Project IMPACT: Improving Pediatric Patient-Centered Care Transitions
DISCLOSURES

Presenters have no financial interests or relationships to disclose.

This presentation does not include discussion of any commercial products or services.
Background
Project IMPACT: Pilot Sites

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Why Discharge Transitions?

- Involve all aspects of “ideal care”
  - Often inefficient
  - Highlights inequitable practices
- High Risk
- High Volume
- Problem Prone
- Aligns with National and Institutional Priorities
What happens when we don’t do things right?

- Video link here.
Parent/Caregiver Self-Management Skills

When suboptimal, families demonstrate:

- Errors in medication use
- Failure to understand and activate contingency plans
- Failure to adhere to follow-up appointments
Medical Provider Handoff

Incomplete and untimely handoffs lead to:

• Increased ED re-utilization
• Increased hospital re-admissions
• Safety events
• Increased costs

Who owns the tracking of these results?

“I didn't even know these were pending!”
What comprises the ideal?

- Patient centered process
- Engaged patients and families
- Partnership of all providers
- Clear instructions and realistic plan
Patient-Centered Transition: Patient and Family Engagement

- Patient and family engaged in transition planning
- Assist in identifying education needs and goals
- Assist in building the Transition Document
AAP SOHM Transitions of Care Collaborative

Work to date includes:

- Phase 1: Improved timeliness of hospitalist-PCP communication at discharge
- Phase 2: Defined essential content for this communication
Essential DC Communication Information

- Admission and DC dates
- DC diagnosis
- Medications
- Follow-up appointments
- Brief hospital course
- Pending lab tests
- Immunizations given during hospitalization

Coghlin, et.al, Hospital Peds 2014
Overview: Project IMPACT

AAP SECTION ON HOSPITAL MEDICINE
SUBCOMMITTEE ON QUALITY AND SAFETY
Accredited for MOC by the American Board of Pediatrics
Purpose

- Launch collaborative to test pediatric care transitions bundle
  - Pre-discharge bundle
  - Post-discharge intervention
- Improve meaningful care transitions outcomes in multiple settings under multiple conditions
Aims

Primary Aim
- Improve caregiver’s ability to teach-back essential self-management components of care during a post-discharge phone call
- Improve timely communication of essential information to PCPs

Secondary Aims
- Reduce hospital re-utilization
- Improve PCP perception of medical provider handoff
- Demonstrate impact of post-discharge phone call in identifying and correcting misinformation and prompting appropriate follow-up
Methods
Multi-site QI Research Collaborative - Study Design

- Observational Time-Series study of multiple planned sequential interventions
Multifactorial Design Planned Experimentation

- Test bundle in multiple ways
  - Different Populations
  - Different hospital settings

*Determine the impact of the bundle elements in context of individual settings*
Planning the Intervention: Review of Geriatric Literature

Bundle use:

- Reduces readmissions
- Reduces hospital re-utilization
- Increased adherence to follow-up appointments.

*Local contextual factors may have impact*
Planning the Intervention: Survey of Potential Site Leaders

- Establish Shared Aim
- Patient Population of Study
- Feasibility of Interventions
# Shared Aims and Measures

<table>
<thead>
<tr>
<th>Define shared aims and measures (P = process; O = outcome) (n=21)</th>
<th>% in favor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content of discharge communication (P)</td>
<td>62</td>
</tr>
<tr>
<td>Use of teach back prior to discharge (P)</td>
<td>67</td>
</tr>
<tr>
<td>PCP satisfaction with Hand Off (O)</td>
<td>90</td>
</tr>
<tr>
<td>Return to ED within 3 days (O)</td>
<td>81</td>
</tr>
</tbody>
</table>
### Patient Population of Study

<table>
<thead>
<tr>
<th>Patient Populations (n=21)</th>
<th>% in favor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>38</td>
</tr>
<tr>
<td>Complex care</td>
<td>24</td>
</tr>
</tbody>
</table>

### Feasibility of Interventions

<table>
<thead>
<tr>
<th>Feasibility of interventions (n=23)</th>
<th>Can Do</th>
<th>Could Do</th>
<th>Can Not Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post discharge phone call</td>
<td>13%</td>
<td>78%</td>
<td>9%</td>
</tr>
</tbody>
</table>
## Patient Populations

<table>
<thead>
<tr>
<th>Technology-Supported</th>
<th>Non-Technology Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ventriculo-peritoneal shunt</td>
<td>Asthma (ages 2-17 years)</td>
</tr>
<tr>
<td>Tracheostomy tube</td>
<td>Infants &lt; 6 months of age</td>
</tr>
<tr>
<td>Central venous catheter</td>
<td>Infants &lt; 12 months of age</td>
</tr>
<tr>
<td>Gastrostomy tube</td>
<td>Children &lt; 2 years of age</td>
</tr>
<tr>
<td></td>
<td>All pediatric patients (ages &lt; 18 years)</td>
</tr>
</tbody>
</table>

Exclude: oncology patients, cardiac critical care unit patients, newborn nursery patients, neonatal intensive care unit patients
Patient-Centered Care Transitions (PACT) Bundle: Four Elements

- Transition Check List
  - Transition Coach
- Education using Teach Back
- Timely and Complete communication with PCP
- Reinforce education with follow up phone call
Element #1: The Transition Checklist

[Diagram showing a pie chart divided into sections labeled 'Patient's Family', 'Health Care Team', and 'Health Care Instructions', with a person writing on a clipboard nearby.]
### Home Needs

| 1. medications filled/arranged | n/a | incomplete | done |
| 2. special nutritional needs    | n/a | incomplete | done |
| 3. home nursing                | n/a | incomplete | done |
| 4. DME (bed, walker, wheelchair)| n/a | incomplete | done |
| 5. home care supplies          | n/a | incomplete | done |
| 6. prior auth forms/LOMN       | n/a | incomplete | done |
| 7. PT/OT/Speech/El             | n/a | incomplete | done |

### Social Needs

| 1. transportation to home arranged | n/a | incomplete | done |
| 2. car seat obtained              | n/a | incomplete | done |
| 3. home safety concerns addressed | n/a | incomplete | done |
| 4. custody/release consented      | n/a | incomplete | done |
| 5. DHS cleared                    | n/a | incomplete | done |
| 6. insurance/self-pay addressed   | n/a | incomplete | done |
| 7. other needs:                   | n/a | incomplete | done |

### Educational Needs

| 1. medication use taught back    | n/a | incomplete | done |
| 2. home equipment use taught back| n/a | incomplete | done |
| 3. follow-up appointment(s) taught back | n/a | incomplete | done |
| 4. contingency plans taught back | n/a | incomplete | done |

### Follow-up

| 1. primary care physician identified | incomplete | done |
| 2. follow-up appointment(s) made    | incomplete | done |
| 3. transportation to follow-up arranged | incomplete | done |
| 4. primary care physician contacted | incomplete | done |
| 5. discharge document communicated  | incomplete | done |
| 6. pending labs follow-up arranged  | incomplete | done |
Element #2: Pre-DC Teach-back

“Nice to Know vs. Need to Know”

Teach-back of each of the following prior to discharge:

- Medications
- Follow-up appointments
- Contingency plan
- Home equipment/nursing contact number
Timely Communication of the following to the PCP:

- Admission and DC dates
- DC diagnosis
- Medications
- Follow-up appointments
- Brief hospital course
- Pending lab tests
- Immunizations given during hospitalization
Element #4: Post-Discharge Phone Call

- Parent/Caregiver performs teach-back of essential self-management information
  - Meds
  - Follow-up
  - Contingency Plan
  - Nursing/Equipment contact information
- Misinformation is corrected
- Transition process evaluated
Establish Inter-Professional Improvement Team

- Patient/Family Representative(s)
- Nursing*
- Case Manager*
- Hospitalist*
- Social Worker*
- Resident
- NP/ PA

- Pharmacy
- Transitions Coach
- Quality
- Utilization Management
- Research Assistant
- Study Coordinator
- Data Manager
- Primary Care Provider Partners
- Subspecialists
Measures
Process Measures

Pre-Discharge
- PACT Bundle
- Parent/Caregiver Teach-Back

Discharge Day
- PCP Handoff

Post-Discharge
- Scripted Phone Interview
- Parent/Caregiver Teach-Back
Post-Discharge Outcome Measures

**Hospital Re-utilization**
- Population-specific readmission rates
- Return to ED within 3 days of discharge

**Annual PCP Survey**
- PCP survey on hospital-PCP handoff
- Subspecialist/Complex care team survey
Hospital Re-utilization

Population-specific readmission rates (3, 7, 15, 30-day)

Population-specific return to ED within 3 days of hospital discharge
Annual PCP Survey

“The communication I receive from the inpatient team has all the information I need to provide care for my patients”

Metric = Likert scale (1-5)
Results (preliminary)
Composite Control Charts

P Chart: ‘Perfect’ PCP Handoff Rate

CL = 58.4%

P Chart: Parent/Caregiver Pre-DC Teach Back Rate

CL = 59.4%

CL = 24.7%
Site B: Pre-DC Teach Back

P Chart: Site B Pre-DC Teach Back of Essential Self-Management Skills

- UCL
- LCL

Teach Back Template in EHR
Nursing Spot Audits and Data Display
Repeat Nursing Teach Back In-service and E-learning
Site D: Pre-DC Teach Back (with special cause)

P Chart: Pre-DC Teach Back

Documentation Template in EHR

Parents schedule Follow-Up Appointments Prior
Site C: Perfect Handoff to PCP

P Chart: PCP Handoff – Site C

- 12/1/13
- 2/14/14
- 3/14/14
- 4/14/14
- 5/14/14
- 6/14/14
- 7/14/14
- 8/14/14

- UCL
- LCL

Essential Handoff Elements
- Staff reminder
- EHR Content Revision

Dotphrase for discharge summary with Essential Handoff Elements shared
Site D: PCP Handoff (with special cause)

P Chart: PCP Handoff – Site D

Electronic Discharge Summary Revised

Residents education: Monthly “Communication with PCP’s Workshops”
Site B: Post-DC Teach Back

P Chart: Post-DC Teach Back of Essential Self-Management Skills

Percent

0%  10%  20%  30%  40%  50%  60%  70%  80%  90%  100%

1/1/14  2/1/14  3/1/14  4/1/14  5/1/14  6/1/14  7/1/14  8/1/14  9/14/14

UCL

LCL
Discussion
Keys to Success

- Sharing lessons learned via multisite collaboration
- Deference to expertise
- Developing shared interventions
- Sharing standardized data collection instruments
- Sharing EHR-specific tools
Standardize the Process: Teach Back Training

- Teach Back (training video link available): http://cupublic.chw.org/media/HealthLiteracy/improvingtransitions-of-care/index.html

- Teach Back Primer (Just-In-Time training)
Lessons Learned

- Just-in-Time Training for rotating residents
- Performance feedback twice a month to inpatient teams
- Integrate checklists into the Medical Record
- DC Checklist is too cumbersome
Remaining Barriers

Competing Priorities....
Remaining Barriers

- Accurate Identification of PCP
- Integrating data collection instruments in EHR
- Post-Discharge phone calls
  - Non-English languages
  - Obtaining the correct number
- IRB process for ‘spread’ sites
Next Steps: Spreading the IMPACT
Next Steps: Analyzing the Data

- Link improved processes to improved outcomes
  - Parent/Caregiver teach back of self-management skills
  - Hospital Re-utilization
  - PCP perceptions of medical provider handoff
- Determine how contextual factors effect bundle impact
Next Steps: Study Transition Failures

- Follow up phone call information
  - Determine causes of transition failures *before* reutilization occurs
- Drill down on readmissions
  - Target reduction in readmissions *specific* to discharge process
- Inform future studies and QI interventions
Next Steps: Expand Patient/Family Voice

Survey of families:
- What works vs. what doesn’t?
- What have we missed?

Study Patient-Centered Outcomes
- Parent Activation Measure
- Patient Satisfaction (HCAPS, Press-Gainey, other Patient Satisfaction)
  - Readiness for discharge
  - Speed of DC process
  - Instructions for care of child at home
Next Steps: Applying What We Learn

- One size may *NOT* fit all
  - Use Multisite data to determine *what* works *where*

- Tailoring the process to fit the population
  - Use Toolkit to build individualized Discharge Roadmaps
    - Triggered on admission
    - Meets usual needs of given population
    - Addresses individual needs of the patient
Thank You!