Promoting Safe Hospital-to-Home Transitions

Improving the Quality of Family/Caregiver Written Discharge Instructions
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Executive Summary

What is the Pediatric Hospital Improvement Project’s (P-HIP) Hospital-to-Home Transitions Collaborative?

The collaborative sought to improve overall performance on hospital-to-home transitions, by improving on the quality of the written discharge instructions provided to families/caregivers, including nine key items referenced below.

Why was this area selected?

The Seattle Children’s Center of Excellence on Quality of Care Measures for Children with Complex Needs (COE4CCN) created Transitions of Care Quality Measures as part of an AHRQ initiative. Transitions of care can occur in multiple ways; from inpatient to outpatient, from one outpatient provider to another, from one inpatient setting to another, or from the inpatient setting to home. These transitions create situations where the care of a pediatric patient is handed off to a new set of healthcare providers and/or to home-based family caregivers, in the case where the patient is being discharged to home after a hospitalization.

An effective transition will support the likelihood of reducing the incidence of inappropriate care and potential medical complications in the next settings of care. Three measures were developed to capture the quality of transitions in the inpatient setting, and from the inpatient setting to home. These quality measures used medical records as a data source.

Of the three measures developed, family/caregiver written discharge instructions content was selected for a quality improvement collaborative because it demonstrated the most variation in baseline performance across participating hospitals. In addition to the baseline variation, the measure was also selected due to the high scores among a few teams.

See Appendix 5 for Transitions Single Measure Guideline.

Family/caregiver written discharge instructions content

Children/adolescents admitted to the hospital, should have documentation in the medical record of written discharge instructions provided to their family/caregivers that contained the following:

- Admission and discharge diagnoses
- Medication list at discharge
- Pending test results
- Follow-up tests that need to be completed
- List of follow-up appointments
- 24/7 telephone contact number if problems arise
- Number to call for assistance getting needed appointments
- Immunizations given
- Admit and discharge dates

These high scoring teams provided a starting place for identifying best practices for improving performance on this measure. This quality measure, Family/caregiver written discharge instructions content is below.

Note that this measure refers to the hospital-to-home transition record provided to the family of the patient, not to the transition record for providers.

What is the change package?

This document is the change package which includes a set of evidence-based practices that are based on findings from the improvement work performed by the eight collaborative teams who took part in P-HIP.

How was the change package developed?

The eight participating hospitals tested and refined change strategies over the course of the collaborative to produce the evidence-based practices. The hospital teams shared challenges, lessons learned, and practical tools that are also summarized in this change package.

Who is the intended audience?

Any hospitals that care for children (including freestanding children’s hospitals, children’s hospitals within larger systems also serving adults, and community hospitals) seeking to improve their performance on hospital-to-home transition quality by improving the content of the written family/caregiver discharge instructions they provide.

How should the change package be used?

The change package offers a starting point to jumpstart improvement efforts at hospitals with varying levels of quality improvement experience and expertise. Hospital teams are urged to select a broad array of strategies and changes from within the change package, but are not expected to implement every recommendation.
A key driver diagram is a visual representation of a theory of what contributes to achieving the aim of the project. The key driver diagram below reflects the changes that were tested and led to improved quality measure performance for the eight participating teams. The aim identified in the key driver diagram below was selected for the P-HIP Collaborative. This is included as an example; hospitals seeking to improve their performance on hospital-to-home transition quality may choose different aims and goals. More details, and examples from the P-HIP teams, on the changes can be found starting on page 7.

**AIM**

By January 2019, the 8 participating hospitals will improve overall performance on quality of family/caregiver written discharge instructions content, going from an aggregate mean score of 71 to 85.

**KEY DRIVERS**

- Standardized written family/caregiver discharge instructions process/checklist
- Standardized policies
- Role clarification & Staff Education
- Data feedback loop for continuous improvement
- Built in error-proofing/constraints

**CHANGE STRATEGIES**

- Create and use a standardized template in the EMR for written family/caregiver discharge instructions that includes key items.
- If overall discharge instructions template cannot be edited due to system restrictions, use dot/smart phrases (or equivalent) to add key items to written discharge instructions.
- In addition to including key items, written discharge instructions should consider parent/family needs and literacy for the best results.
- Ensure that hospital policies align with the intent of the measure’s key items.
- If policies cannot be created or adjusted, work within hospital system by gaining buy-in from many different units, subspecialties, teams, etc. By understanding and supporting system-wide needs/policies, teams can often find ways to include the key elements.
- Identify a process owner, or specific team member roles, to ensure that the written family discharge instructions include the necessary information.
- Educate staff on the importance of including the 9 key items.
- Conduct local gap analysis to identify what items are not being captured in the written family discharge instructions.
- Regularly audit charts to monitor compliance with proper documentation.
- Report audit results back to leadership and other stakeholders in the process (clinicians (including residents), unit leads, etc.).
- Include data entry fields for individual items in either overall discharge instructions template or in necessary dot phrases.
- Include hard stops or other deterrents to errors if possible.
- Limit amount and need for free text.

Key supports: Leadership support, knowledge and application of quality improvement methods, commitment to safety at all levels.
How to Use the Change Package and Tools

**STEP 1**
Learn Where the Gaps are in Your Process

There are a number of tools and strategies you should consider using to assess your current processes. This will help you more accurately understand where you need to focus your improvement efforts.

- Use a gap analysis tool to identify systematic issues with your current process.
- Conduct detailed chart reviews to determine whether and where documentation is occurring for the measure. You may need to review only a handful of charts to identify documentation issues, or more of them depending on your hospital.*
- Create a process map (Figure 1) to ensure you understand how each part of the process or system impacts the other. A process map is a planning and management tool that visually describes the flow of work. Below is an example of a swim lane process map developed by one of the P-HIP hospitals.
- Meet with stakeholders of the process to learn what improvements need to be made from their perspective.

This may include staff involved in the process, patients/families, and/or community providers (physicians and hospitals).

* Note that many sites reported finding documentation of items that would make patients eligible for specific sub-parts of the measure (e.g., immunizations received, pending labs) in places other than the primary care provider-facing discharge summary in the EMR. To address this, medical abstractors sometimes reviewed lab results and medication administration fields in addition to the discharge summary for those items.

Documentation for meeting the measure subparts was also sometimes in several parts of family-facing discharge paperwork. Common places for finding documentation included additional free text fields at the bottom of otherwise standardized discharge instructions, notes that were attached to discharge instructions, or handouts/paperwork that were given to the families and uploaded into the EMR separately. This was especially true in certain subspecialty services where documentation is done across multiple providers and trainees at different times.

![Swimlane process map created by PHIP Hospital to show the development of their Discharge (DC) After Visit Summary (AVS) for families](image)
**STEP 2**

**Form an Effective Team**

Your team’s composition will depend on what structures and processes you will work on to improve outcomes. Depending on what will be affected by the improvement, it will be important to engage and include the individuals who can help drive improvement in those areas. Typically, the three roles that make up an effective team are:

**System leader:** Someone with authority to institute a change and to help overcome barriers when they arise. They should also have the ability to allocate the time and resources needed by the team.

**Technical expert(s):** Someone who has expertise in the particular clinical area that is being improved.

**Day-to-day leader:** Someone who functions as the team lead, and is responsible for driving the work forward on a daily basis.

Typical members of the Hospital-to-Home Transitions Collaborative team would include:

- Physician lead
- Discharge coordinator
- RN/NP representatives
- Clinical staff (who can do chart reviews)
- IT support staff member

While the IT support person may not regularly meet with the team, it is important to have someone on the team who understands the capabilities and limitations of the electronic medical records system. If your hospital has residents, they will likely be involved in discharges, so consider engaging some of them as well.

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**STEP 3**

**Develop and Test Changes**

The changes (i.e., strategies that will bring about improvement) from the key driver diagram were tested and implemented among the hospitals in the P-HIP Collaborative. Note that not every change was implemented in every hospital, but each change included in this package contributed to the success of several hospitals in the Collaborative. Rather than “reinventing the wheel”, consider starting with one of the changes and go from there. The Key Driver Diagram can be viewed in Step 1 and details of changes are in a later section of this document.

Many hospitals noted that developing and testing changes worked better in discrete units or specialties. After tests had been run and progress had been seen, they were able to move onto additional units by leveraging the buy-in from the teams who had already experienced successes.

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**STEP 4**

**Monitor the Impact of Your Changes**

Measurement is essential to determine whether your changes are actually leading to improvement. The following are important steps to ensure that you are monitoring whether your changes are having an impact, and/or working as intended.

- Conduct monthly chart audits.
- If possible, generate routine data pulls from your EMR that break down data by different sites of care or subspecialties.
- Talk with staff, patients/families, and outside clinics periodically to learn what impact the changes have made for them.
- Create simple run charts to monitor your progress over time. Appendix 5 includes a useful Medical Record Abstraction Excel Macros Tool from which you can generate run charts of your data. Control charts can be useful, but if your institution doesn’t have the capability, they’re not essential.
Lessons Learned From the P-HIP Collaborative

Engage leadership from the affected areas. Without their buy-in, it will be challenging to test and implement changes in their units.

Engage frontline staff in your planning efforts. What you may believe is the right change to test may not be feasible or practical in the actual work setting.

Be prepared to change course. If you find that a change is not leading to improvement, or another change is needed prior to the one you are testing, it should be stopped.

Consistent communication with those impacted by the change is essential for successful testing and implementation. Share data from your PDSAs, seek input and feedback on the process. The more your staff and colleagues feel connected and engaged in the improvement work, the greater chance of success.

Hardwire your changes. Every organization has turnover at some point, so by taking the people out of the equation and building the change into the system, it will be harder to make mistakes (error-proofing). One example of hardwiring changes is to create a standard family/caregiver discharge instructions template for use across the hospital.

Understand how family/caregiver discharge instructions operate within your EMR. Include the process for submitting change requests, who is on the team, who can support your technological needs and how best to work with the system.
Change Strategies for Improving Written Family/Caregiver Discharge Instructions

There are five general key drivers of change that organizations can use to improve the quality of their written family/caregiver discharge instructions. The changes described in this section are based on those made by the organizations in the P-HIP Collaborative and the lessons they learned in the course of their work.
Standardized Written Family/Caregiver Discharge Instructions

The most common characteristic of teams with high scores was using a template for written family/caregiver discharge instructions. The hospitals that were able to ensure their overall written family/caregiver discharge instructions template included the required items consistently performed highly on the measure. Several of these changes also relate to the built-in error proofing/constraints key driver as they are trying to make it “easy” to reliably implement the same process for every patient.

**CHANGE 1** Create and use a standardized template in the EMR for written family/caregiver discharge instructions that includes key items.

Recommendations based on learnings from the P-HIP Collaborative:

- Create a written family/caregiver discharge instructions template to ensure that key item fields are pulled directly from patient chart.
- Ensure that updates to your EMR template continue to include key items in written family/caregiver discharge instructions template.
- If possible, leverage plans for housewide written family/caregiver discharge instructions revision.
- If a template already exists and you are working to adjust it, consider adding blocks to include key items that are only necessary occasionally.

**IN PRACTICE**

University of Iowa Stead Family Children’s Hospital had luck with the timing of their work on this project because the hospital was undergoing revision to their After Visit Summary (family/caregiver discharge instructions name in Epic Medical Record System) and the team was able to suggest the key items in the measure.

See Appendix 1 for example of the written family/caregiver discharge instructions template.
**CHANGE 2**  If overall written family/caregiver discharge instructions template cannot be edited due to system restrictions (hospital is part of a health system that includes an adult hospital, IT policies, etc.), hospitals should use dot phrases* (or equivalent) to add key items to written family/caregiver discharge instructions.

*Dot phrases are easy ways of putting in documentation that is either standard or can be filled in to make a complete document. These preformatted phrases are often used as a work-around when larger, more global changes are unable to be made to the EMR. They are very popular in the Epic Medical Record system, where they are often called “Smart Phrases,” but users of other medical record systems report them being used as well.

Recommendations based on learnings from the P-HIP Collaborative:

- Smart/dot phrases (or equivalent from other EMRs) should be agreed upon by participating providers and used to create sets of discharge instructions for different conditions and different parts of the written family/caregiver discharge instructions.

- Work with clinicians (including residents) to create and popularize dot phrases (or equivalent) to address deficiencies in written family/caregiver discharge instructions.

- Dot phrases (or equivalent) can address individual key items that should be included in the written family/caregiver discharge instructions if necessary.

**IN PRACTICE**

Colorado Children’s Hospital had a freeze in changes to the written family/caregiver discharge instructions due to institutional EMR edits, so they used the dot phrases to fill the gaps.

Medical University of South Carolina created a 24/7 contact info dot phrase after input from many groups.

See Appendix 2 for example of the Smart phrase.

At Seattle Children’s Hospital, when a desired lab or radiology study is not available as a future order within the Discharge Power Plan (Cerner term for the list of available orders) or the lab/study will occur outside the system, the ordering provider can type into the “Future labs/studies plan” field so that the text will then appear in the written family/caregiver discharge instructions in the “planned future tests” section. (See screenshots, left)

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**CHANGE 3**  Consider that system standards should be modestly adaptable to the unique care setting.

Recommendations based on learnings from the P-HIP Collaborative:

- Processes and structures that conform with organizational template will likely need additional testing to optimize within the specific care setting or unit. Specific areas where this was found to be true in the collaborative include HemOnc, Inpatient Psych, and Surgery.
**CHANGE 4**  In addition to including key items, written family/caregiver discharge instructions should consider parent/family needs and literacy for the best results.

Recommendations based on learnings from the P-HIP Collaborative:

- Have parents review standard written family/caregiver discharge instructions template for readability, and then make needed modifications.
- If possible, work with language services department to develop a process that would expedite the time in which written family/caregiver discharge instructions can be translated into the preferred language of families with limited English proficiency.
- Generate a hospital-wide initiative to improve the organization and readability of standard written family/caregiver discharge instructions template to make it more understandable for patients and families.
- Solicit buy-in for the entire process for written family/caregiver discharge instructions improvement by illustrating commitment to families. Healthcare professionals of all levels, as well as hospital administrators and advisory groups, typically have more energy around a topic if the focus is on families’ well-being.
KEY DRIVER 2
Standardized Policies or Established Organizational Expectations

The key items often require policies (or established standards/expectations) that support their intent and purpose. Below is a list of the nine key items to include in written family/caregiver discharge instructions; the ones that are highlighted required policy changes the most often. Some of the recommendations below focus specifically on these key items due to the persistent attention sites had to focus on them.

- Admission and discharge diagnoses
- Medication list at discharge
- List of follow-up appointments
- **24/7 telephone contact number if problems arise**
- Admit and discharge dates
- Number to call for assistance getting needed appointments
- **Pending test results**
- Follow-up tests that need to be completed
- Immunizations given

**CHANGE 1 » Ensure hospital policies align with the intent of the key items.**

Recommendations based on learnings from the P-HIP Collaborative:

- Create a standard operating procedure for how unit clerks respond to phone calls from families for the 24/7 contact info item.

**CCHMC PDSA to develop a standard operating procedure and improve performance on a 24/7 callback number**

**Plan:**

- Learned from other teams’ experience and successes.
- Created new dotphrase to add to our current discharge instructions: If you have a question relating to your stay in the hospital or medicines you were given, please call the unit at 513-xxx-xxxx and ask for the doctor on call.”
- Met with nursing and unit leadership to design game plan.
- Providers add dotphrase to discharge instructions.
- If family calls back, unit coordinator uses script to take call and then gives name/phone number to providers.

- Any provider (APN, resident, attending) can call back within 2 hours.
- Record calls on sheet in room.

**Do:**

- Tested for 1.5 months, initially with weekly reminders to providers.

**Study:**

- Over 2 months, used new phrase 41% of time.
- One phone call back to the unit: medication question.

**Act:**

- Adapt and continue to study.

**IN PRACTICE**

Medical University of South Carolina (MUSC) Children’s Hospital developed a Smartphrase (exclusive to Epic EMR) and accompanying educational material to ensure 24/7 phone contact for families was included in the Written Family/Caregiver Discharge Instructions.

See Appendix 2 for MUSC documentation.

Cincinnati Children’s Hospital Medical Center (CCHMC) conducted a PDSA cycle to develop a standard operating procedure and improve performance on 24/7 callback number. (See PDSA, left)
To adequately address the pending test results item, it is important to ensure that there is a process in place for a family to get information about their results even if clinician who they saw during their stay is not available. This can require a policy or process to create coverage when hospitalists rotate to a new service.

If there are organizational concerns about the pending test results item (related to health literacy, confidentiality, or information overload), patients can be referred to the patient portal to access their health information.

Find a unit with relatively low patient volume to test a process for various key items before considering policy changes for large units.

**IN PRACTICE**

Children’s Hospital Colorado developed a Dotphrase (exclusive to Epic EMR) to ensure that pending test results appeared in the Written Family/Caregiver Discharge Instructions. (See Dotphrase)

Mount Sinai Kravis Children’s Hospital and UCSF Benioff Children’s Hospital San Francisco went through a process of collecting and verifying numbers for each individual service.

See Appendix 3 for list of phone numbers compiled.

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CHANGE 2 » If policies cannot be created or adjusted, hospitals should work within their system by gaining buy-in from many different units, subspecialties, teams, etc. By understanding and supporting system-wide needs/policies (hospital is part of a health system that includes an adult hospital, IT policies, etc.), teams can often find “work-arounds” that allow the items to be addressed.

Recommendations based on learnings from the P-HIP Collaborative:

- Collect phone numbers to create a dot phrase (or equivalent) that populates the correct phone number when addressing the 24/7 contact information item.
- When “competing” dot phrases (or equivalent) exist, work with EMR support team, or teams of residents, to select one that is the most user-friendly and encourage its use.
- When developing dot phrases to pull in the items, it is important to solicit feedback from different stakeholder groups. This can mean several iterations and tests of the phrases.
Role Clarification and Staff Education

To ensure the written family/caregiver discharge instructions are consistently clear and comprehensive, it’s imperative that providers and gatekeepers are educated on the importance and steps of this process. Ideally, there should be a process owner for the written family/caregiver discharge instructions on every unit/floor, but if that’s not possible, it needs to be clear whose job is what.

**CHANGE 1** Identify a process owner, or specific team member roles, to ensure that the written family/caregiver discharge instructions include the necessary information.

Recommendations based on learnings from the P-HIP Collaborative:

- If a discharge process is owned/led by a specific role at an institution, this will likely make changes easier and smoother. Roles to consider include nurses, discharge coordinators, residents, nurse practitioners, or attending physicians. In general, sites with dedicated discharge coordinators had an easier time meeting the measure without occasional unexplained failures. At these sites, most people involved in the process seemed to understand it more. This is not always possible, however, so consider if your institution is capable of creating this role.

- While one group might create the written family/caregiver discharge instructions, another group might review it with caregivers and patients. Gather feedback on the document (its original form and any proposed changes) from the group reviewing it with families. They will be able to point to areas that are often confusing or which may contradict each other.

**CHANGE 2** Educate staff on the importance of including the nine key items in the written family/caregiver discharge instructions

Recommendations based on learnings from the P-HIP Collaborative:

- Train new clinicians (including residents/nurse practitioners) on the documentation process and how to use the template or dot phrases correctly. Consider common barriers and include them in training materials.

- If an EMR requires a certain diagnosis be flagged (example, in order for a diagnosis to appear in an Epic After-Visit-Summary, it must be flagged as the “principal diagnosis” within the list of diagnoses), be sure to actively train residents on how to ensure that step occurs.

**IN PRACTICE**

Vanderbilt Children’s Hospital was having problems with the diagnosis not being flagged appropriately in a consistent manner. They added a component to their rounding that included pulling up the diagnosis for discussion. If the diagnosis had not been flagged, the resident would be reminded to do so in the rounding setting. This underscored the importance of the step.

See Appendix 4 for physician education around principal diagnosis.
Data Feedback Loop for Continuous Improvement

To make effective, sustainable changes to your process or system, it is essential that you continuously monitor and respond to your data. Understanding where the gaps are in your process is the first step in focusing your improvement efforts. Once your improvement activities are underway, it is important to regularly assess whether your efforts are actually leading to improvement by collecting data on the process. Sharing the findings of your data collection with both leadership and stakeholders will allow you to involve them in modifying plans to your improvement activities, if needed, and secure the resources needed to do so.

**KEY DRIVER 4**

**CHANGE 1**  Conduct local gap analysis to identify what elements are not being captured in the written family/caregiver discharge instructions.

Recommendations based on learnings from the P-HIP Collaborative:

- Determine the key items in the written family/caregiver discharge instructions that are most frequently missing and see if you can work these items into standardized templates or develop work-arounds to include them (e.g. Epic dot phrases).
- Thoroughly analyze key items by site of care and by subspecialty to understand areas where failures occur.

**IN PRACTICE**

Children's Hospital Colorado conducted a thorough analysis of different subspecialties for performance on including each of the nine key items in their written family/caregiver discharge instructions. (See breakdown of key item by service below.)

### Children's Hospital Colorado Breakdown of Key Item by Service

#### High Performing Elements (2/18 - 6/18)

<table>
<thead>
<tr>
<th>Item</th>
<th>Hosp Med (N=60)</th>
<th>Surgery (N=9)</th>
<th>Hem Onc (N=7)</th>
<th>Other (N=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med List</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Phone Contact</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Admit/Disch date</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Immunize, n=4</td>
<td>100%</td>
<td>100%</td>
<td>n/a</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Lower Performing Elements (2/18 - 6/18)

<table>
<thead>
<tr>
<th>Item</th>
<th>Hosp Med (N=60)</th>
<th>Surgery (N=9)</th>
<th>Hem Onc (N=7)</th>
<th>Other (N=24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>69%</td>
<td>82%</td>
<td>11%</td>
<td>57%</td>
</tr>
<tr>
<td>F/U Appt.</td>
<td>96%</td>
<td>93%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Appt. Assist #</td>
<td>75%</td>
<td>67%</td>
<td>78%</td>
<td>100%</td>
</tr>
<tr>
<td>Pending labs</td>
<td>6% (33)</td>
<td>14% (16)</td>
<td>0% (4)</td>
<td>0% (4)</td>
</tr>
<tr>
<td>F/U Tests</td>
<td>68% (34)</td>
<td>71% (14)</td>
<td>50% (2)</td>
<td>67% (3)</td>
</tr>
</tbody>
</table>
**CHANGE 2**  » *Regularly audit charts to monitor compliance with proper documentation.*

Recommendations based on learnings from the P-HIP Collaborative:

- Create a mechanism to regularly audit charts and view results (for example, generating automatic reports in your EMR). Frequency of your audits can vary depending on your team’s capacity. However, regular audits repeated bi-weekly or monthly can determine how successful training or template implementations are on different services.
- Conduct monthly chart audits using the Medical Record Abstraction Excel Macros Tool in Appendix 5.
- Once a key item is selected for improvement efforts, perform rapid cycle tests frequently to find ways to improve it.

**IN PRACTICE**

Medical University of South Carolina Children’s Hospital selected key items to improve by using results of chart audits. Once a subspecialty and key item were selected, they tried many improvement methods by using rapid cycle PDSAs and auditing a small number of charts each week to verify success or failure. (See PDSA cycle outline below.)

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**PDSA FORM: Medical University of South Carolina Children’s Hospital PDSA including reference to small chart audit**

<table>
<thead>
<tr>
<th>Name of Project:</th>
<th>P-HIP Transitions of Care Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim:</strong></td>
<td>Improve how well we provide after hours and weekend phone contacts to parents.</td>
</tr>
<tr>
<td><strong>QI Team Members:</strong></td>
<td>[omitted]</td>
</tr>
<tr>
<td><strong>Cycle #: 2 Reporting Period:</strong></td>
<td>May 18, 2018 June 8, 2018</td>
</tr>
<tr>
<td><strong>Plan:</strong></td>
<td>There is a need to develop and test a smart phrase for use to populate important after hours phone numbers on the after visit summary in order for parents to reach us with questions after hospitalization.</td>
</tr>
<tr>
<td><strong>Do:</strong></td>
<td>Develop, share, and test uptake and use of the smart phrase by pediatric residents on the hospitalist services.</td>
</tr>
<tr>
<td>1.</td>
<td>[name omitted] – developed smart phrase and shared with group.</td>
</tr>
<tr>
<td>2.</td>
<td>Group gave feedback.</td>
</tr>
<tr>
<td>3.</td>
<td>[name omitted] edited, then shared with group and residents leading 3 PHM teams.</td>
</tr>
<tr>
<td>4.</td>
<td>[names omitted] encouraged team residents to use phrase when preparing AVS</td>
</tr>
<tr>
<td><strong>Study:</strong></td>
<td>Convenience sample of discharges from the 3 PHM teams (n=84) obtained and reviewed by [names omitted]. Found that the smart phrase was used on 74/84 (88%) of the convenience sample AVS</td>
</tr>
<tr>
<td><strong>Act:</strong></td>
<td>1. Smart phrase was appreciated by many residents – liked being able to provide numbers to parents.</td>
</tr>
<tr>
<td>2.</td>
<td>Need to formalize the educational aspects as new resident leaders rotate on each month.</td>
</tr>
<tr>
<td><strong>Next Steps/Plan for next cycle/Comments:</strong></td>
<td>1. Get feedback from attendings, nurses, fellows on language.</td>
</tr>
<tr>
<td>2.</td>
<td>Edit smart phrase for “final” form.</td>
</tr>
<tr>
<td>3.</td>
<td>Test again mid-June to June 30th before rolling out to other services.</td>
</tr>
</tbody>
</table>

**CHANGE 3**  » *Report chart audit results back to leadership and other stakeholders in the process (nurses, residents, attendings, unit leads, etc.).*

Recommendations based on learnings from the P-HIP Collaborative:

- Share results of chart audits with leadership to facilitate the acquisition of the appropriate resources needed to improve your processes.
- Share results of chart audits with different subspecialties and other stakeholders in the process. This will facilitate discussion about where further improvements can be made and will serve as a motivator to continuously improve the process. Different departments might need additional data to understand their results and potential for improvement, which could create buy-in or healthy competition among groups.
- Use results to of chart audits to communicate with committees and advisory groups about areas of improvement. If possible, take advantage of hospital-wide initiatives to improve written family/caregiver discharge instructions if applicable.
KEY DRIVER 5
Built-in Error Proofing/Constraints

To reduce the risk of errors or missed opportunities, many teams identified strategies to create more reliability into their processes. Coupled with the changes related to the first key driver (Standardized written family/caregiver discharge instructions), this key driver aims to ensure that written family/caregiver discharge instructions consistently include the key items. The idea of creating a “hard stop” in the electronic medical record can be useful if that opportunity is available to you and if it doesn’t cause too much disruption in work flow.

CHANGE 1 » Include data entry fields for individual items in either the overall written family/caregiver discharge instructions template or in necessary Epic dot phrases (or equivalent). Include hard stops or other deterrents to errors if possible.

Recommendations based on learnings from the P-HIP Collaborative:

- If some of the 9 key items are not included in the written family/caregiver discharge instructions template, offer them as optional blocks (see driver 1).
- Seek out team members with expertise in medical records to avoid errors and understand how the various components work.
- Have an electronic notification to hold off on printing until various key items included in the template have been completed by the necessary roles.

CHANGE 2 » Limit amount and need for free text.

Recommendations based on learnings from the P-HIP Collaborative:

- Pull information directly into the written family/caregiver discharge instructions template from the medical record so that the need for free text is reduced. This will prevent errors and facilitate high quality documentation in the written family/caregiver discharge instructions. Use Epic smart/dot phrases (or equivalent) to allow for immediate reduction of errors where text is needed.

IN PRACTICE
Seattle Children’s Hospital included a physician with clinical informatics expertise on their project team to thoroughly understand the way data are pulled into the written family/caregiver discharge instructions. This allowed them to identify items most frequently missing in the family/caregiver written discharge instructions and to create hardwiring in the EMR to automatically pull these items into appropriate fields.

Common fields that were already being populated by the EMR or that were readily available in the EMR were: diagnoses, medication lists, follow-up appointments, admits and discharge dates, and immunizations.

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Children’s Hospital Association is the voice of more than 220 children’s hospitals, advancing child health through innovation in the quality, cost and delivery of care.

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