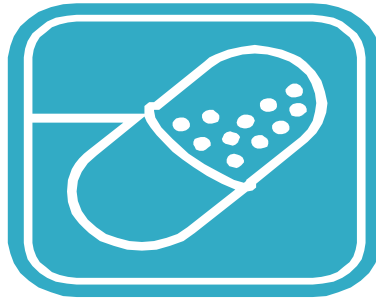


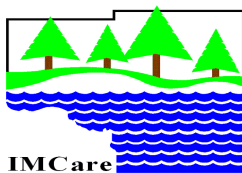
# Aspirin Therapy

**Targeting MSHO/MSO+ Members Ages 65-84 with Ischemic Heart Disease and/or Diabetes Mellitus**



## Care Coordinator Toolkit

**Provided by:**



**MSHO/MSC+ Community  
Aspirin Therapy in Ischemic Heart Disease and Diabetes Mellitus  
Performance Improvement Project  
Care Coordinator Toolkit**

**MSHO/MSC+ Criteria**

Minnesota Senior Health Options (MSHO) program includes the following criteria:

- Age: 65 years and up
- Enrollment: Voluntary
- Medicare Services: All Medicare services including Part D drugs through Medicare Special Needs Plan (SNP)
- Medicaid Basic Care Services: Medicaid Basic Care Services and remaining drugs through same SNP
- Medicaid Long Term Care Services: Elderly Waiver Services through SNP plus 180 days of nursing home care

Minnesota Senior Care Plus (MSC+) program includes the following criteria:

- Age: 65 years and up
- Enrollment: Mandatory
- Medicare Services: Medicare A/B services through Medicare FFS. Part D drugs through separate Medicare drug plan.
- Medicaid Basic Care Services: Medicaid Basic Care Services and remaining drugs through same SNP
- Medicaid Long Term Care Services: Elderly Waiver Services through SNP plus 180 days of nursing home care

**Project Summary**

The purpose of this Minnesota Senior Health Options/Minnesota Senior Care/Minnesota Senior Care Plus (MSHO/MSC/MSC+) Performance Improvement Project (PIP) is to increase the rate of aspirin therapy in patients with a diagnosis of ischemic heart disease and/or diabetes mellitus within the community based population, ages 65 through 84, unless contraindicated.

Those members with contraindications (e.g. gastric bleed, aspirin allergy) have been excluded from the project population, as have members on another antiplatelet agent (e.g. Clopidogrel) or anticoagulant therapy (e.g. Warfarin). Members age 85 and older have been excluded due to the limited literature supporting the effects of aspirin in this population.

**Project Study Question**

Will promoting guideline awareness and healthcare team/member communication improve the aspirin prescription fill rate of the MSHO/MSC/MSC+ community population, age 65 through 84, who have a diagnosis of ischemic heart disease and/or diabetes mellitus by an absolute 5% as measured through pharmacy claims?

**Efficacy of Aspirin**

In the senior population, evidence is strong that the uses of low-dose aspirin or antiplatelet medications result in clinically significant reductions in non-fatal myocardial infarctions, non-fatal strokes, and death rates from vascular or unknown causes. The American Diabetes Association and American Heart Association recommend low-dose aspirin for managing these patients<sup>1</sup>.

**Aspirin Defined**

Aspirin (known chemically as acetyl salicylic acid and often abbreviated as ASA) belongs to a class of medications called nonsteroidal anti-inflammatory drugs or NSAIDs. Aspirin and other NSAIDs, for example, Ibuprofen (aka. Motrin, Advil, etc.) and Naproxen (aka. Aleve), are widely used to treat fever, pain and inflammatory conditions such as arthritis, tendonitis and bursitis. In addition, Aspirin also has an important inhibitory effect on platelets in the blood. The antiplatelet effect is used to prevent the platelets from initiating the formation of blood clots inside arteries, particularly in individuals who have atherosclerosis or are otherwise prone to develop blood clots in their arteries<sup>2</sup>.

## **Ways Aspirin Used**

Aspirin is widely used either alone or in combination with other antiplatelet agents to prevent blood clots from forming in arteries. Aspirin is used specifically in several situations including:

1. **Low Dose Aspirin (75-160 mg/day):** Aspirin is often prescribed in low doses on a long-term basis to patients with a history of heart disease, stroke and diabetes.
2. **Moderate Dose Aspirin (160-325 mg/day):** Aspirin is often prescribed in moderate doses to patients who are having a heart attack to limit the extent of damage to the heart as well as improve survival; patients who are having unstable angina to prevent the onset of a heart attack; and patients who are having ischemic strokes to limit damage to the brain, prevent a second stroke and improve survival.
3. **Aspirin Dosage Varies:** Aspirin is often prescribed to patients undergoing surgery to open or bypass blocked arteries, including percutaneous transluminal coronary angioplasty (PTCA) with or without placement of coronary stents and coronary artery bypass surgery (CABG).

## **Possible Side Effects**

Complications of taking aspirin include<sup>3</sup>:

- **Allergic reaction:** Aspirin sensitivity is common, especially in people with asthma or sinus problems. But a true aspirin allergy – where the immune system overreacts to the drug – is rare. Possible signs or symptoms of aspirin allergy or sensitivity range from mild to serious; they include: hives; itchy skin; watery eyes; swelling of lips, tongue or face; breathing difficulty or wheezing.
- **Gastrointestinal problems:** Daily use of aspirin can potentially cause ulcers of the stomach and duodenum; abdominal pain; nausea; gastritis (inflammation of the stomach); and even gastrointestinal bleeding.
- **Hemorrhagic stroke:** While daily aspirin can help prevent a clot-related stroke, it may increase the possible risk of creating a bleeding stroke (hemorrhagic stroke) within the individual.
- **Intracranial hemorrhage:** Daily use of aspirin can cause an intracranial hemorrhage (bleeding into the tissues of the brain) in rare instances.
- **Kidney/Liver problems:** Daily use of aspirin can potentially impair function of the kidney and/or liver, especially in patients with a history of liver and kidney disease.
- **Other side effects:** Daily use of aspirin can also cause vertigo, ringing in the ears (tinnitus) and nausea.

Serious side effects of aspirin such as bleeding ulcers or intracranial bleeding are rare (less than 1%) among patients taking moderate doses of aspirin<sup>2</sup>. However, serious side effects in patients taking low dose aspirin are even lower. The actual incidence of serious bleeding with long-term use of low dose aspirin has not been determined clearly.

→ ***Due to possible side effects, please advise member to seek medical guidance from their primary care provider at their annual assessment prior to taking aspirin daily.***

## **Member Considerations When Consulting Provider About Aspirin**

Before an individual with a history or ischemic heart disease and/or diabetes mellitus considers the possibility of taking aspirin as secondary prevention, the individual is advised to discuss the following with their health professional:

- Medical history of member and their family
- Medical history of member allergies and sensitivities
- Member usage of all medications, including prescription drugs (ie, Deltasone, Rheumatrex, etc.), over-the-counter medications (ie. Advil, Aleve, etc.) and dietary supplements – including vitamins and herbal remedies (i.e. Ginko biloba, Garlic, etc.)

## **MSHO/MS C+ Over-the-Counter (OTC) Benefit**

With a prescription from the primary care provider of the member, the individual can obtain aspirin at no cost for MSHO and \$3 or less for MSC/MS C+.

## **Care Coordinator Expectations**

1. **Monitor Monthly Risk List:** Care Coordinators will receive a monthly risk list during the first week of each month with the members that meet the criteria of the ASA PIP. This list will exclude members that have contraindications to take aspirin.
2. **Educate Member about PIPs:** Continue to educate eligible member, as identified on the risk list, about ongoing DHS approved PIPs, including the ASA PIP.
3. **Identify Language Barriers:**
  - a. Access an interpreter for face-to-face or telephone contact with member.
  - b. Utilize the Russian, Somali and Spanish versions of the member mailer as needed.
4. **Encourage Discussion with PCP:** Encourage members with a diagnosis for ischemic heart disease and/or diabetes mellitus that are not currently on this treatment to discuss aspirin therapy with their primary care provider at their annual visit.
5. **Document Education in Care Plan:** Care Plan documentation of PIP participation is considered a best practice for health plan contracted care coordinators.

## **References**

1. American Diabetes Association. (2004). Aspirin Therapy in Diabetes. *Diabetes Care*, 27(1), 72-73.
2. Lee, D. and Marks, J. (2007). Aspirin and Antiplatelet Medications: Aspirin for the Prevention and Treatment of Heart Attacks and Strokes. Retrieved on December 31, 2007 from [http://www.medicinenet.com/aspirin\\_and\\_antiplatelet\\_medications/article.htm](http://www.medicinenet.com/aspirin_and_antiplatelet_medications/article.htm).
3. Mayo Foundation for Medical Education and Research. (2006). Daily Aspirin Therapy. Retrieved on December 31, 2007 from <http://www.mayoclinic.com/health/daily-aspirin-therapy/HB00073>.
4. U.S. Food and Drug Administration. (2006). Aspirin: Questions and Answers. Retrieved on December 31, 2007 from [http://www.fda.gov/cder/news/aspirin/aspirin\\_qa.htm](http://www.fda.gov/cder/news/aspirin/aspirin_qa.htm).

**Professional Guidelines  
For Aspirin Therapy in Patients with a Diagnosis  
Of Diabetes Mellitus and/or Ischemic Heart Disease**

<b>Organization</b>	<b>Recommendation</b>
<b>AHA/ AHA/ACC Guidelines for Secondary Prevention for Patients With Coronary and Other Atherosclerotic Vascular Disease: 2006 Update</b> <i>Endorsed by the National Heart, Lung, and Blood Institute</i>	Start aspirin 75 to 162 mg/d and continue indefinitely in all patients unless contraindicated
<b>American Diabetes Association Standards of Medical Care - Antiplatelet Agents Recommendations</b> (ADA, 2007)	Use aspirin therapy (75-162 mg/day) as a secondary prevention strategy in those with diabetes with a history of CVD. Use aspirin therapy (75-162 mg/day) as a primary prevention strategy in those with: <ul style="list-style-type: none"> <li>• Type 1 diabetes at increased cardiovascular risk, including those who are &gt;40 years of age or who have additional risk factors (family history of CVD, hypertension, smoking, dyslipidemia, or albuminuria).</li> <li>• Type 2 diabetes at increased cardiovascular risk, including those who are &gt;40 years of age or who have additional risk factors (family history of CVD, hypertension, smoking, dyslipidemia, or albuminuria).</li> </ul> Other antiplatelet agents may be a reasonable for high-risk patients with aspirin allergy, with bleeding tendency, who are receiving anticoagulant therapy, with recent gastrointestinal bleeding, and with clinical active hepatic disease who are not candidates for aspirin therapy.
<b>Institute for Clinical Systems Improvement (ICSI) recommendations for Management of Type 2 Diabetes Mellitus</b> (ICSI, 2006)	Aspirin/antiplatelet medication unless contraindicated. Patients with type 2 diabetes are at a significantly high risk for development of heart disease. For patients with type 2 diabetes mellitus, initiate low-dose aspirin therapy (81-325 mg daily) in patients 40 and older unless there is a contraindication to aspirin therapy. If aspirin is contraindicated, consider use of clopidogrel (Plavix®) or ticlopidine (Ticlid®) (ICSI, 2006).
<b>American Geriatrics Society – Guidelines for Improving the Care of the Older Person with Diabetes Mellitus</b> (American Geriatrics Society, 2002)	Aspirin – The older adult who has DM (and is not on other anticoagulant therapy and does not have any contraindications to aspirin) should be offered daily aspirin, 81 to 325 mg/d
<b>Assessing Care of Vulnerable Elders (ACOVE) Quality Indicators</b> (Annals of Internal Medicine, 2001)	Diabetes Mellitus <ul style="list-style-type: none"> <li>• Aspirin therapy – All diabetic elders who are not on other anticoagulant therapy should be offered daily aspirin therapy.</li> </ul> Ischemic Heart Disease <ul style="list-style-type: none"> <li>• Antiplatelet Therapy – If a vulnerable elder has established coronary heart disease and is not receiving Warfarin, then he or she should be offered antiplatelet therapy.</li> </ul>

**IBUPROFEN AND ASPIRIN TAKEN TOGETHER**

On September 8, 2006, the Food and Drug Administration issued a Safety Information and Adverse Event Report regarding the concomitant use of low-dose aspirin (for cardioprotective benefits) and ibuprofen. The report indicates that 400 mg ibuprofen taken with immediate-release low-dose aspirin (81 mg) will interfere with the antiplatelet effect of aspirin. Other over-the-counter NSAIDs should be viewed as having potential to interfere with the antiplatelet effect of aspirin.

Recommendations include taking immediate release low-dose aspirin 30 minutes prior to taking ibuprofen. If ibuprofen is taken first, aspirin should not be taken for at least 8 hours after ingestion of ibuprofen. Other analgesics that do not interfere with the antiplatelet effect of aspirin should be considered in populations at high-risk for cardiovascular events.

For more information, please refer to the information listed on the Food and Drug Administration's web site for a complete copy of the alert and cited references.

Internet link: <http://www.fda.gov/medwatch/safety/2006/safety06.htm#aspirin>