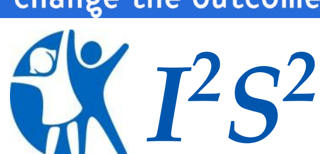
I^{2}S^2 Project Title: **Complete Discharge Summary for Colorectal Patients**

Team Leader: **Andrea Bischoff, M.D.**

Team: **XXX (colorectal APN), XXX (colorectal APN), XXX (urology APN), XXX (colorectal outpatient nurse), XXX (colorectal clinical manager), XXX (colorectal research nurse), XXX (gynecology nurse), XXX (A4S bedside nurse).**

Coach: XXX

Report Date: June 24th, 2013



KEY DRIVER DIAGRAM

Project Name: Complete Discharge Summary for Colorectal Patients **Project Leader: Andrea Bischoff, MD.**

Revision Date: _6_-_23_-_2013_

SMART AIM

We will increase the percentage of colorectal inpatients who will leave the hospital with a COMPLETE* DISCHARGE SUMMARY from 0% to 85% by September 30th, 2013.

GLOBAL AIM

All colorectal center patients will leave CCHMC with a complete and accurate understanding of their discharge instruction and future plan of care.

KEY DRIVERS

- Dedicated / Prioritized "Nurse Practitioner Discharge Summary Work Time"
- Accurate understanding of a "Complete Discharge Summary"
- Adequate Colorectal Nurse Practitioner staff Buy-In
- Effective and Complete "Intra-team Communication on Discharge Plan" (i.e. between APN/ Unit RN/ MD)
- Reliable "Follow-up Scheduling System"
- Activated "Families/ Patients Understanding the Plan of Care"

INTERVENTIONS (Reliability Level)

- Poster with definition of complete discharge summary example is created and available for all nurse practitioners (LOR 1)
- Power Point with case scenarios as examples of correct indication for admission and discharge diagnosis is created and available for all nurse practitioners (LOR 1)
- During morning rounds, discharge summary instructions should also be reviewed by the doctor for each patient with the nurse practitioner, during daily rounds discharge plan should be discussed with unit RN (LOR 3)
- Discharge checklist is created for families and bedside nurse (LOR 1)

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Historical Data

100%
80%
60%
40%
20%
0%

01/08/13 (n=03)
01/15/13 (n=03)
01/22/13 (n=09)
01/29/13 (n=07)
02/05/13 (n=02)
02/12/13 (n=02)
02/19/13 (n=01)
02/26/13 (n=06)
03/05/13 (n=04)
03/12/13 (n=08)
03/19/13 (n=05)

% Complete Discharge Summary — Median — Goal (85)

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James M. Anderson Center for Health Systems Excellence

100%
80%
60%
40%
20%
0%

99.0%
94.5%
89.4%
69.8%
47.2%
24.1%

First PDSA will address education on accurate diagnosis on admission by APN (Element # 2)

48
46
45
39
10
9

No plan of care
Incorrect diagnosis on discharge
Incomplete handout package
Incorrect diagnosis on admission
Incorrect Surgical Procedure
No information sent to PCP

Individual Quantities & Percentages Number Cumulative Sum Cumulative Percentages

120
100
80
60
40
20
0

05/24/13 (n=06)
05/31/13 (n=06)
06/07/13 (n=07)
06/14/13 (n=06)
06/21/13 (n=01)

% Correct Indication for Admission and Discharge Diagnosis — Median — Goal (85)

Process Name:

To type text inside this form, please click on the **border** of the box then begin typing.

Cincinnati Children's
change the outcome

CURRENT PROCESS	INTERVENTIONS	FAILURE MODES
Patient is admitted	-Verify that the correct attending is written in the discharge summary - Write the correct indication for admission	- Wrong attending (attending on call) is pre-populated as patient's attending. - Incorrect diagnosis is selected for admission. - NP documenting the discharge summary does not understand or know the accurate admission diagnosis.
Nurse practitioner starts discharge summary (up to 12 h after admission)	- Correct any prepopulated line that is not accurate	- NP is in a hurry and does not double check record. - Previously filled lines are not checked for accuracy.
Surgical procedure pre-populated from EPIC	- Surgeons must verify with the OR at the final time out if the procedure "stated" was the correct one performed and change it in EPIC, if appropriate.	- During final time out in the operating room, the correct surgical procedure was not recorded or changed in EPIC.
Daily updates are made	- Daily correct update in the discharge summary for relevant information: i.e. new surgical procedure	- No updates. - Inaccurate updates are added to chart. - Conflicting clinical decisions were given to NP (fellow vs. attending).
Future appointments are scheduled	- Appointments should be scheduled prior to discharge. - Appointments needs to be verified and relayed to the family.	- Bedside nurse contacts NP/resident to schedule an appointment but does not get a proper response, therefore, family is instructed to call the colorectal center after discharge to schedule an appointment.
Patient is ready for discharge, medication reconciliation is done, and after visit summary is prepopulated	- Discharge summary is correctly documented. - Medications are correctly displayed and verified with the family.	- Discharge summary was filled incorrectly or incomplete (after visit summary is prepopulated from the discharge summary). - Medication reconciliation was not done properly.
Instructions and plan of care written and given to the family	- Discharge instructions (procedure-related) will be given and reviewed with patient. - Plan of care (condition-related will be handed out and reviewed with patient.	- No plan of care written. - No clear instructions given. - No checking about family understanding of the instructions. - High variation based on bedside nurse and day of discharge (Sunday)
Discharge summary sent to PCP	- If no PCP is listed (International patients) the family will also receive a copy of the Discharge Summary	- No PCP or wrong PCP on file.

PDSA Ramp Planning Tool
Testing Teaching Tools for Nurse Practitioners

<table>
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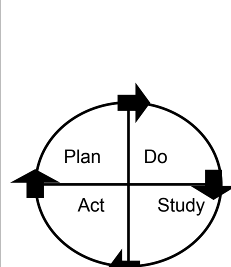
<td>


TEST 1
What: Correct indication for admission and discharge diagnosis (after case scenarios)
Who: 1st colorectal inpatient discharged on 6/17/2013
Where: A4S
From: 6/16/2013
To: 6/17/2013
Who executes: Nurse Practitioners
RESULTS: Adopt and ramp
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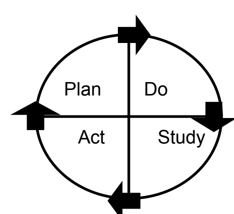

TEST 2
What: Correct indication for admission and discharge diagnosis
Who (population): 5 colorectal inpatients discharged following the fist successful one
Where: A4S
When:From: 6/17/2013 To: 6/26/2013
Who executes: Nurse Practitioners
RESULTS:
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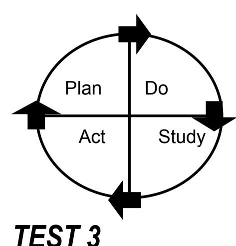

TEST 3
What:
Who (population):
Where:
When:From: _____To:________
Who executes:
RESULTS:
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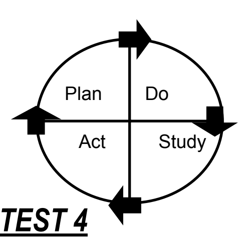

TEST 4
What:
Who (population):
Where:
When:From: _____To:________
Who executes:
RESULTS:
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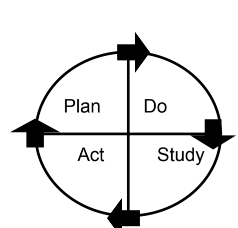
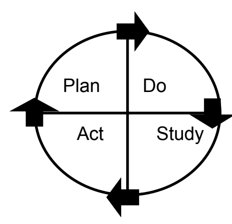
PDSA Ramp Planning Tool

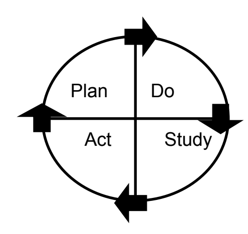
Testing Discharge Checklist for Families/Patients and Bedside nurses



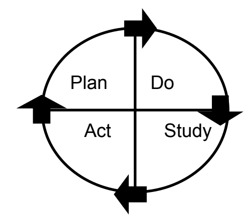
TEST 1
What: Discharge checklist
Who: 1 patient (Bedside nurse and Family/patient)
Where: A4S
When:From: 6/17/2013
To:6/17/2013
Who executes: Bedside nurse and Family with NP observing
RESULTS: Adapt and ramp



TEST 2
What: Discharge checklist
Who: 5 patients(Bedside nurse and Family/patient)
Where: A4S
When:From: 6/24/2013
To:________
Who executes: Bedside nurse and Family with NP observing
RESULTS:



TEST 3
What:
Who (population):
Where:
When:From: _____To:________
Who executes:
RESULTS:



TEST 4
What:
Who (population):
Where:
When:From: _____To:________
Who executes:
RESULTS:

(Correct Indication for Admission)				
Objective for this series of tests	Evaluate if teaching nurse practitioners was an effective and reliable way to obtain an accurate indication diagnosis for admission in the discharge summary.			
Overall Population	Colorectal inpatient / Nurse Practitioners			
TEST CYCLE 1	**Start Date:**	05/28/2013	**End Date:**	5/31/2013
Test Population	1st patient discharged at A4S between 05/29/2013 – 5/31/2013			
Plan	All nurse practitioners received written instructions on how to write the indication for admission on 05/21/2013 and Dr Bischoff confirmed that they received and understood the instructions.			
Prediction	Indication diagnosis for admission will be correct on the first patient discharged at A4S between 05/29/2013 – 5/31/2013			
Do	First patient discharged on 05/29/2013 was evaluated (indication diagnosis for admission).			
Study	The indication diagnosis for admission was incorrect.			
Act	Adapt			
TEST CYCLE 2	**Start Date:**	06/17/2013	**End Date:**	06/17/2013
Test Population	1st patient discharged at A4S on 06/17/2013			
Plan	All nurse practitioners received written case scenarios to illustrate correct indication for admission and correct discharge diagnosis. They also receive percentages on how often this information was incorrect in the last 21 discharge summaries.			
Prediction	First patient discharged on 06/17/2013 will have correct indication diagnosis for admission and correct discharge diagnosis.			
Do	First patient discharged on 6/17/2013 was evaluated.			
Study	The indication for admission and the discharge diagnosis were correct			
Act	Adopt			

(Discharge Checklist for Family and Bedside Nurse)				
Objective for this series of tests	Evaluate if by using two discharge checklists (one for family/patient and one for the bedside nurse) we achieve a correct and accurate discharge summary.			
Overall Population	Colorectal Inpatients at A4S			
TEST CYCLE 1	**Start Date:**	6/17/2013	**End Date:**	6/17/2013
Test Population	1st patient discharged at A4S on 6/17/2013			
Plan	Family will have a discharge checklist and bedside nurse will have a discharge checklist			
Prediction	Correct discharge summary and instructions will be given to the family. Family will understand instructions and be able to teach them back.			
Do	Dr Bischoff will observe the discharge process to assure that both checklists are used and that the family understood instructions and was able to teach them back.			
Study	The discharge summary was correct BUT there were complains from the bedside nurses on some items in their discharge checklist. Family understood and was able to teach instructions back.			
Act	ADAPT (remove some items of the bedside nurse checklist)			
TEST CYCLE 2	**Start Date:**	6/24/2013	**End Date:**	7/03/2013
Test Population	5 patients discharged at A4S between 6/24/2013 - 7/03/2013			
Plan	Family will have a discharge checklist and bedside nurse will have a modified discharge checklist.			
Prediction	Correct discharge summary and instructions will be given to the family. Family will understand instructions and be able to teach them back.			
Do	Nurse practitioners (when Dr Bischoff is not available) will observe the discharge process to assure that both checklists are used and that the family understood instructions and was able to teach them back.			
Study				
Act				

05/21/2013 – Written Instructions

The Perfect Colorectal Discharge Summary (Tentative Version 1 – 5/27/2013)

1) **Attending Provider is correct**
   a. Watch out for patients that were admitted through the emergency room or on emergency basis, because that's when the attending on call is the one pre-populated but it is not necessarily the correct one (remember to change it in the discharge summary if this happened)!
   b. The pediatric surgery inpatient list has the correct attending.

2) **Indication for admission is correct**
   a. The indication for admission should be exactly why the patient is admitted THIS TIME. For example: I. Pre-op for colostomy closure; II. Pre-op for cloacal repair; III. Dehydration s/p ileostomy; IV. Fecal impaction; V. Enterocolitis; VI. Partial small bowel obstruction.

3) **Discharge diagnosis is correct**
   a. The discharge diagnosis is the main disease that the patient has and what happened THIS TIME if relevant. For example: i. Anorectal malformation (recto-urethral bulbar fistula) s/p colostomy closure; ii. Cloaca s/p posterior sagittal anorecto-vaginal-urethral plasty; iii. Idiopathic constipation s/p ileostomy; iv. Idiopathic constipation; v. Hirschsprung disease; vi. Idiopathic constipation s/p sigmoid resection.
   b. In cases of anorectal malformation it is VERY important to state the type of anorectal malformation in all documentation (perineal fistula, vestibular fistula, cloaca, recto-urethral bulbar fistula, recto-urethral prostatic fistula, recto-bladderneck fistula, imperforate anus without fistula).
   c. Avoid writing abbreviations such as ARM instead of anorectal malformation, or PSARP instead of posterior sagittal anorectoplasty, because not everybody outside Cincinnati Children knows what they stand for.

4) **Correct procedure(s) during admission**
   a. Check the operative report if it states the same that is listed on EPIC (sometimes the actual procedure is not the scheduled one and this is not correctly changed in EPIC).
   b. Check if the patient had more than one surgical procedure while in house. If that happened, make sure that they are all listed under procedures.

5) **Correct discharge medications**
   a. In colorectal the most common medications are: laxatives (dose and frequency should be clearly stated – example: take 2 squares of ex-lax – 30mg, once a day), prophylactic antibiotics for urinary tract infection (dose, frequency, and duration should be clearly stated), enemas (recipe, frequency, and route should be clearly stated – example: administer through the rectum 400 ml of saline + 20 ml of glycerin, once a day or administer through the Malone catheter 200 ml of saline + 10 ml of glycerin two times a day).

6) **Correct discharge instructions**
   a. When to call? Who to call? Why to call?
   b. Should include: instructions on shower/bath, double diaper if indicated and for how long, activity restrictions.
   c. Procedure related discharge instructions will be provided for: PSARP with and without colostomy, PSARVUP with and without colostomy, Malone, Neo-Malone, Colostomy closure, Hirschsprung with and without stoma, Sigmoid resection, Rectal prolapse repair with and without colostomy.
   d. **FOLLOW UP APPOINTMENT SCHEDULED PRIOR TO DISCHARGE**

7) **Outlined future plan of care/ Milestones for follow-up back to the center**
   a. Condition related plan of care will be provided for: perineal and vestibular fistulas, recto-bulbar fistula, recto- prostatic fistula, recto-bladderneck fistula, cloaca with

06/16/2013 – Power Point with Case Scenarios and Statistics

I2S2 Project
The Perfect Colorectal Discharge Summary
Everybody is responsible !!!!!

1

Our 1st goal is to have the **correct indication for admission** and **correct discharge diagnosis** in the **discharge summary**

2

How were we doing in the past?

50 patients were reviewed discharged during the period of January 8th – March 25th

3

- Incorrect diagnosis on admission:
  - 39/50 = 78 %
- Incorrect discharge diagnosis:
  - 46/50 = 92 %

4

Last Review (21 patients discharged during the period: 5/24/2013 – 6/16/2013)

- Incorrect diagnosis on admission:
  - 14/21 = 66 %
- Incorrect discharge diagnosis:
  - 12/21 = 57 %

5

Congratulations to **Mark Ogg** (RN CNP) and **Kimberly Cain** (RN CNP) for the best colorectal discharge summaries in the last 21 patients !!!!!!

6

- Please remember that we are a surgical service therefore the indication for admission should be either 1) pre-op for … or 2) post-op for …
- The discharge diagnosis should include the main disease (Hirschsprung, anorectal malformation, idiopathic constipation).

7

Examples – Case Scenarios

- 2 months old with Hirschsrpung disease, admitted for bowel prep the day before, underwent transanal pullthrough.
  - Indication for admission: pre-op for transanal pullthrough
  - Discharge diagnosis: Hirschsprung disease s/p transanal pullthrough

8

Examples – Case Scenarios

- 7 yo, female patient with rectovestibular fistula and previous failed repair, admitted for bowel prep the day before surgery, underwent PSARP.
  - Indication for admission: pre-op for redo posterior sagittal anorectoplasty
  - Discharge diagnosis: anorectal malformation (recto-vestibular fistula) s/p redo posterior sagittal anorectoplasty

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Examples – Case Scenarios

- 5 months old male patient with recto-urethral bulbar fistula s/p PSARP, admitted the day before for stoma irrigation prior to colostomy closure.
  - Indication for admission: pre-op for colostomy closure
  - Discharge diagnosis: anorectal malformation (recto-urethral bulbar fistula) s/p colostomy closure

10

Examples – Case Scenarios

- 8 yo male patient with recto-bladderneck fistula came to same day surgery for a Malone procedure.
  - Indication for admission: post-op for continent appendicostomy (Malone procedure)
  - Discharge diagnosis: anorectal malformation (recto-bladderneck fistula) and fecal incontinence s/p continent appendicostomy (Malone procedure)

11

Examples – Case Scenarios

- 10 yo, female with idiopathic constipation, admitted for bowel prep, prior to a sigmoid resection.
  - Indication for admission: pre-op for sigmoid resection
  - Discharge diagnosis: idiopathic constipation s/p sigmoid resection.

12

- Let me know if you have any questions!

Andrea Bischoff (andrea.bischoff@cchmc.org)

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06/17/2013 – Checklists version 1

BEDSIDE NURSE DISCHARGE CHECKLIST (version 1)

- The diagnosis at admission and discharge are correct.
- The provider (surgeon) listed is the correct one.
- All the medications (previous from admission and new ones) were reviewed with the patient, including dose, frequency and duration. The family understood and was able to teach back.
- The patient/family knows when to call, who to call and why to call in case of problems related with the surgery. They were able to teach back.
- The patient/family was explained about post-operative care including: diet, bath/shower, activity restrictions, wound care, and catheters. They were able to teach back.
- The patient/family received written instructions that are condition related (diagnosis) and procedure related (surgery).
- The patient has a follow up appointment scheduled.
- The primary care physician is correctly listed in EPIC.
- All of the patient/family questions were answered and they understood the future plan of care.

PATIENT/PARENTS DISCHARGE CHECKLIST (version 1)

- All the medications (new and old ones) were reviewed with me and I understood it.
- I know when to call, who to call and why to call in case of problems related with the surgery.
- I was explained about post-operative care including: diet, bath/shower, activity restrictions, wound care, and catheters.
- I received written instructions that are condition related (my diagnosis) and procedure related (my surgery).
- I have a follow up appointment scheduled.
- My primary care physician is correctly listed.
- All my questions were answered and I understood the future plan of care.

06/17/2013 – Checklists version 2

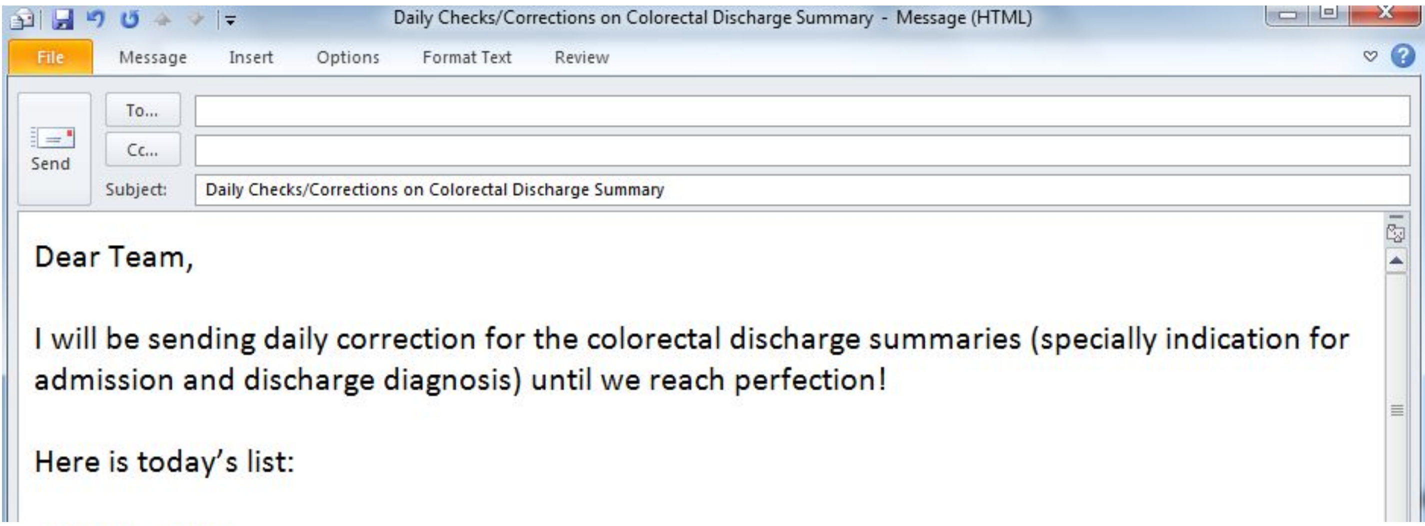
BEDSIDE NURSE DISCHARGE CHECKLIST (version 2)

- The provider (surgeon) listed is the correct one.
- All the medications (previous from admission and new ones) were reviewed with the patient, including dose, frequency and duration. The family understood and was able to teach back.
- The patient/family knows when to call, who to call and why to call in case of problems related with the surgery. They were able to teach back.
- The patient/family was explained about post-operative care including: diet, bath/shower, activity restrictions, wound care, and catheters. They were able to teach back.
- The patient/family received written instructions that are condition related (diagnosis) and procedure related (surgery).
- The patient has a follow up appointment scheduled.
- All of the patient/family questions were answered and they understood the future plan of care.

PATIENT/PARENTS DISCHARGE CHECKLIST (version 1)

- All the medications (new and old ones) were reviewed with me and I understood it.
- I know when to call, who to call and why to call in case of problems related with the surgery.
- I was explained about post-operative care including: diet, bath/shower, activity restrictions, wound care, and catheters.
- I received written instructions that are condition related (my diagnosis) and procedure related (my surgery).
- I have a follow up appointment scheduled.
- My primary care physician is correctly listed.
- All my questions were answered and I understood the future plan of care.

06/18/2013 – Daily emails when indicated



Daily Checks/Corrections on Colorectal Discharge Summary - Message (HTML)

File | Message | Insert | Options | Format Text | Review

To...

Cc...

Send

Subject: Daily Checks/Corrections on Colorectal Discharge Summary

Dear Team,

I will be sending daily correction for the colorectal discharge summaries (specially indication for admission and discharge diagnosis) until we reach perfection!

Here is today's list:

XXXXX, XXXXX

- Discharge diagnosis should be: rectovestibular fistula s/p redo posterior sagittal anorectoplasty

XXXXX, XXXXX

- Discharge diagnosis should be: Hirschsprung disease s/p laparoscopic assisted transanal rectosigmoid resection and ileostomy

XXXXX, XXXXX

- Discharge diagnosis should be: cloaca, s/p rectal prolapse repair

XXXXX, XXXXX

- Indication for admission should be: pre-op for introitoplasty and colostomy

XXXXX, XXXXX

- Indication for admission should be: pre-op for ileostomy closure

Thank you, and hopefully every day the list will be shorter!!!!
Andrea

Learnings/Challenges

- Importance of planning well the tests and evaluating the results immediately.
- Importance of keeping the data collection accurate and updated.
- Finding extra time is always a challenge.

Next Steps

- Ramp on 2 tests:
  - Discharge checklists for families/patients and bedside nurses
  - Correct indication for admission and discharge diagnosis

- Create long-term follow up handouts condition specific