specific to your project, when the QI work is completed. You can find your personalized attestation form under the project name at abp.org.

Upon passing the initial certification exam and becoming board certified, you enter into your first 5-year MOC activities cycle. Any previously-banked credit is then added to your MOC Part 4 requirements.

Fellows in an ACGME-approved fellowship program who have not yet passed their initial General Pediatrics certifying exam are also eligible to participate in MOC for Residents program. Fellows who have already passed the general pediatrics exam are already certified and all MOC activities will earn credit.

If you have any additional questions, please feel free to email moc@abpeds.org [2].

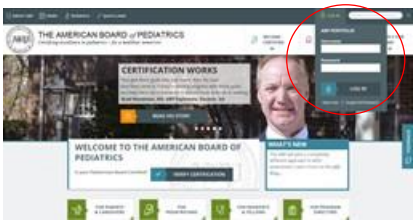
Submit Your Attestation Form

Established QI Projects for 10 or more physicians

NOTE: *An attestation form only needs to be submitted if you have completed an established QI Project for 10 or more physicians in which you are applying to receive MOC credit. This does NOT pertain to any Web-based activities.*

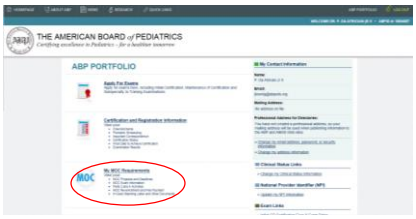
Step I: Logging In To Your Portfolio

- Go to the ABP web site at **https://www.abp.org/**
- In the upper right corner of the home page, click on LOG IN
- A drop down box will appear, you will then enter your user name and password and click **LOG IN**

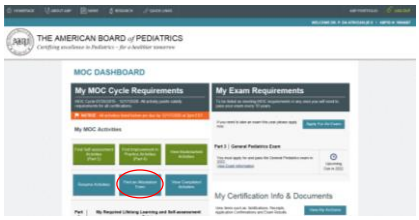


Step 2: Locate the Attestation Form

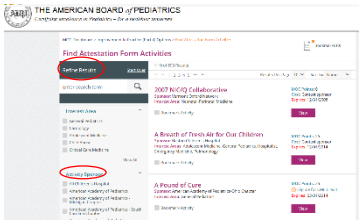
- Click on **My MOC Requirements**



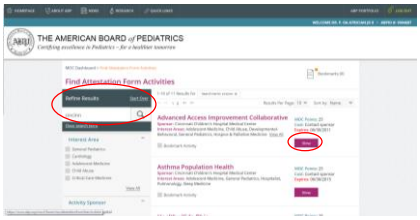
- Click on **Find an Attestation Form**



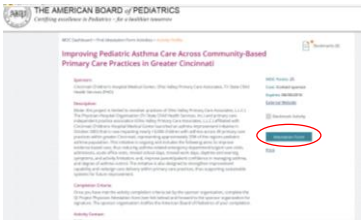
- On the left hand side you will see **Refine Results**, please scroll down until you see **Activity Sponsor**. To display the full list of Activity Sponsors please click on **View All**. Scroll down to the appropriate sponsor and put a check mark in the box in front of their name. This will then display all of the approved QI projects for that sponsor.



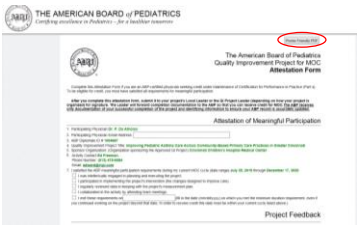
- Scroll down until you see to the QI project you have completed. Click on the purple box that says **View.** This will display the Activity Profile.



- Click on the blue box that says **Attestation Form**. This will open the form in a separate window



- At the top of the Attestation Form you will see a button that says **Printer Friendly PDF** button, click on this. The screen will change and you should have the option to save or print (depending on the pdf software that is on your computer)



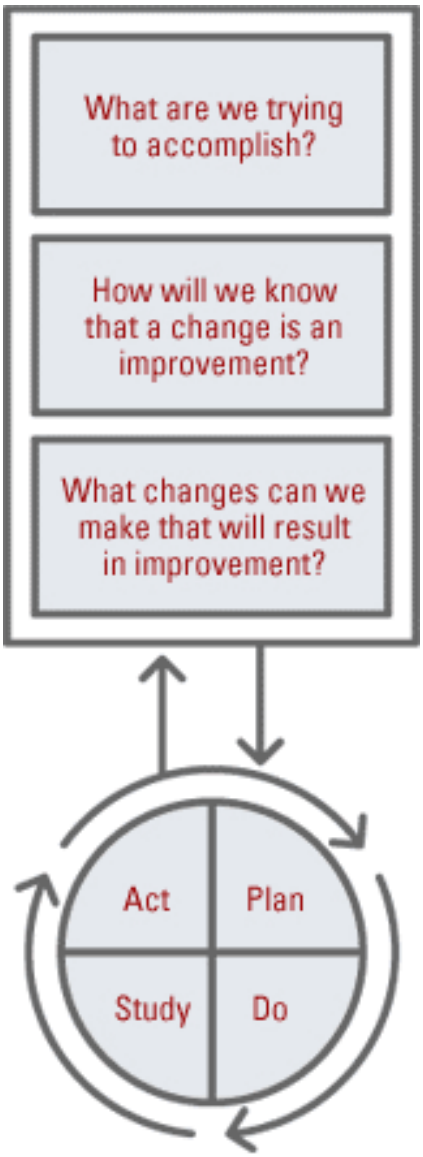
Step 3: Submit the Attestation Form to the Sponsoring Organization

- **Answer all questions** on the Attestation Form
- **Sign and date** as the participant physician
- **Submit the attestation form to your QI Project's Local Leader** or the QI Project Leader (depending upon how your project is organized) for signature
- The Project Leader will send the completed attestation form directly to the designated contact for **the sponsoring organization to enter the credit into our system**
- Once the credit has been entered **an email will immediately be sent to the email address on file stating you have received credit** and to log in to your ABP Portfolio to view how the credit was applied

Intro to Quality Improvement

By identifying and mitigating barriers to timely discharge and improving communication with families regarding expectations around discharge, we hope to increase parents' understanding of their child's medical issues and plan for outpatient management. Improving throughput will also allow us to maximize our ability to provide care to all those who need it.

The Institute for Healthcare Improvement Model focuses on a Plan, Do, Study, Act Methodology, which we will be using for this project.



Steps to Quality Improvement using the PDSA approach:

1. Form the team
2. Set SMART aims*
3. Establish measures
4. Select changes
5. Test Changes

- Aims should be SMART (specific, measurable, attainable, realistic, time-bound)
- Start with small tests of change, including selecting one patient or one day of the week, etc. to test your changes and modify accordingly. Repeated use of this cycle will identify opportunities for improvement.

Congratulations! Your changes have been identified as successful. Now:

6. Implement Changes
7. Spread Changes

Quality Improvement Resources

Quality Improvement Basics:

- Institute for Healthcare Improvement (IHI):
  - Science of improvement
  - IHI PDSA
  - IHI Open School (1 hour online course)
- Video: Introduction to QI in Healthcare
- Institute of Medicine, "To Err is Human": Executive Summary
- Video: Intro to QI Measurement
- Tutorial: QI in Healthcare
- Toyota System in Healthcare
- Article: Restaurant chains have managed to combine quality control, cost control, and innovation. Can health care? (Gawande, 2012)

University of Chicago Specific:

- UCM Clinical Effectiveness
- UCM internal scorecards
- Hospital Compare
- Illinois Hospital Report Card
- Requesting Data: Analytics Core Request System (ACReS)
- Center for Quality

Delay Tool

A delay consitutes any action or event that holds up the discharge process.

Name _____

Level of training
- ◯ Attending
- ◯ Fellow
- ◯ Resident Year 3
- ◯ Resident Year 2
- ◯ Resident Year 1

Admitting Service
- ◯ General Pediatrics
- ◯ Allergy and Immunology
- ◯ Cardiology
- ◯ Critical Care
- ◯ Endocrinology
- ◯ Gastroenterology
- ◯ Hematology/Oncology
- ◯ Infectious Disease
- ◯ Neonatology
- ◯ Nephrology
- ◯ Neurology
- ◯ Pulmonary Medicine
- ◯ Rheumatology
- ◯ Pediatric Surgery
- ◯ Surgical Subspeciality

Surgical Subspecialty _____

Name of Service Attending _____

Patient's MRN _____

Date of admission _____

Date of discharge _____

Time of Discharge _____

Consults services involved
- ☐ Endo
- ☐ Cards
- ☐ GI
- ☐ Neuro
- ☐ Pulm
- ☐ ID
- ☐ Nephrology
- ☐ Rheum
- ☐ CPS
- ☐ Gen Peds
- ☐ Peds Surgery
- ☐ ENT
- ☐ Ortho
- ☐ Urology
- ☐ Plastics
- ☐ Other

Other consult services _____

Primary reason for delay

- ◯ Delay related to test scheduling
- ◯ Delay related to obtaining tests results
- ◯ Delay related to surgery
- ◯ Delay related to consultation
- ◯ Delay related to the patient (NOT transportation)
- ◯ Delay related to physician responsibility
- ◯ Delay related to patient/ family education or training
- ◯ Delay related to medical student / resident education
- ◯ Delay related to pharmacy
- ◯ Delay related to discharge planning or scheduling for outside support care (e.g. ride home)
- ◯ Delay related to unavailability of appropriate level of care/outside resources/facility

Delay related to test scheduling

- ◯ Delays related to incorrect sequencing of tests (e.g., retained contrast delays subsequent imaging)
- ◯ Delay related to ordering tests or procedures (other than sequencing)
- ◯ Busy schedule, no openings
- ◯ Test or procedure not done until late in the day resulting in a delay
- ◯ Delay due to sedation needed
- ◯ Delay occurs because certain tests and procedures are not able to be scheduled on weekends or evenings (e.g. colonoscopy, EGD)
- ◯ Certain tests or procedures not done on weekends unless it is an emergency (e.g. colonoscopy, EGD)
- ◯ Certain tests or procedures not done during the evening or night unless it is an emergency (e.g. colonoscopy, EGD)
- ◯ Procedures or test could have been done on outpatient basis

Delays related to incorrect sequencing of tests

- ◯ Physician did not specify sequence
- ◯ Nurse did not specify sequence
- ◯ Resident did not specify sequence
- ◯ Secretary did not specify sequence
- ◯ Laboratory did not follow specified sequence
- ◯ Indeterminate cause of wrong sequence

Delay related to ordering tests or procedures causes a delay (other than sequencing)

- ◯ Ordering of initial work-up causes a delay
- ◯ Delay caused by problem in ordering specific test
- ◯ Not ordered early enough to be performed the same day
- ◯ Process of ordering test or procedure is unknown and therefore causes in delay in obtaining test/procedure
- ◯ Patient is admitted for a specific procedure but the procedure was not scheduled for the next day

Ordering of initial work-up causes delay

- ◯ Delay related to length of resident work-up
- ◯ Transfer from other service and initial orders not written
- ◯ Indeterminate delay in initial orders

Delay caused by problem in ordering specific test

- ◯ MD related delay (e.g. discussed but not ordered)
- ◯ Nurse related delay
- ◯ Lab related delay (e.g. order not carried out)
- ◯ Indeterminate delay in carrying out order

Patient is admitted for a specific procedure but the procedure was not scheduled for the next day

- ◯ Primary admission for procedure
- ◯ Transfered from another institution for precedure

Busy Schedule, no openings

- ◯ Test ordered before noon on preceding day
- ◯ Test not ordered before noon on preceding day
- ◯ Sedation was full and test was delayed 14

Delay due to sedation needed
- ◯ Sedation schedule is full
- ◯ Sedation not available until later in the day

Type of procedure
_____

Delay related to obtaining tests results
- ◯ Delay related to problem in executing test
- ◯ Return of results is delayed, causing a delay in plan of action
- ◯ Test results are not reviewed within standard time of their return

Delay related to problem in executing test
- ◯ Test to be done by MD is delayed beyond time desired
- ◯ Medical management precluded completion of test
- ◯ Patient is inadequately prepared for a procedure
- ◯ Delay occurs because the study could not be performed on the patient because of technical reason
- ◯ Delay occurs because there is a technical problem with the test procedure itself

Patient is inadequately prepared for a procedure
- ◯ Prep incorrectly ordered
- ◯ Prep correctly ordered but not carried out
- ◯ Prep attempted but patient not compliant

Return of results is delayed, causing a delay in plan of action
- ◯ Standard wait for test results
- ◯ Delay of results/report by lab beyond standard wait
- ◯ Results not available on weekends
- ◯ Results completed to floor but not entered into EPIC
- ◯ Results not available because lab lost specimen
- ◯ Test performed but results "lost" on unavailable from lab

Test results are not reviewed within standard time of their return
- ◯ Delay because physician did not review results
- ◯ Delay because nurse did not review results
- ◯ Delay because resident did not review results

Delay related to surgery
- ◯ Patient is in hospital and there is a problem scheduling a surgical procedure
- ◯ Surgery could have been done on an outpatient basis

Patient is in hospital and there is a problem scheduling a surgical procedure
- ◯ Busy schedule, no openings
- ◯ Patient is admitted for specific (elective) surgery but the surgery was not scheduled for the next day
- ◯ Surgery not done on weekends unless it is an emergency
- ◯ Surgery not done during the evening or night unless it is an emergency

Patient is admitted for specific (elective) surgery but the surgery was not scheduled for the next day
- ◯ Primary admission for surgery
- ◯ Transferred for another institution for surgery

Physician requests consultation: delay in carrying out consultation
- ◯ Delay occurs because consult is discussed but never ordered
- ◯ Consult ordered but delay occurs: consult service does not see patient
- ◯ Delay occurs because consult service not readily available on weekends
- ◯ Delay occurs because consult service opinion not obtained in timely fashion (what time)
- ◯ Delay occurs because there is lack of follow-up by the consult service after initial consultation

Consult ordered by delay occurs: consult service does not see patient

- ◯ Consult ordered in EPIC, but consult service does not see patient
- ◯ Consult called to consult phsysican, but consult service does not see patient

Delay related to the patient (NOT transportation)

- ◯ Patient or family is undecided about a procedure/therapy
- ◯ Patient refuses test or procedure or therapy
- ◯ Other

Other

_____

Delays related to physician responsibility

- ◯ Unnecessary admission per patient's physicians
- ◯ Medical management of in hospital patient is beyond standard of practice (e.g, 96 hr rule-out vs 48 hr)
- ◯ Delay related to clinical decision making of physicians

Unnecessary admission per patient's physicians

- ◯ Patient does not require hospitalization, but is "political admission" (e.g. patient is a VIP)
- ◯ Patient admitted purely for logistical reasons (facilitate work-up)
- ◯ Patient admitted but does not require hospitalization by consensus of the team

Delay related to clinical decision making of physicians

- ◯ Awaiting discussion with service attending
- ◯ Awaiting discussion with off-service attending
- ◯ Awaiting next days' rounds for further discussion
- ◯ Awaiting the patient's old records

Awaiting the patient's old records

- ◯ Old records are incomplete
- ◯ Discharge summary missing from old records
- ◯ Final report of a certain procedure not in old records

Delay related to patient / family education or training

- ◯ Asthma education
- ◯ Diabetes Education
- ◯ G-Tube
- ◯ Crutch/Walker
- ◯ Issues with AVS
- ◯ Other

Other

_____

Delay related to discharge planning or scheduling for outside support/care

- ◯ Patient is ready for discharge but delay occurs because of hospital related problem
- ◯ Patient is ready for discharge but delay occurs because of patient or family (e.g. ride not ready)
- ◯ Delay secondary to waiting for home support systems to be established
- ◯ Waiting for the setting up for home IV or TPN therapy service

Delay related to medical student / resident education

- ◯ Delay in discharge order signing due to resident conference
- ◯ Delay in discharge due to teaching rounds running late

Delay due to Pharmacy

- ◯ Flu vaccine ordering delay
- ◯ Flu vaccine administration delay
- ◯ Prior authorization delay
- ◯ Delay due to discharge prescription not written
- ◯ Delay due to discharge prescription not filled

Prior authorization delay

- ◯ Prior authorization took longer than usual
- ◯ Need for prior authorization not realized until day of discharge
- ◯ Change of medication / dose on day of discharge

Patient is ready for discharge but delay occurs because of hospital related problem

- ◯ Physicians made decision to discharge patient late in the day
- ◯ Physicians' plan for follow-up care is undecided, causing patient to remain in the hospital
- ◯ Physicians delays discharge even though medical care is complete because "I want to watch him/her for another day"
- ◯ Nurse has not completed discharge teaching
- ◯ Case manager does not see patient within standard time after the consult is ordered
- ◯ Social work does not see patient within standard time after the consult is ordered
- ◯ Case manager is not available on weekends
- ◯ Social Workers are not available on the weekend
- ◯ For reasons other than above and other than unhealthy/unsafe environment, there is consensus that it is easier to send patient home the next day.

Patient is ready for discharge but delay occurs because of patient or family

- ◯ Patient and/or family are undecided regarding patient's disposition
- ◯ Patient and/or family insist on patient remaining in the hospital
- ◯ Family or friend is not available to transport patient home from the hospital
- ◯ Family or friend is not available to care for patient at home at this time
- ◯ Family stays for lunch

Delay secondary to waiting for home support systems to be established

- ◯ Physician did not request home support sufficiently early to be ready at time of discharge
- ◯ Case manager is unable to complete process within standard time
- ◯ Home support cannot be initiated on the weekend
- ◯ There is a delay in scheduling home health
- ◯ There is an issue with discharge scripts
- ◯ There is a delay in procurring home health equipment

Waiting for the setting up of the home IV or TPN therapy service

- ◯ Physician does not initiate home IV or TPN therapy service sufficiently early to be ready at time of discharge
- ◯ Home IV or TPN therapy ordered but contact with service not initiated within standard time
- ◯ Home IV or PTN therapy service is unable to complete process within usual time
- ◯ Patient has difficulty learning procedures for home IV or TPN therapy

Delays related to unavailability of appropriate level of care/outside resources/facility

- ◯ Unavailability of bed in a skilled nursing facility
- ◯ Unavailability of bed in a rehabilitation facility
- ◯ Delay relay related to readying home environment
- ◯ Bed at another hospital not available (acute or chronic)
- ◯ Delay occurs related to the patient having a terminal disease

Unavailability of bed in a skilled nursing facility

- ◯ No appropriate facility in patient's area
- ◯ Appropriate facility in patient's area but bed not available

Appropriate facility in patient's area but bed not available

- ◯ Patient does not have required insurance
- ◯ Appropriate facility in area exists that would accept patient but has no space available (i.e., application not accepted)
- ◯ Delay related to patient being evaluated by facility
- ◯ Patient accepted but no bed available (i.e., patient is on a waiting list)
- ◯ Bed available at facility but facility does not accept patients during the weekend

Unavailability of bed in a rehabilitation facility

- ◯ No appropriate facility in patient's area
- ◯ Appropriate facility in patient's area but bed not available

Appropriate facility in patient's area but bed not availability

- ◯ Patient does not have required insurance
- ◯ Appropriate facility in area exists that would accept patient but has no space available
- ◯ Delay related to patient being evaluated by facility
- ◯ Patient accepted but no bed available (i.e, patient is on a waiting list)
- ◯ Bed available at facility but facility does not accept patients during the weekend

Delay Related to readying home environment

- ◯ Awaiting setup of specialized home equipment
- ◯ Patient from unhealthy/unsafe environment is kept in the hospital until environment becomes acceptable or alternative facility is found
- ◯ Awaiting home health services
- ◯ Service available in the community but not obtained because of problem with payment

Awaiting home health services

- ◯ Delay related to nursing services
- ◯ Delay related to home health aide services
- ◯ Delay related to respiratory therapy services
- ◯ Delay related to physical therapy services

Service available in the community but not obtained because of problem with payment

- ◯ Delay related to nursing services
- ◯ Delay related to home health aide services
- ◯ Delay related to respiratory therapy services
- ◯ Delay related to physical therapy services

Delay occurs related to the patient having a terminal disease

- ◯ Patient has a terminal disease and is stable, but is kept in the hospital for humanitarian reasons
- ◯ Patient has a terminal disease and placement is actively being sought; however, patient dies before placement

Additional comments _____

THE UNIVERSITY OF CHICAGO MEDICINE
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UCM QUALITY IMPROVEMENT

A GUIDE TO USING THE PDSA WORKSHEET

PDSA (Plan, Do, Study, Act) is a performance improvement method that offers a systematic approach to make and sustain improvement within an organization. Based upon the scientific method, it involves understanding processes, identifying potential changes that might improve the quality of the those processes and their outcomes, testing those changes to see if they are effective, analyzing what worked, what didn't work, and what could work better, and then starting another project aimed at further improving the process. These iterations of change are often referred to as "cycles of change."

This document briefly summarizes the PDSA method as adapted from the Institute for Healthcare Improvement's model for implementing change in healthcare settings. Within this document, you will find many hyperlinks to outside quality improvement information resources.

Please contact the Center for Quality if you need assistance with your quality improvement project. The Center for Quality team can help you make full use of the performance improvement tools and assist you in taking advantage of any existing data sources that might be available to you and your team.

UCM Resources

UCMC Center for Quality Web Page | UCMC Center for Quality Staff Contact List | UCMC Nursing Quality

Planning a PDSA Quality Improvement Project

Project Title	Pick a title that concisely describes the nature of your working group and what the specific quality improvement project. Examples: *T4SE QR Nurses – Improving Pain Assessment* *EVS – Reducing Time from Patient Discharge to Room Ready for Next Patient*
Team Members	Make sure that people who are involved in the current process or who will be affected by any changes to that process are included in the planning of your project. Consider who is involved in carrying out the processes associated with this project? Who has the major inputs into this work? To whom do the major outputs go to? What leadership would you need to "sign off" on any announcements regarding this project or any funding needed to initiate the project? Be prepared to add members to your team as you refine your project aims and begin to more carefully study the processes. You may also have some ad hoc team members who participate only as needed. As your team begins to form, be as specific as possible in terms of defining the role and expectations of each member. See the Institute for Healthcare Improvement's webpage, "Forming the Team" for more information and examples. Consider using the following tools to assist you in establishing your team: Internal Customer (Stakeholder) Analysis, NHS Stakeholder Analysis , External Customer (Stakeholder) Analysis.
Aims	Develop a statement (or a few statements) that clearly define what you are trying to accomplish. These are your aims, or the results you are hoping to achieve. Make aim statements ***SMART***: • as specific as possible (S) • clearly measurable (M) • actionable (A) in that the team has the ability to make the specific changes necessary to overcome obstacles to improvement • realistic (R) in that it is within the team's ability and authority to influence the attainment of the aim • time-bound (T) in that the aim has a reasonable target date – for projects longer than 6 months, ensure that you come up with target dates, sometimes called "milestones," so that you can track the progression of your efforts toward attaining your aim(s) Your aims should also be aligned with one or more of the six "Aims for Improvement" for healthcare, as defined by the Institute of Medicine (IOM). Additionally, in order to help establish priority among other organizational initiatives, if the project is directly in response to an externally mandated regulation it's important to call that out.
Measures	**Develop at least 1 measure (or metric) for your project aim** Every project should have at least one metric related to the aim, to quantify the teams' progress toward attaining that aim. Refer to the IHI tool on establishing measures for more guidance. **Conduct research to see if someone else has already developed metrics for similar aims** Whenever possible, don't just "make up" your measures. Conduct some research into metrics and data collection tools that other teams or organizations may have already developed and validated.

Take the time to define meaningful, feasible metrics that are clearly linked to your aims

A project team might spend several weeks determining how they will measure their improvements. Defining these measures clearly and ensuring that the data you need in order to calculate them are valid, reliable, and feasible to obtain consistently are among the most critical steps in engaging in a quality improvement project.

Consult the Center for Quality or Nursing Quality to determine whether or not another group is already collecting the data that you are considering. This could end up saving you a lot of time that would otherwise have been wasted with labor-intensive, redundant data collection! Remember to define all of the essential elements of a metric: description, unit of measure, data collection tools and methods, assessment frequency, and baseline and target performance.

Develop balancing measures to ensure that your intervention is not placing patients or the organization at risk

Healthcare quality improvement initiatives often involve changing the way care is delivered, which requires careful monitoring for unintended negative effects on other processes or the system as a whole. Potential unintended consequences can compromise any of the IOM aim domains (safety, effectiveness, patient-centeredness, timeliness, efficiency, equity). General examples include: saving resources from one department while increasing the costs in another, or disrupting other related or unrelated care or operational processes. A specific example is around reducing the length of stay: Two balancing measures for this aim are readmissions rates and patient satisfaction scores. You want to make sure that as patients are discharged sooner, they are not readmitted more often or sooner, and that patients don't feel rushed or not ready and reflect that with lower satisfaction scores.

Current Process

Describe the current process

Describe the current process with as much detail as possible. Often times, this means you need to observe the process from start to finish, noting who needs what (and when) in order to do what (by when).

Be careful not to describe "how the process is supposed to be done," but rather, focus on how it is actually done.

The Process Flow Chart is a helpful tool for mapping processes. Please don't hesitate to contact the Center for Quality for assistance mapping a process in its current state if you believe that might be helpful.

Understand variation within the current process and causes of variation

Investigate whether there is already some policy or protocol "on the books" describing how the process should be done. How does what is actually happening differ from what should be happening? Sometimes there is no defined process and variation can occur between people or even when a person performs the process from one instance to the next.

If you already have baseline data available, use Pareto Charts to focus on the categories of process breakdowns that are most significantly contributing to poor performance. Use Run Charts and Control Charts to identify points in time where performance significantly improved or declined, look for any potential causes of those changes. Be prepared to add members to your team and to refine your aims and your measures as you learn more about the current process.

It is important to understand the history behind all aspects of a process before determining whether or not it is "waste" or inefficient and subject to revision. Some seemingly inefficient processes must remain in place due to safety, regulatory, or policy constraints. Make sure you ask, "why is it sometimes done this way?"; "Is there a regulatory requirement?"; "Are the circumstances that required this particular practice still valid?" When in doubt, keep asking questions and check with the experts, whether that's Compliance to ensure that a regulatory requirement is actually a requirement and not just an interpretation, or whether it's the manager of the area to understand the history of a process or policy.

Focus on the root causes of variation

Every time you see a difference between what is happening and what should be happening, you and your team need to ask "why is this difference occurring?" There is probably a good reason for the difference: perhaps they are eliminating unnecessary steps or they are doing workarounds to address a problem that has come up. Anytime you identify these differences, or identify problems and issues, it's important to get to the root cause(s).

One way to get to the root cause is an exercise called "Five Whys". It's important to understand root cause to target your intervention properly to prevent problems from recurring. If you are unsure of the problems within a process, you can use a "Fishbone Diagram" to help brainstorm potential problem causes and organize them by theme or type. You can use a Fishbone Diagram with the Five Whys tool: first brainstorm using the Fishbone Diagram, then choose a cause from the Fishbone to investigate further using the Five Whys.

Use data to understand root causes of variation

If you already have some baseline data available, you may want use that data to study a) what kinds of problems or "defects" are occurring, b) where they are occurring, and c) how many of those kinds of problems are occurring within a specified period of time. Again, try to focus on those areas that seem to really make a difference and you and your team can influence. You may find it helpful to use a Run Chart, Control Chart, or Pareto Chart for this analysis, depending on the type of problem or variation you are focusing on.

Explore the differences in the work process associated with different conditions (e.g., time of day, day of week, patient status, people, etc.); are these differences causing variation in the process or outcomes?

	Imagine a better way of doing things and get started with a plan to make it happen You and your team may sometimes find that you do not have the resources or authority to address the root cause. In these cases, engage your leadership to help to escalate the issue. Remember to keep a focus on our patients! It's our ethical imperative to ask ourselves and our teammates, "what causes of variation or poor performance do WE have control over?" and "what can WE do about this?" You are now ready to start the PDSA cycle!
PDSA: Plan – Do – Study – Act	
Plan	**Plan the intervention** An intervention can be a pilot test of a new way of doing things, or it can simply be a plan to develop systematic observation of a process. Sometimes, coming up with a way of monitoring a process is in and of itself a meaningful quality improvement initiative. How do you know if there is a problem if you don't have a way of monitoring the process? • Refer to IHI's resource on selecting changes and testing changes to get started. • Make predictions about what will happen and why. • If establishing an observation plan, where do you think you might want to look? Who will need to be involved in interpreting whether or not the current process is compliant and/or safe? How will this assessment be done? • Develop a plan to test the change that results from your intervention. (Who? What? When? Where? What data is needed?) • Define the new process in detail. Consider making another Process Flow Chart to illustrate the new process. Use the Quality Improvement Planning Table within the PDSA worksheet to define the tasks involved in implementing this plan, what person(s) will need to do what, starting when, and what tools or training will be needed in order for those tasks to be accomplished. You may also find it helpful to use a Gantt Chart for graphically presenting when tasks start and stop in relation to the entire improvement plan.
Do	**Try out the intervention** This is often known as a pilot test. Whenever possible, start by testing your intervention in the smallest way possible (one patient, one hour, one appointment, etc.) Your first pilot could even be a simulation. • Carry out the intervention as documented in your Quality Improvement Planning Table within the PDSA worksheet. • Document problems and unexpected observations. Get qualitative data from the people involved. • Begin analysis of the data. How well is your data reflecting what you are trying to measure? Are there any signals that may be indicating that your intervention is working? Do the pilot test. Implement your detailed action plan, including the improvement(s) itself and collection of performance data.
Study	**Study the results of the pilot test** Assess for improvement by examining the performance data revealed by your key process and outcome measures. Answer the following questions: • Is our performance improved? If yes, how so? • If no, did our performance stay the same? • If no, did our performance deteriorate? • If no, did something interfere with our pilot test, causing the performance outcomes to be unknown? • What did we learn from trying this on a small scale? Document your results. (PI Tools: Process Flow Chart, Run Chart, Control Chart, Histogram)
Act	**Act on the results of the pilot test** Based on your answers to the four questions above, decide what action to take. To make your decision, consider the following questions: • Do we need more performance data? Should we repeat or expand the pilot test? Should we conduct a modified pilot test? Refer to IHI's resource on linking test of change. • Should we retire the improvement idea because, at this time, it has not led to any or significant enough improvement? • Should we discard the improvement idea because it is associated with deteriorated performance? • Should we spread the process change to more areas within the medical center? Is the effort involved in implementing the change on a broad scale worth the effects we will achieve? (Spread shouldn't be considered until after an extended pilot. Evaluate for spread once you're sure the change is a sustainable improvement.) Make sure you either plan for the next PDSA cycle based on what you have learned from this first pilot, or, at the minimum, develop a strategy for monitoring this improved process at predefined intervals to ensure it is sustained. Measure for sustainment of project gains on an ongoing basis and evaluate at 3 month intervals, at minimum.

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UCM Quality Improvement

Quality Improvement Project PDSA Worksheet

To open links in this document, press Ctrl + mouse-click on the link.

Please click on the link, A Guide to Using the PDSA Worksheet, to gain more information about each step within the PDSA process and providing links to resources that will provide further detail and tools for those who are interested. This document can also be accessed on this intranet page. Contact the Center for Quality at 2-2723 if you need assistance using this form.

Name of Group/Project: _____

Project Initiation Date: _____ **Update Date/ Version** (if applicable): _____

Project Target Completion Date _____ **Current Project Status:** ☐Plan ☐Do ☐Study ☐Act

Quality Committee/Council to which this project Reports: _____

BACKGROUND

Briefly describe the problem. Be sure to specify if this is a continued PDSA cycle from a previously launched project.

TEAM MEMBERS

Who will be doing what? Forming a team is one of the most important preparatory steps in any performance improvement project.

Name	Department	Role	Name	Department	Role

Add additional rows as necessary.

AIM

What are aiming for? What are you trying to make better? Some performance improvement methodologies call these goals, objectives, or targets. Aims that are well-defined are often described as specific, measurable, actionable, realistic, and timely / time bound (SMART).

Please indicate the areas of UCM quality that your project will be aimed at improving.
Sources: IOM Report/Framework for Quality/Six Key Areas Report Brief, http://www.iom.edu/~/media/Files/Report%20Files/2001/Crossing-the-Quality-Chasm/Quality%20Chasm%202001%20%20report%20brief.pdf

☐ **Safety** – "avoiding injuries to patients from the care that is intended to help them"

☐ **Timeliness** – "reducing waits and delays for both those who receive and those who give care"

☐ **Effectiveness** – "providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding underuse and overuse, respectively)"

☐ **Efficiency** – "avoiding waste, including waste of equipment, supplies, and energy"

☐ **Equitability** – "providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status"

☐ **Patient-centeredness** – "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions"

If this project is being initiated to address an issue of compliance with an external mandate, please identify the regulatory body and the metric to which it relates:

☐ Not Applicable Or ☐ Regulatory Body: _____ Mandate/Measure: _____

Quality Improvement Project PDSA Worksheet

MEASURES

How will your team measure the project's progress toward attaining the aims? What are your measures of success?

CURRENT PROCESS

How does the process work prior to your team making any changes? What about it isn't working or seems to offer an opportunity for improvement? What elements are working? Describe the current process in as much detail as possible.

PLAN

What is the plan for your intervention, test, or observation? Explain any predictions about how your plan is expected to affect the overall process or improve the situation. If your project involves redesigning a process, describe the new process and how each change is expected to affect performance. Include a description of your plan for data collection during the intervention.

Quality Improvement Planning Table

ID	Action Steps *(What needs to be done?)*	Responsible Individual(s) (*By Whom)*	Location *(Where? With what patient and/or staff groups?)*	Tools / Training / Resources Needed	Target Start Date	Target Completion Date

Add additional rows as necessary.

Quality Improvement Project PDSA Worksheet

DO

Document problems and unexpected observations occurring as the test/intervention is being carried out. What does your monitoring data reveal about any changes in performance? What are some of the unplanned obstacles? What will your team do, if anything, in response to the unplanned obstacles?

STUDY

After the active phase of the test/intervention, describe your findings from the analysis of the data. Compare the data to your predictions. Summarize and reflect on what was learned.

ACT

Describe any further refinements need to be made, based on what was learned from the test/intervention. Prepare a plan to monitor for sustained improvements. Plan for the next PDSA cycle. Answer the question, "so, now what needs to be done?"

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Comer Children's Hospital

Comer 2PM huddle attendance form

_____ attended the 2pm huddle on _____
(Name) *(Date)*

_____ *Huddle Leader Signature*