USING ACUTE CARE PLANS TO IMPROVE COORDINATION AMONG ED HIGH UTILIZER PATIENTS
MASSACHUSETTS GENERAL HOSPITAL

Publication Year: 2014

SUMMARY:

High utilizer patients often get a full work-up every time they come to the ED. With an acute care plan, patients may avoid unnecessary testing and/or admission, as there is seamless documentation of the patient's risk factors and history.

SUBMISSION CATEGORY:

- Care Coordination

HOSPITAL: Massachusetts General Hospital

LOCATION: Boston, MA

CONTACT: Dawn Williamson, APRN, DWILLIAMSON19@partners.org

CATEGORY:

- A: Arrival
- C: Clinician Initial Evaluation
- D: Disposition Decision/Throughput

KEY WORDS:

- Care Manager
- Communications
- Continuity of Care
- Frequent Flyer
- Information Systems

HOSPITAL METRICS:

- **Annual ED Volume:** 102,301
- **Hospital Beds:** 1,046
- **Ownership:** Partners Healthcare
- **Trauma Level:** I
- **Teaching Status:** Yes

TOOLS PROVIDED:

- Included in the text

CLINICAL AREAS AFFECTED:

- Access Readmissions
- ED
- Inpatient Units Laboratory
- Outpatient Units
- Psychiatric Consults

STAFF INVOLVED:

- Administrators
- Case Management
- ED Staff
- IT Staff
- Nurses
- Physicians
- Residents
- Social Workers
- Primary Care

Acute care plans are special treatment plans integrated within a patient's record with information from the patient's primary care provider, case manager, or other clinician to help guide treatment decisions should the patient end up in the ED. Acute care plans are flagged in the ED Information System when a patient arrives to the ED, so that all providers are automatically notified of the plan. High utilizer patients often get a full work-up every time they come to the ED. With an acute care plan, patients may avoid unnecessary testing and/or admission, as there is seamless documentation of the patient's risk factors and history.

High utilizer patients, defined as having four or more ED visits per year, represent 4% of ED patients, 17% of ED visits and 19% of ED bed hours at our hospital. These patients are often complex, with medical, psychiatric and social conditions that need to be addressed. High utilizer patients often get a full work-up every time they visit the ED. Despite a large number of homeless patients, the majority of these patients do have a primary care provider (PCP).

Given the complex array of factors driving ED readmissions, it became evident that responding to just the chief complaint often did not address core issues and that interventions to decrease ED presentations must be broad and multifaceted. It was apparent that a multi-disciplinary team approach was necessary to address the complex issues driving the high utilization of emergency services.

Innovation

Acute Care Plans (ACPs) were created to address the lack of coordination among outpatient providers and ED providers, particularly for these complex patients. ACPs are special treatment plans integrated within a patient's record with information from the patient's primary care provider, case manager, or other clinician to help guide treatment decisions should the patient end up in the ED. ACPs are automatically flagged in the ED Information System (EDIS) when a patient arrives to the ED. With an ACP, patients may avoid unnecessary testing and/or admissions, as there is seamless documentation of the patient's risk factors and history.

The innovation was developed by a multidisciplinary group of representatives from the ED, inpatient medical teams, case managers, social work, acute psychiatric consult service, and primary care providers.

A solution was built within the longitudinal medical record (LMR) system due to its automated capabilities and ease of use. A note template was created with standard fields to give guidance on a patient's treatment plan or disposition, along with a phone number of who to contact should the patient end up in the ED. When a patient with an ACP enters the ED, a flag is triggered in EDIS to indicate there is important information about the patient. ED clinicians are trained to review the ACP information at the beginning of clinical evaluation. By having these plans flagged for emergency clinicians to view we are able to decrease fragmentation of care and improve overall outcomes for high utilizer patients.

Innovation Implementation

A group of ED clinicians initially took on this issue as a quality assurance initiative. Data was gathered to aid in identifying care needs for patients that frequented the ED greater than ten times a year. A team was assembled to develop and to communicate treatment plans for these patients. At first the group consisted of a Psychiatric Clinical Nurse Specialist, ED Social Workers and two ED Case Managers (CM). This group quickly expanded to include representation from a variety of disciplines, including: NP, MD, RN, SW, CM, outreach workers, and administrators. Other areas of the hospital soon began joining treatment planning meetings and contact was made with outpatient providers to provide collateral information and attempt to re-engage patients with their outpatient team.

During these bi-monthly meetings, treatment plans were developed for patients with the highest recent visits to the ED. As mentioned above, a note template was developed within LMR, an electronic system for documentation. Authors are encouraged to address who should be called when the patient arrives to the ED, steps to facilitate evaluation, medication recommendations/restrictions, specific protocols that should be followed, interventions that could be used

to prevent admission, or issues that might impact a successful transition home. Using the template, authors can determine what information is relevant for each patient. Some ACPs can be as simple as a phone number, while others may be more complex. Plans are considered "active" for six months and then the author must update the plan or discontinue it.

Acute Care Plan
***Note – Clinical management is ultimately determined at the discretion of the clinician caring for the patient
Date Acute Care Plan Last Reviewed and Author:

Ambulatory Care Team:
(PCP, RNCC, SW, VNA, hospice; contact info.)
Key Specialists: (Specialist name and problem[s] managed – only include those with frequent involvement)

Key Caregivers/Contact Info: (Family members, in-home caretakers, day program contacts)

If patient presents for acute care, please consider:

Guide: (remove instructions before you print for LMR)
This section should highlight the 4-5 key points that will be useful to ED/inpatient clinicians at time of patient presentation, e.g.:

- Particular member of ambulatory care team who should be called early in the course of evaluation (include title/role, contact information)?
- Specific intervention that might prevent an admission or return to ED/inpatient?
- Any concrete steps/action plan that may facilitate evaluation and/or return home?
- Contact specific outpatient provider for input? (OK to page after-hours?)
- Admit to specific service/floor?
- Pain medication recommendations/restrictions? (be specific)
- Continue regular medications?
- Consult pain service? Other services?
- Specific follow-up instructions if patient discharged home?
- Notify specific clinician if patient discharged home?
- Literacy issues that might impact safe/successful transition home?
- Transportation issues that might impact timeliness of follow-up?

(Patient should be aware of plan of care; should be reviewed and reinforced often with patient.)

Immediate Active Problems:

- What problems have patients been presenting with recently?
- Which issues that are being actively managed could lead to an ED or inpatient visit?
- Which issues have required recent major medication changes?

Prescription Issues:

- Special circumstances around medication delivery, specific pharmacy, hours of operation?
- History of difficulty obtaining/affording prescriptions?
- Specific prescription problems that may interfere with care plan (health literacy issues, prior approval problems, etc.)

Pain Management
Pain/Prescriptions Managed By:

Pain Management Care Plan:

- Specific pain management recommendations if pain is presenting symptom?
- Details of any existing pain contract?
- Follow-up plan and/or patient instructions if patient discharged home?
- Clinician(s) to be contacted regarding patient follow-up if discharged home?
- Pain management recommendations if patient admitted?
- Any insurance or prescription issues?

If patient discharged home from ED:
[Be as specific as possible: e.g. “Email PCP so s/he can arrange follow-up within XX days,” or “Page PCP during business hours,” etc.]

- Patient to follow up with PCP/pain specialist within XX timeframe, how best to arrange
- Pain medication to be written for x days to maintain coverage until f/u appt, OR patient should not receive pain medication from ED for chronic pain issues
- CC Practice Based Case Manager

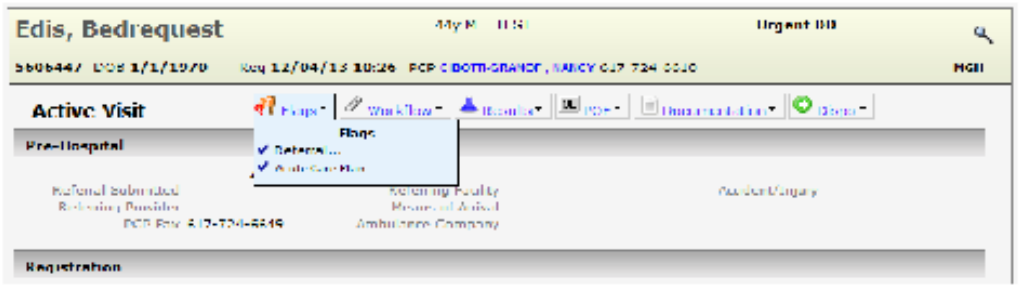
Behavioral Health

Active issues:

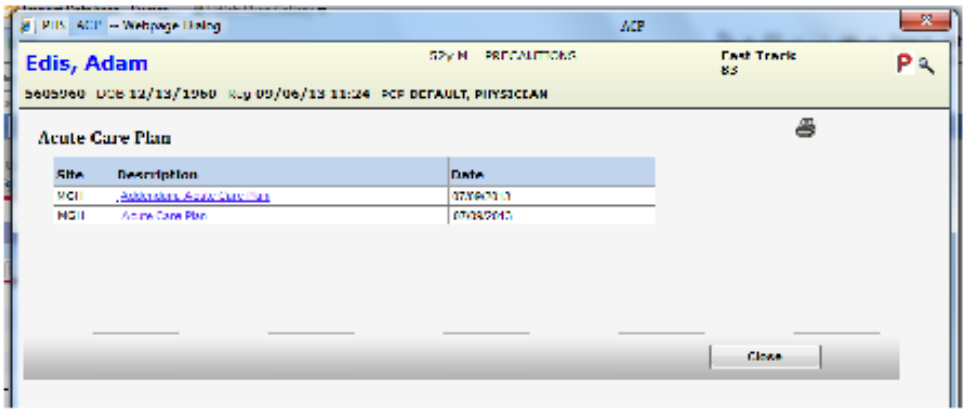
When a patient arrives to the ED, the electronic tracking system initiates an orange flag if the patient has an ACP. It does this using a search program called QPID, which looks for LMR for notes titled "Acute Care Plan." When it finds this type of note, it triggers the flag in EDIS. When a clinician clicks on the flag, the most recent ACP will appear. In the electronic world, with so much information available to ED clinicians, the ACP flag prioritizes key information about these complex patients.

The flag turns orange when an active Acute Care Plan is present. When the orange flag is clicked, a dropdown shows important referral information about the patient, including the presence of an ACP.

This information displays on the patient tile overview (image on left), as well as within the patient's chart (image below).



To review the information in an Acute Care Plan, the user simply clicks on the item "Acute Care Plan" in the dropdown list under the orange flag. Any plans created or updated in the last six months will appear (see image below).



Timeline

Efforts to improve the care of high utilizer patients were ongoing throughout 2011. However, specific steps to develop and implement the ACP, happened according to the timeline below:

- Jan 2012 - Multidisciplinary group initiated; reviewed baseline high utilizer data
- Jan - Feb 2012 - Development of ACP template

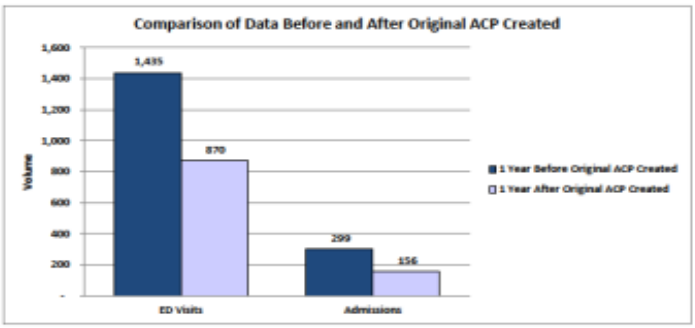
- Jan - Feb 2012 - Creation of search logic within electronic system and programmed flag in EDIS
- April - May 2012 - ACP pilot
- May 2012 - July 2012 - Feedback about pilot and data reviewed
- July 2012 - Full roll-out to providers with high utilizer patients
- Nov 2013 - Further refinement of system (simplified flag in EDIS to more clearly identify these patients)
- Today - Continue to encourage providers with high utilizer patients to create/update ACPs and expand to other complex sub-populations

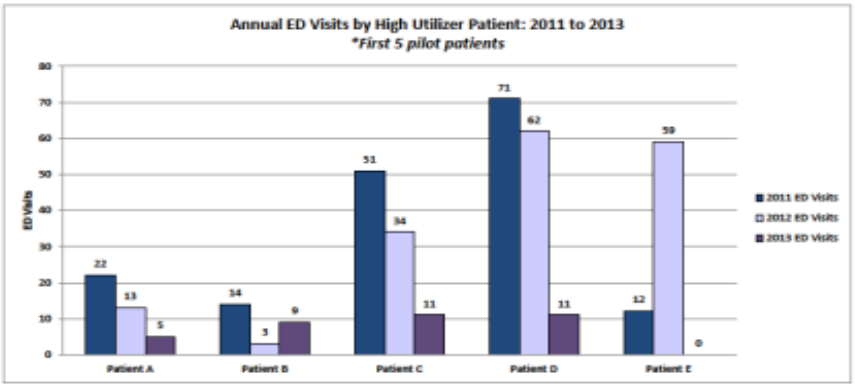
Results/Evaluation

At the time of the initial analysis, 119 ED patients had an ACP. Among these, 41 (34%) were considered active and 78 (66%) had become inactive.

Initial data analysis shows positive trends:

- Comparing 1 year prior to the ACP and 1 year after the ACP, there was a 39% decrease in ED visit volume among this high utilizer population (net decrease of 565 visits).
- Approximately 70% of patients who had an ACP experienced a decrease in ED visit volume in the year following the ACP.
- 60% of patients with an ACP experienced a decrease in ED LOS.
- The number of hospital admissions decreased by 48% for patients with an ACP (net decrease of 143 admissions). The overall admit rate among this population decreased by 14%, from 20.8% to 17.9%.





Anecdotal feedback has also been overly positive. One ED nurse said, "I found that being able to review his acute care plan helped dramatically in planning his care. The care plan was easily accessible and I was able to review in a timely manner. The information in this care plan was very helpful in understanding the patient's history and outlined helpful recommendations and guidelines for certain behaviors we might encounter. Overall, the care plan helped us identify the patient and as a team come up with a efficient plan in providing medical treatment."

Cost/Benefit Analysis

The cost of implementing the ACP was minimal and required IS resources, as well as the time it takes for providers to create and update an ACP.

The ACP does present a significant opportunity for cost-savings. This would come from the reduction in inpatient admissions, as well as the reduction in ED visits. The data analyzed to date showed a one-year impact, however, future analyses would look for sustained reduction in ED visits and inpatient admissions, as well as associated cost-savings.

Advice and Lessons Learned

1. This tool requires buy-in from multiple partners across a system in order to be successful: it relies on PCPs/case managers/etc. to create acute care plans, and continue to update them when they approach 6 months. While

there has been initial success with the tool, getting authors to update the ACP at the 6-month mark has been challenging. We are working with IS resources to determine if an automated e-mail can go to authors at the 5-month mark, requesting an update to the plan.

2. To date, the ACP tool has been used among providers within the system. However, many of the high utilizer patients have PCPs outside of the system. We've made some progress with some outside organizations, such as Healthcare for the Homeless, to create plans for their highest utilizer patients. However, this process requires more coordination from a designated person within the system.

3. Currently, we do not have a designated person to coordinate the Acute Care Plan process. Ideally, it would make sense to have a case manager responsible for identifying the high utilizer patients who do not have an ACP, communicate with the key providers to create an ACP, and interface with outside providers to get external ACPs into the system. This person could also help with education and take part in treatment planning meetings.

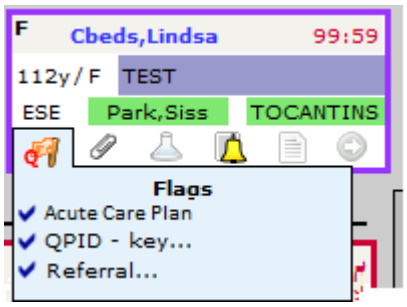
4. Lastly, while there has been consensus that the information in the ACPs is extremely useful to ED providers, there are times where the information is not actionable during the overnight hours. We have attempted to address this issue through further education to providers when they create an ACP.

Sustainability

We continue to monitor recidivism rates during our monthly ED quality assurance meeting, through regular treatment planning meetings with internal and external providers, ACPs continue to be created.

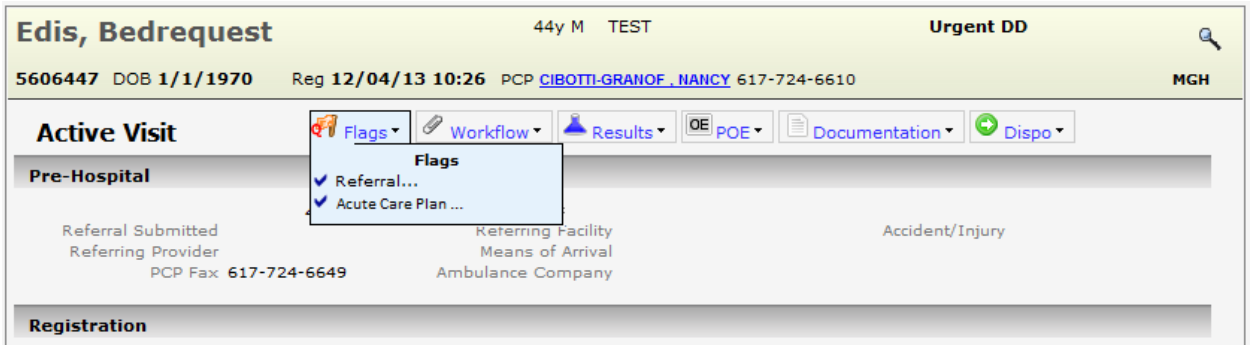
On the primary care side, a quality incentive measure was established to encourage PCPs with high utilizers to create and/or update an ACP. On the ED side, a similar quality incentive measure was established for EM physicians to review ACPs.

Another initiative aimed at stainability is creating an automated message for authors of ACPs when the plans are approaching the 6-month mark. This message would remind providers to either update or discontinue the plan.



The flag turns orange when an active Acute Care Plan is present. When the orange flag is clicked, a dropdown shows important referral information about the patient, including the presence of an ACP.

This information displays on the patient tile overview (image on left), as well as within the patient's chart (image below).



To review the information in an Acute Care Plan, the user simply clicks on the item "Acute Care Plan" in the dropdown list under the orange flag. Any plans created or updated in the last six months will appear (see image below).