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Elkridge, MD 21075

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410.540.9210 (Phone)
410.540.9139 (Fax)

Care Alerts: A Novel Solution to Improve Coordination of Care
Drivers, Standards, Implementation, Measurement

Introduction

In 2012, the Kaiser Commission on Medicaid and the Uninsured described that among Medicaid enrollees, the elderly and disabled represented 25% of the enrollees but two thirds of Medicaid spending. Per capita spending for this population was seven times that for non-elderly. Additionally, these populations have higher utilization of acute care services and they are more inclined to use long term services.

Complex vulnerable patients are a diverse group but often suffer from multiple chronic conditions or difficult health or social issues. They are frequent consumers of emergency room care and experience numerous hospital admissions. The Maryland Health Services Cost Review Commission (HSCRC) uses the term "high utilizer" to highlight their impact on health systems and defines this population as having three or more inpatient admissions (including admission to observation status) in a year or 6 or more visits to the emergency room in six months. Because complex vulnerable patients have challenging physical and psychosocial needs requiring multiple services in the community, their care frequently suffers from inadequate coordination and collaboration among community care providers. This lack of coordination and difficulty accessing the appropriate level of care result in frequent emergency room presentations and/or inpatient admissions.

Drivers for Change

In 2017, HSCRC recommendations for achieving the global budget included a focus on care coordination and called for hospitals to "work with the Chesapeake Regional Information system for our Patients (CRISP) to exchange information regarding care coordination resources aimed at reducing duplication of resources, ensuring more person-centered approaches, and bringing additional information to bear at the point of care for the benefit of patients". In addition, there was growing appreciation of common frustrations experienced by care providers at the time and location of the patient's presentation for care. These difficulties include:

- No way to communicate "need to know right now" information about the complex patient at the time of care
- Care providers typically do not have time to dig and sift through information in multiple locations in the patient's medical record
- Making a call to the ED provider or hospitalist who took care of the patient is not realistic in the world of shift work
- There is no quick way to know if or which care manager is involved with the patient
- Care providers using the same electronic medical record could still miss critical information that could or should inform care decisions, possibly resulting in clinical misadventures and/or over-utilization

- With a few exceptions, there is no current method to attribute a patient to a resource. For example, a small hospital may not need to use its limited Case Management resources for a patient who is technically a high utilizer at that facility because that patient actually uses another facility more.

Source: Dr. Patricia Czapp presentation 'What are Care Alerts and Why Are They Necessary"? November 1, 2016 presentation

The Care Alert: A tool to improve communication and facilitate coordination of care
Significant progress has been achieved by Maryland's hospitals to develop/write care alerts for their high utilizer patient populations; this initial work, however, has largely focused on the quantity of care alerts and the number of high utilizers they cover. The Maryland Patient Safety Center, in collaboration with CRISP has been asked to work with provider organizations to expand the use of care alerts at all of Maryland's hospitals and to improve the quality of the alerts already available in the registry. Seamless transmission of useful, timely information about complex patients is a central goal for both patient safety and quality of care.

What is a Care Alert?

A Care Alert is an electronic note that is written and modified by local healthcare providers within the patient's own electronic medical record. The content of the note is tailored to the information needs of the ED physician, hospitalist, primary care provider or care manager and the communication process is aligned with their workflows. The purpose of a Care Alert is to standardize the process for communicating actionable information about the patient at the point of care. They are instantly accessible and contains succinct, need-to-know-now information on vulnerable patients and provides valuable guidance from clinician to clinician regarding complex patients shared across hospital settings as well as different hospitals.

A Care Alert should have the following salient features:

1. They are brief – most clinicians don't have time to read multiple paragraphs
2. Durable – includes information that will remain relevant to the patient for several months
3. Safe – avoids using absolutes (always, never) in consideration of and respect for provider clinical judgment at the point of care
4. Respectful - Uses respectful language avoiding subjective or pejorative description of the patient. Limits information that conforms to regulations regarding restricted disclosures
5. Contains useful and actionable information. Some examples are shared below:
   a. the patient's usual complaint/s and demonstrated effective interventions, brief results of commonly performed laboratory or imaging studies
   b. brief description of the patient's chronic illness baseline and pattern with suggestions for management
   c. a plan for management of chronic complaints or chronic illnesses, specifying concerns for use of narcotics/controlled substances and alternatives when indicated
   d. social services provided to the patient (transportation, food services, medication vouchers, etc.), and contact information

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   e. patient enrollment and/or participation at a care management program as relevant

   f. patient resources or need for resources with interventions implemented, planned or recommended

   g. list of names and contact information for primary care providers, care coordinators, comprehensive care programs including specifics on availability of these providers and/or programs

   h. advance directives (and how to access them) when available

6. Should a Care Alert contain more than one or two of these (a-h) features, the Care Alert separates these features into sections, so that different providers can easily view clinical information relevant to them

How Is a Care Alert different from a Care Plan or a Program Plan?

Patients with complex clinical scenarios need a strong, well developed **Longitudinal Plan of Care** (LPOC). These documents typically live in the health record of the primary care provider and includes medical and surgical history, medications, allergies, patient and provider goals (and limitations) of therapy and resources available (and used) in the conduct of that care. In the hospital, there is a long tradition of a multidisciplinary plan of care (multi D POC). This plan focuses on the goals specific to the hospitalization but may include information about home support services and advance directives. A significant technical challenge with these documents is that they are linked to a specific hospital encounter and are typically not available at a patient level within the health record.

In contrast, a **Care Alert** is a note that focuses on key, immediately actionable information that can be easily accessed by care providers within the facility. Through integration with the CRISP system, the care alert is extracted and delivered by CRISP to the Care Alert Registry where the information can be accessed by other care providers from within or outside the hospital.

A Program Plan is typically developed by an Accountable Care Organization (ACO) to describe care management and/or social services available to the patient through the ACO. These are similar to Care Alerts in that they specify the services, names and contact information of resources as well as their availability, and alternatives for patients presenting after regular business hours. Program plans typically do not have the detailed clinician guidance found in a care alert. CRISP is working with ACOs to refine a functionality to allow their care coordination programs to input valuable information about services available to their members.

Implementation

The Care Alerts work group has identified several structural requirements for successful implementation of care alerts. Provider organizations are in the best position to determine which factors would be important to implement considering their facility's culture, processes, resources and priorities. These include:

1. Integration of the facility's electronic medical record with the CRISP system. Integration of the facility's electronic medical record with CRISP allows for more user friendly and efficient access to and sending of care alerts

2. Physician leadership and oversight

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3. A multidisciplinary care coordination team that will have the authority and accountability for developing and/ or approving care alerts. This committee should have a charter outlining its goals, authority, reporting relationships, interface relationships and accountability for Care Alerts and care coordination

4. A process that govern the care, communication of information and follow up of complex, high risk patients

5. A small group of clinical staff should be responsible for writing, reviewing and updating care alerts. Experience has shown that having a small group of highly trained, experienced alert writers results in development of more effective, high quality Care Alerts

6. Administrative lead or contact person. This individual could be the gateway to collaboration with other hospitals who serve the same patient and can field comments regarding the originating hospital's Care Alerts

7. Regular reporting and analysis of results. The Hospital's committee with oversight responsibilities over Care Alerts should decide on process and/or outcome metrics to determine the effectiveness of the initiative. These metrics should be reported, discussed and acted upon at intervals decided by the committee.

Several of Maryland's hospitals have more mature care alert processes and demonstrate the following best practices which the workgroup recommends for serious consideration by others:

1. Convene a small multidisciplinary team with clinical and administrative leadership to coordinate the creation and curation of Care Alerts

2. Develop and follow a standardized process for identifying the appropriate patient/patient population, using appropriate language and writing the initial Care Alert

3. Use a monthly CRISP report to develop criteria for "alert hygiene" (i.e. review, modification or deletion of care alerts that have aged out). This review process should be standardized throughout the organization. Update or retire alerts as appropriate

4. Organizations with care alerts on shared patients should develop processes to coordinate the content of the Care Alert to avoid duplicated or even contradictory information

Who Writes Care Alerts?
Clinical staff who have a treatment relationship with the patient and have important, actionable information to share about the patient may write a Care Alert. Care Alerts may be written by an ED physician, hospitalist, primary care physician, care manager or care coordinator or by social workers. Similarly, program alerts may be written ACOs or payers with care coordination programs. Experience has shown that training on whom and how to write care alerts is paramount in ensuring the quality and usefulness of care alerts. Additionally, practice, supervision and peer consultation by a small group of Care Alert writers result in the development of quality Care Alerts. It is important that clinical care recommendations are written by clinical staff.

Accessing Care Alerts
CRISP staff have worked with the three largest electronic medical record (EMR) vendors in the state (Epic, Cerner and Meditech) to develop tools that may be unique to an EMR but can include fields that

can be widely shared across EMRs. Clinical staff can also access a documented care alert on the Patient Summary or the Patient Query Portal on the CRISP website. Second generation tools are already in development that will 'parse' or break apart the care alert and display just the key information for a particular type of provider in his or her workflow. These "in context" alerts are becoming more common. Although we want the information to be available by a variety of tools, we believe that it is most valuable when providers can access the information within the tool they use most regularly i.e. in the hospital or practice EMR.

Measurement
CRISP and the Maryland Patient Safety Center are working on two critical documents. The first will be a monthly report of all currently active care alerts, by organization. This tool will allow rapid identification of older Care Alerts that may need to be refreshed or eliminated. It will also allow the Care Alert leadership team to see which other organizations have published a Care Alert on those patients. Your facility may be familiar or have used the Pre/Post report done by CRISP for your organization. This report is being revised to bring into sharper focus the value Care Alert programs have for our patients and our organizations.
CRISP is refining or developing other reports so that organizations can analyze and improve their care alert process, access and utilization.

User stories
User stories validate the utility and importance of care alerts to make caring for complex patients safer, more efficient, more cost effective and more personal. CRISP has developed "user stories" to help individuals understand how to best use its various tools. CRISP and the Maryland Patient Safety Center are working on the development of user stories to share the experience of the following key participants with the use of care alerts: ED or urgent care providers, primary care physicians, transitional care coordinators, ambulatory care managers and hospital Ethics committees.

Summary:
Why Use Care Alerts?
Improved care coordination is dependent on availability and communication of critical actionable information to the care provider at the time of the patient's presentation. Early adapters of Care Alerts (Bon Secours, St. Agnes, University of Maryland, Midtown, and Anne Arundel Medical Center) demonstrated a reduction in ED visits, inpatient admissions (including observation status), number of diagnostic studies, etc. of high utilizers post implementation of Care Alerts.
When implemented appropriately, Care alerts can be an important tool for hospitals to

- improve the safety and quality of care – the availability of information at the point of care informs care decisions regarding the best treatment for the patient
- improve efficiency – saves clinician time and reduces duplication of diagnostics and care management resources
- reduce potentially avoidable utilization – informs the provider about available community services for immediate follow up to avoid unnecessary admissions
- complement existing work flows, decrease non-productive work

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- facilitate care coordination and reduce fragmentation; improve follow up care
- improve role satisfaction – allows providers to focus on the medical aspects of care and care managers and social workers to be accountable for the coordination of community services and for meeting the psychosocial needs of the patient
- improve patient experience/satisfaction –the use of care alerts prevent clinical misadventures, avoid "hunting" for relevant information in the medical record and facilitates community referrals resulting in decreased patient wait times in the ED