Overview
Health Services Advisory Group (HSAG) is contracted by the Centers for Medicare & Medicaid Services (CMS) to work with healthcare providers to improve coordination of care, reduce hospital readmissions, and improve medication safety by reducing adverse drug events (ADEs) for patients in the community.

Florida Readmissions and Medication Safety
HSAG works with hospitals in Florida on reducing ADEs, which contribute to readmissions and are the leading cause of preventable patient harm. The top three implicated medication classes include anticoagulants, diabetic agents, and opioids. The Department of Health and Human Services (HHS) identified these medication classes as common, preventable, and measurable ADEs and selected them as high priority targets in the National Action Plan for Adverse Drug Event Prevention. ADEs contribute to increased costs and negatively impact patient care:

- ADEs add an additional $3.5 billion in healthcare costs; of this, up to $5.6 million per U.S. hospital.
- ADEs prolong hospital stays by 1.7 to 4.6 days.
- A report estimated that ADEs account for one-third of adverse events encountered in hospitals.
- A study of emergency department (ED) visits for ADEs estimated that:
  - Anticoagulants were associated with 17.6 percent of the visits, with 48.8 percent of cases resulting in hospitalization.
  - Diabetic agents were associated with 13.3 percent of the visits, with 38.5 percent resulting in hospitalization.
  - Opioids were associated with 6.8 percent of the visits, with 24.6 percent resulting in hospitalization.

Engaging With Hospitals to Create and Implement ADE Interventions
Data from the hospitals that HSAG works with reveal that many facilities rank above the state average for high-risk readmission rates related to one or more of the three high-risk medication (HRM) classes: anticoagulants, diabetic agents, and opioids. A hospital’s ADE rate is measured by counting the number of hospital admissions and ED visits related to an ADE from one of the three HRMs.

Figure 1       2015 Florida Medicare Readmissions Within 30 Days
Of the 54,512 Readmissions Within 7 Days, 16,246 (29.8%) Readmissions Were for Beneficiaries Who Were on HRMS
That is almost 3 out of every 10 readmissions!

Figure 2       Medicare Fee-For-Service (FFS) Beneficiaries on HRMs in Florida—2015
Diabetic agents are the most common drug type used, closely followed by opioids. Fewer beneficiaries use anticoagulants.

Represents beneficiaries with at least 30-days supply of drug type. Patients may be included in more than one drug type category.
Despite lower frequency of use, patients taking anticoagulants have the highest rate of ADEs per 1,000 discharges among Medicare beneficiaries on HRMs, followed by diabetic agents. Opioids have much lower ADE rates based on claims data.

Readmissions among beneficiaries on HRMs are much more frequent than the general population, suggesting ample opportunity for improvement. Percent of 30-day readmits with an anticoagulant or diabetes agent ADE are much higher than the percent of readmits with an opioid ADE.

Factors Contributing to ADEs and What You Can Do

Target patients who are receiving HRMs. Medicare claims data provided to HSAG will be used to focus on medication safety improvement efforts with the goal of improving medication safety and reducing the incidence of ADEs related to hospital readmissions for patients in the community. Factors that contribute to ADEs include:

- Sub-optimal medication reconciliation
- Failure to confirm patient’s understanding of their medication regimen
- Inappropriate medication use by the patient and inappropriate prescribing
- Failure to monitor patient’s therapeutic lab values, drug treatment outcomes, and patient’s adherence
- Poor multidisciplinary communication and polypharmacy

### Best Practice Description

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<tr>
<th>Best Practice</th>
<th>Description</th>
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<tr>
<td>Pharmacist-led medication reconciliation and medication therapy review</td>
<td>Compares active medication orders to all of the current medications that the patient has been taking, identifies and addresses medication related problems (i.e., duplication of therapy, unnecessary medications, inappropriate dosing, drug-drug interactions)</td>
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<td>Bedside delivery of medications prior to discharge</td>
<td>Prevents delay or interruption in medication therapy following discharge, verifies insurance coverage, manages prior authorizations or drug substitutions (i.e., therapeutic equivalent substitutions based on cost, availability, formulary, insurance)</td>
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<td>Pharmacist-led discharge medication counseling</td>
<td>Provides information on proper medication administration, side effects, disease state education</td>
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<td>Post-discharge follow up</td>
<td>Reinforces the discharge plan, assesses patient retention of information, addresses patient questions and concerns, assesses medication therapy adherence</td>
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<td>Medication Therapy Management (MTM)</td>
<td>Improves medication use, enhances health care professionals collaboration, enhances communication between patients and their health care team, encourages patient involvement</td>
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<tr>
<td>Comprehensive medication history</td>
<td>Assists with obtaining high quality, complete, and accurate medication history</td>
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NOTE: References regarding best practices are available from HSAG upon request.

References: