Transitions of Care

Improve Care and Reduce Costs

AMA IN PARTNERSHIP WITH

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How will this module help me use the SafeMed model in my practice?

1. Four STEPS to develop and implement the SafeMed model.
2. Answers to common questions about SafeMed.
3. Tools to develop training materials and track progress.

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Introduction

Complex patients, such as those with multiple chronic conditions, polypharmacy, and unmet social needs, are particularly at risk for serious drug therapy problems during transitions from hospital to home. The SafeMed care transitions model uses intensive medication reconciliation and home assessments to manage high-risk/high-needs patients in the primary care practice who tend to be heavy utilizers of inpatient and emergency services. The SafeMed model leads to decreased hospital and emergency department utilization, and improved outcomes for the target patient population.

The SafeMed model was originally developed at the University of Tennessee/Methodist Le Bonheur Healthcare and funded by a Health Care Innovation Award from the Centers for Medicare and Medicaid Services (CMS). The model was designed with the strengths of primary care in mind and relies on primary care-based team members, including physicians, pharmacists, nurses, and community health workers, to form a support network for high-risk/high-needs patients as they transition from the hospital to outpatient setting. These team members work closely with patients to forge strong relationships that make it easier to coordinate and manage their care. This module provides guidance, tools, and resources at no cost so you can adapt the SafeMed model for your practice.

Four STEPS to building a SafeMed care transitions team

1. Develop your care transitions plan.
2. Identify complex patients who are candidates for the program.
3. Assemble and train your SafeMed team.
4. Start the transition process and refine the plan over time.

Develop your care transitions plan.

Start holding regular team meetings to plan for the implementation of SafeMed. Think about how to scale the SafeMed model to fit your practice’s needs and to best take care of the patients who will benefit from your new program. You may want to consider working with multiple practices in your area to pool resources and create a SafeMed team as a shared community resource.

When you have a good idea of your practice’s capabilities and how you intend to work with a partner, review and think about how to modify SafeMed job descriptions, protocols, and procedures to meet your target patients’ needs.

Q&A

How is SafeMed financed?

Most practice-based care transitions teams are funded internally by integrated delivery systems or health plans interested in improving their bottom line under accountable care and other value-based payment arrangements. Alternatively, you can seek funding to launch your SafeMed team from regional health improvement collaboratives, non-profits (e.g., American Heart Association) or federal agencies (e.g., CMS or the Agency for Healthcare Research and Quality) that are interested in supporting demonstration
projects to improve quality while reducing costs. Some services can be billed to Medicare chronic care management services, which can help fund the program.

How can I identify and approach other practices to collaborate with?

Look for other practices in your integrated delivery system that serve socially and medically complex patients. You can use a collaborative agreement to initiate the conversation. This will help you spread the cost burden of hiring new staff.

Where can I find examples of materials I can adapt for my practice to develop my care transitions plan?

This module includes protocols and procedures, job descriptions, forms (e.g., an inpatient enrollment form, a patient eligibility checklist, a first home visit checklist, etc.), patient self-care tools, assessment tools, and recruitment and training materials developed and made available by SafeMed.

Identify complex patients who are candidates for the program.

Identify the most vulnerable patients who will receive the greatest benefit from intervention by the SafeMed team. If you have a smaller practice or only a few high-risk/high-needs patients, consider partnering with another practice to increase the size of your target population.

Example: Mr. S. was a 58-year-old Caucasian man with multiple chronic conditions and a history of depression and cocaine use. With the intensive support of all members of the SafeMed care transitions team at University of Tennessee/Methodist Le Bonheur Healthcare, he was able to get assistance with medications and homemaker services, meet his self-identified health goals, develop positive relationships with his providers, and subsequently avoid rehospitalization.

Q&A

Which patients should my SafeMed program target?

A SafeMed approach is best suited for patients with:

- High utilization, defined as two or more hospital admissions or one inpatient admission and two or more prior emergency department (ED) visits in the last six months prior to current admission.
- Two or more of the following conditions: hypertension, diabetes, coronary artery disease, congestive heart failure, asthma, and chronic obstructive pulmonary disease
- Polypharmacy, defined as six or more medications at one time or high-risk medications such as diabetes medications, pain medications, and blood thinners.

These characteristics and criteria can be adapted to fit your patient population, and to include additional patients you deem most at risk, such as patients with documented medication nonadherence or those identified by health plans as being in the top five percent of predicted risk for high cost.

Are there any patients who aren't appropriate for SafeMed?

The SafeMed model was designed to have maximum impact for a very specific group of patients who have complex health conditions and frequently visit the hospital. You may want to exclude patients for whom care transitions programs are not likely to be effective, such as those with:

- Hospitalization related to cancer, pregnancy, or surgical procedure.
- Severe mental illness, for example, recent psychosis or suicidal ideation.
- Severe substance abuse disorder.
- Life expectancy less than six months.
- Homelessness or unstable residence.
- Planned discharge to another location other than home, unless the patient will be discharged to a skilled nursing facility or rehabilitation center.
- Severe cognitive difficulties and lack of caregiver assistance in program participation.

Risk stratification can help you determine if these patients may be more appropriate for similar but less intensive services, for palliative, hospice or home care or for other community resources and programs.

Assemble and train your SafeMed team.

Select a leader to champion the effort, designate team leads, and hire any additional staff you need to make your care transitions plan work. The typical SafeMed team consists of three team leaders: a physician, nurse, and pharmacist, plus two community health workers (CHWs), one pharmacy technician, and one licensed practical nurse (LPN), medical assistant (MA), or health coach.

The SafeMed team will work with the rest of the primary care practice team and local pharmacies to help patients effectively manage their conditions and medications; therefore, team members should be knowledgeable about practice workflows and chronic disease symptoms, signs, medications, and treatment. All SafeMed team members should receive training in motivational interviewing, patient advocacy, transitions of care, and mental health issues.

The resources below can help you implement SafeMed within your practice as you develop your transitional care program.

**SafeMed protocols and procedures**
(MS WORD, 1,894 KB)

**Patient Continuity of Care Questionnaire**
(PDF, 881 KB)

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**Q&A**

What are the roles of SafeMed care transitions team members?

A SafeMed team consists of the following people:
How many patients is each SafeMed care transitions team assigned?

The University of Tennessee SafeMed program assigns 100 high-risk/high-needs patients to each six-person care transitions team. This averaged out to approximately eight new high-risk/high-needs patients per month and a panel of 20 to 25 active patients at any given time, with an average SafeMed transition lasting six weeks to four months. Depending on the size of your patient population and the capacity of your team members, this number may vary.

Do I need to hire more staff to form a care transitions team modeled after SafeMed?

Ideally, you would have outreach staff dedicated solely to care transitions work. The team leaders function as advisors and spend less time on SafeMed than the CHWs and will continue to fill their normal roles within the practice. Depending on your practice's staffing model, you may have other team members with the appropriate background who are interested in taking on a new role.

What resources are available to supplement my team's existing training to ensure they are ready for their new roles?

The physician, nurse, and pharmacist team leaders can use the materials in this module to provide in-house, tailored training for the CHWs. Alternatively, the practice may want to consider working with a professional who is an experienced educator and is trained in health coaching.
Start the transition process and refine the plan over time.

Use your electronic health record (EHR) to identify high-risk/high-needs patients who meet your practice’s criteria so that they can be flagged for the transitions team immediately in the event of an ED visit or hospital admission. Running a daily report will help you to identify eligible patients in real-time and begin the transition process.

Key performance metrics will indicate the impact of the care transitions team, and highlight areas for further development or improvement. Use your results to make rapid cycle or longer-term improvements to the process.

Q&A

How do I inform patients that they qualify for transitional support services? What do I do if patients are resistant to the new approach?

It is important to understand what type of transitional care services patients qualify for through their health plan. Some insurers may have their own recommended transitional care programs.

You should not assume that patients will immediately sign up for the SafeMed program. The care transitions team must clearly explain the services and benefit to the patient. SafeMed experience in Memphis suggests that building rapport and enrolling patients while they are in the hospital is the most effective approach. It is easier to recruit patients when their primary care physician (PCP) supports and encourages their participation; the care transitions team will be able to introduce themselves as representatives of the patient’s regular doctor. Use the modifiable recruitment materials in the module toolkit to help you enroll patients.

How long should patients participate in this program?

The patients you are targeting will require intensive engagement early on to make a difference and should be followed closely for a minimum 45-day intensive period. After the first 45 days, invite patients to participate for an additional three months (for a total of four and a half months). This will help make sure that they receive the maximum benefit from the program. Selected patients can be followed on an ongoing basis as needed or re-enrolled if they are readmitted or revisit the ED.

What key performance indicators could we track?

You may opt to monitor patients eligible for and participating in the program before and after implementation to track delivery of the following key program services:

- Recruitment rate (percent of eligible patients who agree to participate).
• Telephone follow-up rate within 30 days of discharge.
• Home visit completion rate within 72 hours and within 30 days of discharge.
• Primary care follow-up rate within 30 days of discharge.
• Medication adherence for essential chronic disease medications.
• Satisfaction of enrolled patients with the program. In addition, key utilization outcome measures can be tracked, including:
  • Emergency care utilization.
  • Overall hospitalizations.
  • Readmissions.

How long should home visits last and how often should they take place?

The length of a home visit will vary based on the needs of the particular patient, but in general, home visits should not last longer than one hour. The chart below details the core hospital and home visit activities included in the SafeMed care transitions model.

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**Conclusion**

The SafeMed model draws on existing primary care strengths and targets high-cost, high-risk/high-needs patients with a focus on medication and chronic disease management. By using proven methodology and team-based care approaches, practices can use SafeMed to simultaneously improve care and patient health while reducing costs.

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**AMA Pearls**

Communication is essential

Interdisciplinary teamwork and patient-centered communication are the keys to good primary care practice-based transitional care.

Your outreach workers are the backbone of the SafeMed team

Hire outreach workers who excel in patient-centered communication.
Involve patients early and often
Engage your patients early on in continuous program improvement efforts so you can benefit from the honest perspectives of the people you intend to serve.

STEPS in practice

Transitions of Care Case Report: University of Tennessee Health Sciences Center

SafeMed is an initiative developed by the University of Tennessee in partnership with Methodist LeBonheur Healthcare and funded by a Center for Medicare and Medicaid Services (CMS) Health Care Innovation Award. The University of Tennessee Health Sciences Center in Memphis, TN, was the original SafeMed site. The program used in Memphis can be adapted by individual practices to:

- Reduce drug therapy problems
- Reduce patient morbidity and mortality resulting from preventable drug therapy problems
- Reduce avoidable hospital readmissions
- Lower costs
- Improve medication adherence
- Improve disease management
- Improve patient health

As part of the SafeMed program, a report is run every morning that indicates to the clinic which of its assigned patients has been hospitalized within the last 24 to 72 hours. This allows the SafeMed nurse leader to help determine which patients might benefit from SafeMed care transitions support so that home visits can be scheduled. Regular home visits are typically scheduled at two and four weeks post-discharge. The community health workers (CHW) are the primary point of contact for patients. The CHW meet with the SafeMed team physician, pharmacist and nurse leaders on a daily basis, both in person and by phone, to address specific medication problems or care management issues identified during home visits. The CHW also meet with the SafeMed team leaders as a group on a weekly or monthly basis to conduct case reviews and refine care plans.

Program participants are invited to regular clinic-based SafeMed peer group support and educational sessions. Support session topics can be suggested by patients to meet their needs and may include speakers and discussions, but should primarily employ group problem-solving techniques. The support sessions are used to empower patients to ask questions and help them better navigate the health system. It is recommended that each patient remain in the program for a minimum of 3 months to receive the maximum benefit from the approach.

The SafeMed experience in Memphis reported by the University of Tennessee Health Science Center suggests that using a care transitions team model can have a very positive effect on a practice and its patients.
<table>
<thead>
<tr>
<th>Without SafeMed</th>
<th>Memphis Experience with SafeMed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency department visits</td>
<td>Recently hospitalized super-utilizing patients with multiple chronic conditions experience on average six ED visits resulting in more than three hospitalizations in a 12-month period</td>
</tr>
<tr>
<td>Recently hospitalized super-utilizing patients experience 30 percent fewer hospitalizations, 44 percent fewer 30-day readmissions, and 52 percent fewer ED visits in a 6-month period</td>
<td></td>
</tr>
<tr>
<td>Primary care visits</td>
<td>46 percent of patients report not having a regular primary care provider (PCP); fewer than 50 percent follow-up with a PCP within 30 days after discharge</td>
</tr>
<tr>
<td>More than 80% of recently hospitalized super-utilizing patients follow-up with their PCP or patient centered medical home (PCMH) within 30 days of discharge and most patients follow-up with their physician within 72 hours of discharge</td>
<td></td>
</tr>
<tr>
<td>Information from PCP</td>
<td>Patients perceive that the information from their PCP or specialist is not tailored enough to their situation and is inconsistent</td>
</tr>
<tr>
<td>Patients perceive that the information given by their providers is more tailored to their situation and consistent</td>
<td></td>
</tr>
<tr>
<td>Non-adherence or non-compliance issues</td>
<td>Providers are frustrated with patients who appear to be noncompliant</td>
</tr>
<tr>
<td>Providers are less frustrated with patients because they now understand the underlying social problems contributing to nonadherence</td>
<td></td>
</tr>
<tr>
<td>Provider relationships</td>
<td>Patients perceive that their relationship with their provider needs to improve</td>
</tr>
<tr>
<td>Patients perceive that their relationship with their provider is improved</td>
<td></td>
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</tbody>
</table>

Transitions of Care Case Report: A Patient Experience with the SafeMed Model at the University of Tennessee

Mr. S was one of the first enrollees in the University of Tennessee/Methodist Le Bonheur Healthcare SafeMed program.

A 58-year-old Caucasian, Mr. S had multiple chronic conditions, including coronary artery disease, congestive heart failure (CHF), chronic kidney disease and hypertension, along with a history of depression and cocaine use. He was initially admitted to the hospital because his automatic implantable cardioverter-defibrillator kept firing, causing him severe emotional and physical discomfort. Social risk factor screening indicated that he had low to moderate social support at home. Mr. S was on Medicaid and received government disability assistance.

His complex medical history and lack of social support made Mr. S a clear candidate for the intensive care transitions services provided by the SafeMed program. He met the program eligibility criteria and expressed interest in participating. Over the next three days of his hospitalization, Mr. S was visited by the SafeMed program's lead nurse practitioner (NP), lead pharmacist, a pharmacy technician, and a licensed practical nurse (LPN) community health worker. This team worked to develop rapport with Mr. S and assess his needs.

The pharmacist learned that because of his limited income, cost was a major barrier to Mr. S's medication adherence. The pharmacist and pharmacy technician helped Mr. S simplify his medication regimen, made sure he was getting his medications at the lowest possible cost, and reviewed his plan for obtaining his medications following discharge. At discharge, they gave him a Patient-Friendly Medication List describing each of his medicines.

The team also learned that Mr. S had numerous negative healthcare experiences in the past with specialists and primary care physicians. He didn't feel he could talk to a care provider without being judged about why it was difficult for him to follow medical advice, nor did he feel that they understood his situation. The NP and LPN community health worker counseled him on how to share his concerns with his physicians and worked with him to prioritize, schedule, and arrange transportation for his outpatient visits following discharge. They also gave him educational materials, including a CHF Symptom Tracker to help him know when to contact the doctor. At discharge, the NP and pharmacist completed a brief SafeMed Continuity of Care Document/
Discharge Summary and faxed this information to his primary care provider and cardiologist before his follow-up appointments.

Soon after Mr. S. was discharged from the hospital, he was mugged, resulting in a brief rehospitalization for a concussion and a broken leg. The SafeMed team was immediately alerted of his readmission via the daily eligibility report and Mr. S’s team members visited him once again.

A few days after his second hospitalization, Mr. S was visited in his home by the LPN community health worker. The community health worker reviewed his Patient-Friendly Medication List and his CHF Symptom Tracker. When she employed teach-back techniques, she found that Mr. S had only a fair level of comprehension of the self-management care guidelines he had been given in the hospital. They discussed his care plan in greater detail along with his health goals. Mr. S identified outpatient medical follow-up as a priority, with secondary diet and exercise goals.

After the initial home visit, the LPN community health worker met with the entire SafeMed team at their bi-weekly case review meeting to discuss Mr. S’s needs and care plan. The input of the lead physician, NP, and pharmacist helped to refine the approach to Mr. S's care. Most importantly, the team decided that the community health worker should attend Mr. S’s outpatient cardiology follow-up visit to assist him in communicating his concerns to the doctor. This made Mr. S more comfortable discussing issues regarding the circumstances that led to his defibrillator’s repeated firing and he revealed to the cardiologist that the firing always occurred during sexual activity. As a result, the cardiologist was able to fine tune the device in response to the patient’s activity level to help him avoid future unnecessary shocks.

As part of Mr. S’s ongoing care plan, the SafeMed staff facilitated communication between Mr. S and his Medicaid case manager. As a result, Mr. S was able to get the assistance he needed with medications and home services. With the help of concentrated counseling, ongoing education, and a supportive care team, Mr. S is now meeting his self-identified health goals: attending his scheduled follow-up appointments, walking in his neighborhood, and doing daily exercise for cardiac rehabilitation.

Mr. S looks back on his SafeMed experience positively, remarking that the SafeMed team helped him speak up for himself and get the care he needed most. The SafeMed staff was encouraged by their breakthrough with Mr. S. They noted that, like many of the medically and socially complex patients who participate in the program, Mr. S was not very receptive to help initially, but once he understood that the SafeMed team members were there to help him, he was able to take the actions he needed to gain control of his health and avoid further hospitalization.

*Disclaimer: The protected health information regarding Mr. S. in the case study above has been modified to protect patient privacy.

Learning Objectives:
At the end of this activity, you will be able to:
1. Define the SafeMed care transitions model and explain its effects on hospital and emergency department utilization and patient population outcomes;
2. Identify complex patients who are candidates for the SafeMed care transitions model;
3. Describe the individuals and roles needed to form a SafeMed team;
4. Explain how to identify eligible patients and how to refine care transitions over time.
Article Information

AMA CME Accreditation Information

Credit Designation Statement: The American Medical Association designates this enduring material activity for a maximum of .50 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Target Audience: This activity is designed to meet the educational needs of practicing physicians, practice administrators, and allied health professionals.

*Disclaimers: Individuals below who are marked with an asterisk contributed towards Version 1 of this learning activity.

Statement of Competency: This activity is designed to address the following ABMS/ACGME competencies: practice-based learning and improvement, interpersonal and communications skills, professionalism, systems-based practice, interdisciplinary teamwork, quality improvement and informatics.

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References


15. Bailey, J.E., Surbhi, S., Wan, J.Y., Munshi, K.D., Waters, T.M., Binkley, B.L., Ugwueke, M.O., & Graetz, I. Effect of intensive interdisciplinary transitional care for high-need, high-cost patients on quality, outcomes, and costs: A quasi-experimental study. Journal of General Internal Medicine. [Accepted for publication March 5, 2019.]