AAVBC

American Academy of Value Based Care

Antiplatelet Therapy Utilization Management

Quick Reference Guide

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AAVBC Antiplatelet Therapy Utilization Management - Quick Reference Guide

Table of Contents

1. LANDSCAPE AND UTILIZATION OF ANTIPLATELETS IN VBC

Antiplatelet therapies are foundational, often chronic medications used to **reduce the risk of arterial thrombotic events**, including myocardial infarction (MI), ischemic stroke, and complications of peripheral artery disease (PAD). Their greatest and most well-established benefit is in secondary prevention of thrombotic events among patients with known **atherosclerotic cardiovascular disease (ACSVD)**, where they reduce the risk of recurrent events. **Aspirin, the most commonly prescribed antiplatelet therapeutic**, may also have utility in **primary prevention of thromboembolic events**[1] and may provide additional benefits beyond thrombosis prevention in select patient populations.

Cardiovascular disease remains the leading cause of death in the United States, with coronary heart disease affecting approximately **20–21 million adults (~5% prevalence)**, nearly **795,000 strokes occurring annually**, and an estimated **8–10 million individuals living with Peripheral Artery Disease (PAD)**, together representing major drivers of morbidity, mortality, and healthcare utilization.[2–8] In Calendar Year 2023, Medicare Part D spending on outpatient prescription antiplatelet therapies totaled approximately **$1 billion** across key agents, including **ticagrelor** (Brilinta), **clopidogrel** (Plavix and generics), **prasugrel** (Effient and generics), and **aspirin–dipyridamole** (Aggrenox).[5] This figure likely **underestimates the true financial and clinical impact of antiplatelet therapy**, as the most widely used agent—aspirin—is available over the counter and is **not consistently captured in Part D claims data**, despite its extensive use in secondary prevention across these high-prevalence cardiovascular conditions.

The American Academy of Value-Based Care (AAVBC) supports the appropriate and thoughtful use of antiplatelet therapies to reduce avoidable ischemic complications, including myocardial infarction and stroke, while **minimizing bleeding-related hospitalizations**. Within a value-based care framework, antiplatelet therapy emphasizes preventive care, appropriate low-cost medication selection when appropriate, and careful attention to therapy duration and de-escalation over time.

High-value care in this setting includes prioritizing **low-cost generic agents** when clinically appropriate, **avoiding unnecessary combination therapy** (including prolonged dual or triple antithrombotic regimens), and **aligning therapy intensity** with each patient's evolving risk profile. These approaches support better patient outcomes while reducing avoidable harm and unnecessary healthcare utilization.

See: *Additional information on anticoagulant therapies is available in the AAVBC Anticoagulant Utilization QRG: https://www.aavbc.org/knowledge-hub/anticoagulant-therapy-utilization-management*

AAVBC Tip: A key component of high-value antiplatelet care is aligning treatment strategies with individualized patient risk. Aspirin remains foundational in secondary prevention and may also be considered for primary prevention in patients with elevated cardiovascular risk and low bleeding risk. When used thoughtfully, this targeted approach can **reduce the risk of first-time myocardial infarction and stroke**, supporting improved long-term outcomes. In selected low bleeding risk populations, long-term low-dose aspirin has also been associated with potential **reductions in colorectal and prostate cancer risk** and other downstream benefits, though these remain secondary considerations within an overall cardiovascular risk–benefit assessment. Prioritizing appropriate patient selection, use of lower-cost therapies when suitable, and avoidance of unnecessary combination regimens supports better outcomes while reducing preventable complications.

Antiplatelet Therapy Selection is Highly Individualized

Antiplatelet strategies are broadly categorized based on the **number of agents used**. **Single antiplatelet therapy (SAPT)** refers to the use of a single platelet inhibitor (e.g., **aspirin or a P2Y12 inhibitor**), whereas **dual antiplatelet therapy (DAPT)** combines aspirin with a P2Y12 inhibitor to provide **complementary inhibition of platelet activation pathways**. As a result, DAPT offers **more potent and consistent platelet inhibition** than SAPT but is associated with a **higher risk of bleeding**, requiring careful patient selection and thoughtful attention to duration of therapy. **Triple antiplatelet therapy (TAPT)** is uncommon and typically refers to the addition of a third antiplatelet agent (e.g., vorapaxar) to aspirin and/or a P2Y12 inhibitor in highly selected patients with **high atherothrombotic risk and low bleeding risk**. Due to the substantially increased risk of major and intracranial bleeding, its use is rare in contemporary practice and generally limited to specific, guideline-informed scenarios.

Notably, other antiplatelet agents may be used in combination with aspirin but are not considered **"traditional DAPT,"** as they act on **non–P2Y12 pathways** and are typically used in **indication-specific clinical contexts** rather than routine coronary indications. These include **PAR-1 antagonists** (vorapaxar; Zontivity), **phosphodiesterase inhibitors** (dipyridamole, cilostazol), and **glycoprotein IIb/IIIa inhibitors** (abciximab, eptifibatide, tirofiban), the latter of which are **intravenous agents used almost exclusively in acute, procedural settings** (e.g., PCI).

Contemporary guidelines from the American College of Cardiology (ACC), American Heart Association (AHA), American Stroke Association (ASA), Society for Cardiovascular Angiography and Interventions (SCAI), and other expert bodies emphasize that antiplatelet therapy selection and duration must be **individualized** based on multiple **clinical and patient-specific factors**, reflecting the **dynamic balance between ischemic and bleeding risk** across different phases of care).[6–10]
These include:

- Confirmed clinical indication (e.g., acute coronary syndromes, PCI, chronic coronary disease, ischemic stroke/TIA, peripheral artery disease
- Timing relative to the index event or procedure (e.g., early post-ACS or post-PCI vs chronic phase)
- Ischemic risk (e.g., prior MI, complex PCI, diabetes, diffuse atherosclerotic disease)
- Bleeding risk (e.g., prior bleeding events, frailty, concomitant medications)
- Age and patient-specific factors, including frailty, fall risk, renal and hepatic function
- Need for **concurrent anticoagulation** (**dual pathway therapy)**
    - **AF + PCI:** short course of **triple therapy (anticoagulant + aspirin + P2Y12 inhibitor)** → transition to **dual therapy (anticoagulant + P2Y12 inhibitor)** → eventual anticoagulant monotherapy
    - **WATCHMAN (LAAO):** short-term **anticoagulation ± aspirin** → DAPT (aspirin + clopidogrel) → long-term SAPT
    - **CAD/PAD:** chronic **low-dose rivaroxaban + aspirin**
- Patient-specific comorbidities and contraindications (e.g., prior stroke/TIA affecting prasugrel use, gastrointestinal bleeding risk)
- Drug-drug interactions (e.g., NSAIDs, anticoagulants, CYP3A4-modifying agents)
- Planned or anticipated **procedures requiring interruption of therapy**
- **Contraindications and special populations** (e.g., aspirin avoidance in children and adolescents with viral infections due to the risk of Reye syndrome)

Prevalence and Clinical Context

Antiplatelet therapies in older adults

Common Indication Leading to Thromboembolic Risk	Associated Bleeding Risk
Acute coronary syndrome (ACS)	Early DAPT reduces recurrent MI/stent thrombosis but increases **major bleeding risk**, especially GI and access-site bleeding
Recent PCI/coronary stent	Prevents **stent thrombosis**, but longer duration and potent P2Y12 inhibitors increase **major and clinically relevant nonmajor bleeding**[7,11,12]
Chronic coronary disease/prior MI	SAPT is sufficient for many patients; prolonged DAPT increases **bleeding without consistent added benefit** in lower-risk patients[7]
Minor ischemic stroke or high-risk TIA	Short-term DAPT reduces early recurrence, but extended use increases **major bleeding and intracranial hemorrhage risk**[10]
Symptomatic peripheral artery disease (PAD)	SAPT or intensified therapy reduces CV/limb events, but bleeding risk increases with more intensive regimens[6]
Post lower-extremity revascularization	Temporary intensification (dual pathway inhibition) may improve outcomes, but increases **post-procedural bleeding risk**[6]
Primary prevention (select high-risk patients without established ASCVD)	Aspirin may reduce first-time cardiovascular events in carefully selected patients at elevated ASCVD risk and low bleeding risk; however, routine use increases gastrointestinal and intracranial bleeding and is not recommended for most patients[1]
Concurrent anticoagulation and/or TAPT (e.g., AF + PCI)	**Highest bleeding-risk scenario**; Dual-pathway therapies and/or TAPT significantly increases major bleeding → minimize duration[9,11,12]
Atrial fibrillation ablation	Periprocedural DAPT increases bleeding risk[13]
Left atrial appendage occlusion (e.g., WATCHMAN device)	Requires short-term anticoagulation followed by dual antiplatelet therapy (e.g., clopidogrel plus aspirin) and eventual SAPT; bleeding risk is elevated during transition phases and with combination therapy[13,14]
Older age/frailty/prior bleeding /renal dysfunction	Amplified bleeding risk across all regimens; requires **shorter duration and careful agent selection**

Cost Estimate Snapshot: Acute and Chronic Antiplatelet Utilization

Cost Category	Typical Annual Cost Range (per person)	What it represents
Chronic SAPT: aspirin	**~$15–$20/year**[15,16]	Generic low-dose (**81 mg**) **aspirin once daily**, a common long-term secondary prevention dose used across CAD/PAD and with other antiplatelet regimens when indicated[6,8]
Chronic SAPT: clopidogrel (Plavix)	**~$120/year**[17,18]	**Clopidogrel 75 mg once daily**, a common SAPT option for chronic coronary disease, PAD, and secondary stroke prevention[6–10]
Chronic SAPT: prasugrel	**~$300/year**[19]	**Prasugrel 10 mg once daily** (or **5 mg once daily** in

Cost Category	Typical Annual Cost Range (per person)	What it represents
(Effient)		selected lower-body-weight (<60 kg) patients per labeling), generally used after ACS managed with PCI rather than for routine long-term use across all indications[8,9,12,20]
Chronic SAPT: ticagrelor (Brilinta)	**~$620/year**[21]	**Ticagrelor 90 mg twice daily during the first year after ACS**, then **60 mg twice daily after 1 year** in selected patients; also used short-term with aspirin in selected acute ischemic stroke/high-risk TIA scenarios[10,21]
Chronic aspirin–dipyridamole ER	**~$1400/year**[22]	**Aspirin 25 mg/extended-release dipyridamole 200 mg twice daily**, a secondary prevention option after non-cardioembolic ischemic stroke or TIA[10]
Chronic, traditional DAPT: aspirin + clopidogrel	**~$140/year**[17]	Illustrative annualized cost of **aspirin 81 mg once daily + clopidogrel 75 mg once daily**; used in selected post-PCI, ACS, PAD, and short-course stroke/TIA settings depending on indication and bleeding risk[6,8,9,11,12,18]
Chronic, traditional DAPT: aspirin + prasugrel	**~$320/year**[19]	Illustrative annualized cost of **aspirin 81 mg once daily + prasugrel 10 mg once daily**; generally relevant to ACS-PCI populations[8,9,11,12]
Chronic, traditional DAPT: aspirin + ticagrelor	**~$640/year**[23]	Illustrative annualized cost of **aspirin 81 mg once daily + ticagrelor 90 mg twice daily** in year 1 after ACS, or lower-dose ticagrelor strategies in selected extended-treatment settings[7,8]
Short-term DAPT/TAPT: Vorapaxar (Zontivity) ± aspirin ± clopidogrel	**~$515-530/month**[24]	IIIIlustrative monthly cost of **vorapaxar 2.08 mg once daily** used as add-on therapy to: **aspirin 81 mg once daily ± clopidogrel (Plavix) 75 mg once daily**[10]. Used only in **highly selected secondary prevention patients** (prior MI or symptomatic PAD) with **very high residual ischemic risk and low bleeding risk**, as **short-term intensified therapy (~1–3 months)** in rare cases of recurrent or refractory atherothrombotic risk. **Not recommended for routine use (increased moderate/severe and intracranial bleeding)**[8,10,14,24,25]
Short-term dual-pathway therapy: Rivaroxaban + aspirin	**~$55-150/month**[26,27]	Low-dose **rivaroxaban (2.5 mg BID) plus aspirin (81 mg daily)** used for long-term secondary prevention in patients with chronic coronary artery disease (**CAD**) or symptomatic peripheral artery disease (**PAD**) at elevated ischemic risk and acceptable bleeding risk[7,8,26]

Right Intensity, Right Medication(s), and Right Duration in Antiplatelet Therapy

The highest-value antiplatelet strategy is often **front-loaded intensity with later simplification**, reflecting the time-dependent balance between ischemic and bleeding risk. Early after ACS, PCI, or selected revascularization procedures, more **intensive therapy** such as DAPT provides substantial **protection against recurrent myocardial infarction and stent thrombosis**.[8–11] However, as the highest-risk window passes, continuing the same regimen without reassessment can **erode value by increasing bleeding risk** without proportional ischemic benefit. Contemporary U.S. guidelines therefore support **shorter DAPT**

durations and earlier de-escalation in appropriate patients, particularly among older adults, those with prior bleeding, or those requiring concurrent anticoagulation.[8–11] Aligning therapy intensity with the patient's evolving risk profile is a key driver of safer care, reduced rehospitalization, and improved total cost of care.

2. INDICATIONS AND CONTRAINDICATIONS

Indications

This Quick Reference Guide applies primarily to older adults (>65) at high arterial thromboembolic risk receiving long-term (outpatient) antiplatelet therapies for one of the following primary indications:

A. Acute Coronary Syndromes (ACS) and Post-PCI

Includes patients with **ST-elevation MI (STEMI)**, **non–ST-elevation MI (NSTEMI)**, **unstable angina**, or those undergoing **percutaneous coronary intervention (PCI) with stent placement**. These patients are at highest risk for **early recurrent myocardial infarction and stent thrombosis**, particularly within the first weeks to months following the index event or procedure.[8,9,11,12]

Typical therapies (DAPT; typical duration ~12 months unless high bleeding risk):
81 mg aspirin + **one of the following P2Y12 inhibitors:**

- Clopidogrel (Plavix): **300–600 mg loading dose → 75 mg daily**[18]
  - **Preferred in: stable CAD**, higher bleeding risk, need for concomitant anticoagulation, cost-sensitive settings[7,8]
  - **Considerations:** variable response (CYP2C19 metabolism), **less potent platelet inhibition**
- Ticagrelor (Brilinta): **180 mg loading dose → 90 mg twice daily**[21]
  - **Preferred in: ACS** (broad population), patients at higher ischemic risk[8]
  - **Advantages:** more potent and consistent platelet inhibition vs clopidogrel
  - **Considerations:** dyspnea, bradyarrhythmias, twice-daily dosing, higher cost[23]
- Prasugrel (Effient): **60 mg loading dose → 10 mg daily** (5 mg daily if ≥75 years or <60 kg; generally not recommended unless high thromboembolic risk (e.g. diabetes or prior MI)[8,20]
  - **Preferred in: ACS patients undergoing PCI** with known coronary anatomy and low bleeding risk[8,20]
  - **Advantages:** potent platelet inhibition; improved ischemic outcomes vs clopidogrel in PCI-treated ACS[9,11]
  - **Contraindications:** prior stroke or TIA
  - **Avoid/use caution in:** age ≥75, patients <60 kg require 5 mg maintenance dose (unspecified efficacy), elevated bleeding risk for coronary artery bypass graft (CABG) patients[20]

Duration considerations:[7–9]

- **Standard: ~12 months** post-ACS/PCI
- **Shortened duration (e.g., 1–6 months):** consider in **high bleeding risk** patients
- **Extended duration (>12 months):** may be considered in **high ischemic risk and low bleeding risk** patients

De-escalation strategies:[7–9]

- Transition from **ticagrelor/prasugrel → clopidogrel** after early high-risk period
- Transition to **SAPT (aspirin or P2Y12 inhibitor monotherapy)** based on individualized risk assessment

B. Chronic Coronary Disease (CCD)/Secondary Prevention of Atherosclerotic Cardiovascular Disease

Includes patients with stable coronary artery disease, prior myocardial infarction, or established atherosclerotic cardiovascular disease. These patients have ongoing risk of recurrent ischemic events, but generally lower short-term risk than those with recent ACS.[7]

Typical therapies:

Single antiplatelet therapy (SAPT):

- aspirin
- clopidogrel (Plavix; *alternative when aspirin is not tolerated or in selected patients)*

Selected higher-risk patients may receive **extended or intensified therapy** depending on ischemic and bleeding risk:

- **Vorapaxar (Zontivity)**: protease-activated receptor-1 (PAR-1) antagonist
  - Dose: **2.08 mg once daily**[28]
  - Mechanism: inhibits thrombin-mediated platelet activation (complementary to COX-1 and P2Y12 pathways)
- May be considered in **selected patients with prior myocardial infarction (MI)** who are at **high ischemic risk and low bleeding risk**, as **add-on therapy to standard SAPT/DAPT (typically aspirin ± clopidogrel)**
- Evidence **(TRA 2°P–TIMI 50)**:[25]
  - Reduced composite of cardiovascular death, MI, or stroke
  - **No mortality benefit**
  - **Significant increase in moderate and severe bleeding**, including intracranial hemorrhage[10]
- Contraindicated in patients with **prior stroke, TIA, or intracranial hemorrhage** due to markedly increased intracranial bleeding risk
- Clinical use is **rare and highly selective**, generally limited to:
  - Prior MI with **high recurrent ischemic risk**
  - **Low bleeding risk profile**
  - Not receiving full-dose anticoagulation

C. Ischemic Stroke and Transient Ischemic Attack (TIA)

Includes patients with **non-cardioembolic ischemic stroke** or **high-risk TIA**, where **antiplatelet therapy is preferred over anticoagulation**.[10] Early recurrence risk is highest in the days to weeks following the event.

Typical therapies:

Short-term DAPT (early secondary prevention; 21–90 days in select patients):81 mg aspirin + clopidogrel (Plavix)[29]

- **Clopidogrel dosing: 300–600 mg loading dose → 75 mg daily**[18]
- **Preferred in:**[10]
  - Minor ischemic stroke (NIHSS ≤3)
  - High-risk TIA (e.g., ABCD ≥4)
  - Initiated within **24 hours of symptom onset**
- **Benefit:** reduces early recurrent stroke risk
- **Limitation:**
  - **Bleeding risk increases with extended duration**
  - **Avoid beyond 90 days**

Long-term SAPT (beyond early high-risk period):[10]

- Aspirin (50-325 mg daily)
  - **Preferred in:** broad population, low cost, widely accessible
  - **Considerations:** GI intolerance, bleeding risk
- Clopidogrel (Plavix): 75 mg daily
  - Preferred in:
    - Aspirin intolerance
    - Higher GI bleeding risk
  - **Advantage:** slightly lower GI bleeding vs aspirin[12]

Alternative/Additional Antiplatelet Strategy

- **Aspirin + extended-release dipyridamole (Aggrenox)**[30]
  - **Dose:** aspirin 25 mg + ER dipyridamole 200 mg twice daily
  - **Use:** secondary stroke prevention as an alternative to SAPT
  - **Advantages:** additional **stroke risk reduction** vs aspirin alone[31]
  - **Limitations**:
    - Headache (common reason for discontinuation)
    - Twice-daily dosing
    - Not used in acute DAPT phase

Key Duration and Strategy Considerations[10,29]

- DAPT duration
  - 21-30 days (most common)
  - Up to **90 days in select high-risk patients**
- **Long-term therapy**
  - SAPT preferred indefinitely
- **Avoid prolonged DAPT (>90 days)**
  - No additional ischemic benefit
  - Increased major bleeding and intracranial hemorrhage risk

AAVBC Tip: Short-term DAPT with aspirin plus clopidogrel is recommended for **early secondary prevention following minor ischemic stroke or high-risk TIA**, while **long-term management should**

transition to SAPT (aspirin, clopidogrel, or aspirin–dipyridamole), as **prolonged DAPT increases bleeding risk** without additional benefit.[10]

D. Peripheral Artery Disease (PAD) and Post-Revascularization

Includes patients with symptomatic PAD or those undergoing lower-extremity revascularization. These patients are at risk for both **major adverse cardiovascular events (MACE)** and **major adverse limb events (MALE)**.[6]
Typical therapies:

Single antiplatelet therapy:

- aspirin
- clopidogrel (Plavix)

Selected patients:

- **Dual-pathway therapy**; aspirin + rivaroxaban (Xarelto; 2.5 mg BID)[26]
- **Vorapaxar (Zontivity)** may be considered in **selected patients with symptomatic PAD**, particularly those with:
  - Prior MI or established ASCVD
  - High risk of major adverse cardiovascular events (MACE) or limb events (MALE)
  - **Low bleeding risk**[26]
- Evidence suggests reduction in **limb ischemic events and revascularization**, but at the cost of increased bleeding[25]
- In contemporary practice, **dual-pathway therapy (aspirin + low-dose rivaroxaban)** is generally **preferred over vorapaxar + aspirin** due to stronger evidence and broader guideline uptake[7,8,10,26]

Therapy selection should balance **limb protection & cardiovascular risk reduction with bleeding risk**.

E. Special Clinical Considerations

Populations and scenarios requiring individualized therapy decisions:

- **Post–WATCHMAN (LAAO) therapy:**[9,11,13,32] Initial short-term anticoagulation (e.g., DOAC or warfarin ± aspirin for **~45 days**) → transition to DAPT (aspirin + clopidogrel for **~6 months**) → **long-term SAPT**, with duration adjusted based on bleeding and device-related thrombus risk
- Older adults (>75), frailty, at higher fall risk or prior bleeding history: Higher risk of **major bleeding and hospitalization**
- Patients requiring surgery or invasive procedures: May require **temporary interruption or modification of therapy**
- Polypharmacy and drug interactions: NSAIDs, anticoagulants, and CYP-modifying drugs increase bleeding risk

Within each indication group, therapy choice must reflect **patient-specific contraindications, comorbidities, and safety considerations**

F. Preventive Low-Dose Aspirin in Selected High Thromboembolic-Risk, Low Bleeding-Risk Patients (Primary Prevention; Individualized Use)

- For **adults 40-70 years old with elevated ASCVD risk**, aspirin should be considered for primary prevention and **balance individualized bleeding risk**[1,33]

Emerging Risk-Stratified Approaches (Hypothesis-Generating/Selective Use)

- **Coronary artery calcium (CAC) scoring**[33] may help identify patients with potential net benefit:
  - **CAC ≥100**: may identify individuals with higher ASCVD risk where aspirin could confer net benefit in low bleeding risk patients[2]
  - **CAC = 0**: generally associated with **net harm or no benefit** from aspirin
  - Data supporting CAC-guided aspirin use are **stronger in younger populations** and less certain in older adults
- **Elevated lipoprotein(a) [Lp(a)]** is associated with prothrombotic risk and ASCVD:[34]
  - Secondary analyses suggest aspirin may reduce cardiovascular events in patients with elevated Lp(a)[35]
- The **AHA PREVENT equations**[36,37] provide a more contemporary estimate of **10-year total CVD risk (ASCVD and/or heart failure)** by incorporating traditional, kidney (eGFR), and metabolic risk factors, improving risk discrimination and calibration compared with prior models
  - By more accurately estimating absolute CVD risk, PREVENT may better identify patients who could derive net benefit from **primary prevention aspirin**, particularly those with higher global cardiovascular–kidney–metabolic risk, while supporting more individualized risk–benefit assessment (ischemic vs bleeding)

Non-Thromboembolic (Pleiotropic) Effects

- Long-term aspirin use has been associated with **reduced colorectal and prostate cancer incidence, progression, and mortality**, particularly after **≥10 years of continuous use**[38,39]
- Any potential oncologic benefit should be considered **ancillary** and weighed against near-term bleeding risk[1]

Clinical Application

- Consider aspirin for primary prevention in **select patients** with:
  - Very high estimated ASCVD/thromboembolic risk (AHA PREVENT score ≥10%)
  - **Low baseline bleeding risk** (no prior GI bleed, no high-risk medications, preserved renal function, low fall risk)
  - Additional risk-enhancing features (e.g., **high CAC burden**, possibly **marked Lp(a)**)
- Avoid in patients with:
  - Prior gastrointestinal or intracranial bleeding
  - Concurrent anticoagulation or high bleeding risk medications
  - Frailty, advanced age with limited life expectancy, or high fall risk

Contraindications to Antiplatelet Therapy

Category	Absolute Contraindication	Applies to	Clinical Rationale
Active bleeding	**Active pathological bleeding** (eg, peptic ulcer bleeding, intracranial hemorrhage, other significant active bleeding)	All	These agents inhibit platelet-mediated hemostasis and can worsen ongoing bleeding[6,7,9,10]
Prior intracranial hemorrhage	History of intracranial hemorrhage (ICH)	Ticagrelor (Brilinta), vorapaxar (Zontivity)	FDA labels contraindicate use because of the high risk of recurrent intracranial bleeding in this population
Prior cerebrovascular ischemic event	History of stroke or transient ischemic attack (TIA)	Prasugrel (Effient), vorapaxar (Zontivity)	Prasugrel is contraindicated in patients with prior TIA/stroke because of excess intracranial and fatal bleeding risk; vorapaxar is likewise contraindicated because of increased ICH risk
Drug hypersensitivity	Known hypersensitivity to the drug or one of its components	All	Re-exposure may provoke severe allergic reactions, including anaphylaxis, bronchospasm, angioedema, or severe rash, depending on the agent
Aspirin/NSAID-exacerbated allergy	Known aspirin or NSAID hypersensitivity, or the syndrome of asthma, rhinitis, and nasal polyps	Aspirin-containing regimens (SAPT and DAPT), including aspirin ER (Aggrenox)	Aspirin-containing products are contraindicated because rechallenge may precipitate severe urticaria, angioedema, or bronchospasm in aspirin-sensitive patients
Pediatric viral illness	Children or teenagers with viral infections	Aspirin-containing regimens (SAPT and DAPT), including aspirin ER (Aggrenox)	Aspirin-containing products are contraindicated because of the risk of **Reye syndrome**

3. MECHANISMS AND PHARMACOLOGIC OVERVIEW OF ANTIPLATELET THERAPIES

Antiplatelet therapies reduce thrombotic risk by **inhibiting platelet activation and aggregation**, key processes in arterial thrombosis. Unlike anticoagulants, which target the coagulation cascade, antiplatelet agents primarily act on **platelet signaling pathways** and are foundational in the prevention of myocardial infarction (MI), ischemic stroke, and complications of atherosclerotic cardiovascular disease (ASCVD).

Clinically, antiplatelet agents target **distinct but complementary pathways of platelet activation**, including thromboxane-mediated signaling (Cycloxygenase-1 enzyme inhibition), ADP (P2Y12) signaling, thrombin-mediated activation, intracellular cyclic nucleotide pathways, and the final common pathway of aggregation. Combination strategies (e.g., DAPT) leverage these non-overlapping mechanisms to enhance ischemic protection while increasing bleeding risk.

Common Antiplatelet Therapy Comparison Table:

Feature / Drug	Mechanism of Action	Onset of Action	Drug-Drug Interactions *besides NSAIDS, antithrombotics*	Practical Considerations	Preferred in
Aspirin (Bayer, Ecotrin, and others)	Irr. inhib COX-1 inhib =↓ thromboxane A2–mediated platelet activation	Rapid with chewable aspirin (30-60 min); delayed with enteric-coated products (6-8 hrs+)	ACE inhibitors	Low cost, simple dosing. Critical component of SAPT/ DAPT/TAPT & dual pathway therapy	Most indications except aspirin-intolerant patients
Aspirin/ER dipyridamole (Aggrenox)	Aspirin (see above) + rev. phosphodiesterase inhib ↑ cAMP, ↓ ADP uptake + ↓ platelet activation	Rapid (1-2 hrs)	Antihypertensive agents, cholinesterase inhibitors	Primarily for 2° prevention after non-cardioembolic stroke/TIA; headache limits tolerability	Selected patients with prior non-cardioembolic ischemic stroke or TIA
Clopidogrel (Plavix)	Irr. inhib P2Y12 (oral)	Slower oral onset (CYP2C19-depend prodrug), 2-6 hrs	CYP2C19 modulators	Widely used generic; common lower-cost component of SAPT/DAPT; Effects can last platelet lifespan (~7–10 days) due to irr. binding	Alternative to aspirin for SAPT; used in **stable CAD**, **stroke**, or **higher bleeding risk** patients
Prasugrel (Effient)	Irr. inhib P2Y12 (oral)	Onset time <clopidogrel (30-60) min; CYP2C19-depend prodrug	CYP2C & CYP3A modulators	Cost > clopidogrel; Effects can last platelet lifespan (~7–10 days) due to irr. binding	Selected ACS-PCI patients without prior stroke/TIA
Ticagrelor (Brilinta)	Rev. inhib P2Y12 (oral)	Rapid oral onset with potent antiplatelet effect	CYP3A4 modulators, >100 mg aspirin, **digoxin**	Higher cost than prasugrel; platelet function recovery within ~3–5 days after discontinuation	ACS (especially prior MI) when a potent oral P2Y12 inhibitor is needed in DAPT
Cangrelor (Kengreal)	Rev. inhib P2Y12 (IV)	Rapid following IV administration	*N/A - IV use*	Use is procedural and short-term, not for chronic outpatient therapy	Peri-PCI when oral P2Y12 therapy is not feasible or not yet given

Feature / Drug	Mechanism of Action	Onset of Action	Drug-Drug Interactions *besides NSAIDS, antithrombotics*	Practical Considerations	Preferred in
Vorapaxar (Zontivity)	Rev. PAR-1 antagonist, blocks thrombin-mediated platelet activation	Slow, ~7 days to reach steady-state inhibition levels	CYP3A modulators	Contraindicated in prior stroke, TIA, or intracranial hemorrhage	Rare add-on therapy (DAPT/TAPT) in 2° prevention following MI or PAD
Abciximab, Eptifibatide, Tirofiban	Glycoprotein IIb/IIIa receptor inhibitors, block platelet cross-linking	Rapid following IV administration	*N/A - IV use*	High bleeding risk, infrequently used and replaced with DAPT strategies	Short-term use in high-risk PCI or ACS procedural settings
Alcohol consumption, NSAIDs, and anticoagulants can all increase GI bleeding risk when taken concurrently with antiplatelet therapies[6–8,10]					

4. ANTIPLATELET THERAPY DURATION CONSIDERATIONS

Antiplatelet Therapy Duration is Indication- and Risk-Dependent

Antiplatelet therapy duration is **indication- and risk-dependent**, with contemporary U.S. guidelines emphasizing individualized duration based on the balance of ischemic and bleeding risk. Within a value-based care framework, the AAVBC strongly discourages **unnecessary prolongation of antiplatelet therapy**, particularly dual or triple regimens, when incremental ischemic benefit is low and bleeding risk and associated hospitalization costs are increased. Clinicians should prioritize the **shortest evidence-based duration necessary**, with routine reassessment and timely de-escalation to minimize avoidable harm, reduce downstream utilization, and align therapy intensity with each patient's evolving clinical risk profile.

For **acute coronary syndromes (ACS)**, the 2025 ACC/AHA/ACEP/NAEMSP/SCAI guideline recommends **dual antiplatelet therapy (DAPT) for at least 12 months** in patients **without high bleeding risk.**[8] In selected patients undergoing PCI who require a less intensive approach, **de-escalation** from ticagrelor (Brilinta) or prasugrel (Effient) to **clopidogrel (Plavix) after 1 month** may be reasonable, and **transition to ticagrelor monotherapy at ≥1 month after PCI** is also supported in appropriate patients.[8,9]

For **chronic coronary disease (CCD) or stable ischemic heart disease after PCI**, the 2021 ACC/AHA/SCAI Coronary Revascularization guideline supports **shorter DAPT durations**, noting that after consideration of ischemic and bleeding risks, selected patients may **transition to P2Y12 inhibitor monotherapy after 1 to 3 months of DAPT**.[7] This approach is reinforced by the 2023 AHA/ACC guideline for chronic coronary disease, which emphasizes shorter-duration therapy when bleeding risk reduction is a priority.

For **minor ischemic stroke or high-risk transient ischemic attack (TIA)**, the 2021 AHA/ASA guideline supports **short-term DAPT only**, with typical durations of **21 to 90 days when initiated early after the event**, as longer durations increase bleeding risk without additional ischemic benefit.[10,29]

5. ANTIPLATELET UTILIZATION FRAMEWORK IN VBC

A common misconception in antiplatelet management is that newer or more potent agents should universally replace older therapies. In practice, **aspirin, clopidogrel (Plavix), ticagrelor (Brilinta), and prasugrel (Effient)** each serve important roles depending on **clinical indication, timing from the index event, and patient-specific risk factors**. While generic options such as aspirin and clopidogrel are widely available and low cost, higher-cost agents like ticagrelor and prasugrel are often most appropriate in **early high-risk settings (e.g., ACS, PCI)** rather than for indefinite use.

From a value-based care perspective, optimal antiplatelet use requires balancing **ischemic risk reduction, bleeding risk, and cost stewardship**, with particular attention to **therapy duration and de-escalation**, which are major drivers of avoidable harm and utilization.

Key VBC principles include:

1. Clinical efficacy and guideline alignment
Use therapies supported by current guidelines for the specific indication and phase of care, recognizing that **DAPT is highest value early after ACS/PCI**, while long-term therapy often favors **simplification to SAPT**. In **primary prevention**, aspirin should be considered selectively based on overall cardiovascular risk and bleeding risk (AHA **PREVENT-ACSVD** equations).

2. Safety and personalization
Individualize therapy based on **bleeding risk, age, comorbidities, and concomitant medications**, especially NSAIDs or anticoagulants, which significantly increase bleeding risk.

3. Duration as a primary value lever
Avoid prolonged or unnecessary dual therapy. **Timely reassessment and de-escalation** are critical to reducing bleeding-related hospitalizations and total cost of care.

4. Value-conscious medication selection
When clinically appropriate, prioritize **low-cost generics (aspirin, clopidogrel, rivaroxaban)** for long-term therapy. Higher-cost agents should be reserved for patients most likely to benefit during high-risk periods.

5. Transitions of care and adherence
Ensure safe transitions from hospital to outpatient care by confirming **duration, affordability, and patient understanding**, as errors in DAPT continuation or discontinuation are common drivers of readmissions.

Summary principle
AAVBC supports a **"right intensity, right medication(s), right duration, right patient"** approach to antiplatelet therapy. This includes selective use of preventive strategies such as aspirin when appropriate,

alongside guideline-aligned therapy, individualized risk assessment, and cost-effective long-term management to improve outcomes and reduce avoidable utilization.

6. ANTIPLATELET UTILIZATION OPTIMIZATION STRATEGIES

For PCPs, ASCs, and Value-Based Care Organizations Evidence-Based Drug Selection

Choose the **lowest-cost, guideline-appropriate antiplatelet therapy** based on indication, timing, and bleeding risk.

Actions

- Use **enteric-coated aspirin (Bayer, Ecotrin)** or **generic clopidogrel** for long-term therapy when appropriate
- Reserve **ticagrelor (Brilinta)** and **prasugrel (Effient)** for higher-risk early phases (e.g., ACS/PCI)
- Avoid unnecessary prolonged DAPT
- Align therapy duration with guideline-supported windows

Cost Impact: i) Lower drug spend through generic use **ii)** Reduced downstream costs from overtreatment

Polypharmacy and Bleeding Risk Reduction

Bleeding events are a major driver of antiplatelet-related hospital utilization.

High-Risk Combinations to Avoid

- Antiplatelets + NSAIDs
- Antiplatelets + anticoagulants without clear indication
- Prolonged DAPT beyond guideline duration

Actions

- Perform routine medication reconciliation
- Use EHR alerts for high-risk combinations
- Limit duration of dual or triple therapy

Cost Impact: Reduced bleeding-related admissions and readmissions

Duration and De-escalation Management (Primary Value Lever)

Inappropriate continuation of DAPT is a common source of harm.

Actions

- Reassess therapy at key intervals (e.g., post-ACS, post-PCI, post WATCHMAN device implant)
- Transition from DAPT → SAPT when appropriate
- Document planned duration at discharge

Cost Impact: Reduced bleeding events and total cost of care

Formulary Standardization

Standardized pathways improve consistency and cost control.

Actions

- Prioritize **generic aspirin and clopidogrel**
- Define clear pathways for **DAPT initiation and duration**
- Implement pharmacist-supported antiplatelet stewardship

Cost Impact: Lower drug spend and improved prescribing consistency

Transitions of Care Optimization

Transitions are high-risk periods for medication errors.

Actions

- Confirm **indication, duration, and regimen at discharge**
- Ensure medication reconciliation and follow-up
- Educate patients on therapy duration and adherence

Cost Impact: Reduced readmissions and adverse events

Population Health Analytics

Use data to identify high-risk patients.

Actions

- Track: bleeding events, readmissions, DAPT duration
- Flag: elderly patients, frailty, high fall risk/history, prior bleeding, polypharmacy
- Monitor transitions and adherence

Cost Impact: Early intervention reduces downstream utilization

7. PATIENT COMMUNICATION FRAMEWORK FOR ANTIPLATELETS

Because antiplatelet therapies require balancing **reduction in ischemic risk (e.g., myocardial infarction, stroke)** against **bleeding risk**, effective communication is essential to ensure patients understand both the benefits and responsibilities associated with therapy. Unlike anticoagulants, the value of antiplatelet therapy is often driven by **appropriate intensity and duration over time**, making patient understanding critical to adherence, safety, and avoidance of unnecessary utilization.

A consistent conversation framework helps clinicians support informed decision-making while improving adherence, safety, and long-term outcomes.

Core Elements of the Conversation Framework

1. Clarify the Clinical Purpose

Begin by explaining why antiplatelet therapy is recommended in the patient's specific case.

Key points to address

- The condition being treated or prevented (e.g., acute coronary syndrome, post-PCI, stroke prevention, PAD)
- The patient's individual risk of recurrent ischemic events
- Expected benefits of therapy (**risk reduction, not elimination**)

Example explanation

"Because you recently had a stent placed, this medication helps prevent clot formation in the stent and reduces your risk of another heart attack.

2. Discuss Therapy Options

Present antiplatelet options clearly, emphasizing differences in **intensity, cost, and duration**. Topics to review:

- Aspirin (Bayer, Ecotrin) vs clopidogrel (Plavix) vs ticagrelor (Brilinta) vs prasugrel (Effient)
- Single antiplatelet therapy (SAPT) vs dual antiplatelet therapy (DAPT)
- Dosing schedules and duration expectations
- Cost considerations (generic vs branded therapies)

Patients should understand that therapy selection depends on **clinical indication, bleeding risk, and timing from the index event**.

3. Explain Risk–Benefit Balance

Antiplatelet discussions should explicitly address both **ischemic benefit and bleeding risk**. **Key discussion points**:

- Reduction in risk of heart attack, stroke, or stent thrombosis
- Risk of bleeding (e.g., gastrointestinal or intracranial)
- When to seek urgent care

The goal is to reduce risk while avoiding unnecessary harm, particularly from prolonged or overly intensive therapy.

4. Emphasize Duration and Reassessment (Key VBC Concept)

Unlike many chronic therapies, antiplatelet treatment often changes over time. **Important considerations**:

- Planned duration of DAPT vs SAPT
- Expected timeline for de-escalation
- Importance of follow-up to reassess therapy

Example explanation
"You will need two medications for a limited period while your risk is highest, and then we will likely simplify your therapy to reduce bleeding risk."

This step is critical for VBC, as **failure to reassess duration is a major driver of avoidable bleeding and cost**.

5. Assess Patient-Specific Factors

Clinicians should explore factors that influence adherence and safety.

Important considerations

- Medication affordability and access
- Ability to maintain adherence (especially for twice-daily regimens)
- Bleeding history, fall risk, or participation in contact sports
- Concomitant medications (e.g., NSAIDs, anticoagulants)
- Planned procedures or surgeries

Addressing these early reduces **treatment interruptions, adverse events, and readmissions**.

6. Address Safety and Transitions of Care

Patients should understand that therapy may change during transitions.

Examples:
- Medication changes after hospital discharge (e.g., starting or stopping DAPT)
- Need for coordination before procedures
- Importance of medication reconciliation

7. Provide Clear Patient Education

Patients should leave with clear instructions on safe therapy use. **Topics**:
- What to do if a dose is missed
- Signs of bleeding to monitor
- When to contact a clinician
- Medication interactions (especially NSAIDs and OTC agents)

Written instructions and follow-up contact information should be provided whenever possible.

8. HCC AND QUALITY ALIGNMENT

Condition/Indication	Common Antiplatelet Therapies	ICD-10 Codes	CMS-HCC V28	Approximate RAF Value
Acute coronary	aspirin (Bayer, Ecotrin) +	I21.xx	HCC 228 – Acute	0.252

Condition/Indication	Common Antiplatelet Therapies	ICD-10 Codes	CMS-HCC V28	Approximate RAF Value
syndrome/acute myocardial infarction	ticagrelor (Brilinta); aspirin + prasugrel (Effient); aspirin + clopidogrel (Plavix)		Myocardial Infarction	
Unstable angina/acute ischemic heart disease	aspirin (Bayer, Ecotrin) + ticagrelor (Brilinta); aspirin + clopidogrel (Plavix)	I20.0, I24.8	HCC 229 – Unstable Angina and Other Acute Ischemic Heart Disease	0.189
Ischemic stroke/secondary prevention	aspirin (Bayer, Ecotrin); clopidogrel (Plavix); aspirin/dipyridamole ER (Aggrenox); short-term aspirin + clopidogrel	I63.xx, I64	HCC 249 – Ischemic or Unspecified Stroke	0.258
Peripheral artery disease (PAD) with complications	aspirin (Bayer, Ecotrin); clopidogrel (Plavix)[22]	I70.2, I70.8, I70.9	HCC 263 – Atherosclerosis with Ulceration or Gangrene	1.118
Peripheral vascular disease with complications	aspirin (Bayer, Ecotrin); clopidogrel (Plavix)	I73.9 (with complication coding context)	HCC 264 – Vascular Disease with Complications	0.455
Chronic coronary disease/prior PCI	aspirin (Bayer, Ecotrin); clopidogrel (Plavix)	Z95.5, I25.1, I25.2	Typically non-HCC (clinically relevant)	0

Key Quality Measures for Anticoagulants (HEDIS/STARs/PQA)

Antiplatelet therapy quality is measured less through drug-specific monitoring metrics (as with anticoagulants) and more through **cardiovascular disease management, medication safety, and care transitions**. CMS Star Ratings and HEDIS measures emphasize **appropriate secondary prevention, avoidance of harm (e.g., bleeding risk, high-risk medications), and continuity of care** in populations commonly receiving antiplatelet therapy. Key HEDIS, STARs, and PQA measures relevant to antiplatelet therapy are summarized below.

Antiplatelet Clinical Metrics Compliant with HEDIS/STARs/PQA[40]

Measure Name	Type	Description
Statin Therapy for Patients With Cardiovascular Disease (SPC)	HEDIS (Stars)	Assesses whether patients with atherosclerotic cardiovascular disease (ASCVD) are prescribed appropriate statin therapy, reflecting adherence to secondary prevention guidelines
Use of High-Risk Medications in the Elderly (DAE/HRM)	HEDIS (Stars)	Evaluates potentially inappropriate medication use in patients ≥65; relevant to antiplatelet therapy when combined with NSAIDs or other agents that increase bleeding risk
Medication Reconciliation	HEDIS	Measures whether medication reconciliation

Measure Name	Type	Description
Post-Discharge (MRP)		occurs after discharge, critical for patients on dual antiplatelet therapy (DAPT) or those transitioning from inpatient PCI/ACS care
Transitions of Care (TRC)	HEDIS (Stars)	Evaluates timely follow-up and medication management after hospitalization; particularly important for patients discharged on DAPT following ACS or PCI
Adherence to Antihypertensive, Antidiabetic, and Statin Medications (PDC measures)	PQA (Stars)	Medication adherence measures indirectly support antiplatelet therapy effectiveness by improving overall cardiovascular risk reduction in shared patient populations
Potentially Harmful Drug–Disease Interactions in the Elderly	HEDIS	Assesses medication safety in high-risk populations; relevant for antiplatelet users with conditions that increase bleeding risk (e.g., prior GI bleed)

Star Ratings for Clinical Presentations Relevant to Anticoagulant Therapies

Category	Star Measure [IDs]	Star Rating Tie-in/Weight[25]	Key Compliance Requirement
Secondary Prevention of Cardiovascular Disease (ASCVD)	[**D12**] Statin Therapy for Patients With Cardiovascular Disease (SPC)	**3x (Triple weight; adherence/outcomes domain)**	Patients with ASCVD (common antiplatelet population) should be prescribed and remain adherent to statin therapy as part of guideline-directed secondary prevention.
Medication Adherence for Chronic Disease	[**D08**] Diabetes Medications, [**D09**] RAS Antagonists, [**D10**] Statins (PDC ≥80%)	**3x (Triple weight each)**	Ensures adherence to chronic cardiometabolic therapies that reduce recurrent ischemic risk in patients also receiving antiplatelet therapy.
Reduced Readmissions (Post-ACS/PCI/Stroke)	[**C18**] Plan All-Cause Readmissions (PCR)	**3x** (Triple weight)	Measures unplanned readmissions within 30 days; strongly influenced by appropriate initiation, duration, and transitions of antiplatelet therapy after ACS, PCI, or stroke.
Medication Safety in Older Adults	DAE/HRM (Use of High-Risk Medications in the Elderly)	**1x**	Evaluates avoidance of high-risk medications and unsafe combinations (e.g., NSAIDs with antiplatelets) that increase bleeding risk.
Medication Reconciliation Post-Discharge	[**C17**] Medication Reconciliation Post-Discharge (MRP)	**1x** (part of TRC composite	Ensures reconciliation of discharge medications (e.g., initiation of DAPT after ACS/PCI) within 30 days to reduce adverse events.
Transitions of Care	TRC Composite	**1x (composite**	Ensures safe transitions after

Category	Star Measure [IDs]	Star Rating Tie-in/Weight[25]	Key Compliance Requirement
(TRC)	(includes admission notification, discharge info, follow-up, med rec)	**measure)**	hospitalization, including appropriate continuation, modification, or de-escalation of antiplatelet therapy.
Follow-up After ED Visit (High-Risk Conditions)	[**C21**] Follow-up After ED Visit for Patients With Multiple High-Risk Chronic Conditions	**1x (TRC-related)**	Timely outpatient follow-up supports reassessment of therapy intensity and duration, especially after bleeding or ischemic events.

10 KEY TAKEAWAYS: ANTIPLATELET THERAPIES IN VBC

1. Antiplatelet Therapy is Foundational in Cardiovascular VBC

Coronary artery disease, stroke, and peripheral artery disease are among the most prevalent and costly conditions in Medicare populations, and antiplatelet therapies are central to preventing myocardial infarction, recurrent stroke, and limb events.

2. The Core VBC goal is Dual: Reduce Ischemic Events While Minimizing Bleeding

High-value antiplatelet management requires balancing prevention of thrombosis (**primary and secondary prevention**) against **avoidable bleeding complications and hospitalizations**, particularly in older adults and those with comorbidities.

3. Therapy Intensity Should Match the Clinical Phase

More intensive regimens (e.g., dual antiplatelet therapy [DAPT]) are often highest value early after ACS or PCI, while **long-term care typically favors simplification to single antiplatelet therapy (SAPT)**.

4. Duration and De-Escalation are Primary Value Levers

Inappropriate continuation of DAPT beyond guideline-supported durations is a common source of avoidable harm. **Timely reassessment and de-escalation** are as impactful as initial drug selection.

5. Bleeding Risk is a Major Driver of Cost and Outcomes

Bleeding-related hospitalizations (e.g., GI or intracranial hemorrhage) can exceed medication costs and are a key driver of avoidable utilization, particularly when combination therapy is prolonged unnecessarily.

6. Generic Therapies Often Provide High-Value Long-Term Options

Lower-cost agents such as **aspirin and clopidogrel (Plavix)** are effective for many chronic indications, while higher-cost agents (e.g., ticagrelor [Brilinta], prasugrel [Effient]) are often best reserved for higher-risk early treatment periods.

7. Transitions of Care are High-Risk Periods for Error

Discharge after ACS, PCI, or stroke is a vulnerable time for **incorrect duration, duplication, or omission of therapy**, making medication reconciliation and follow-up essential VBC interventions.

8. Polypharmacy Drives Preventable Harm

Concurrent use of NSAIDs, anticoagulants, and multiple antithrombotic agents significantly increases bleeding risk, making **medication review and deprescribing** high-yield strategies.

9. Anticoagulation Stewardship Should be Continuous, Not One-Time

Reassessment should confirm **indication, timing from index event, bleeding risk, need for continued dual therapy, and potential for simplification**, especially after clinical transitions or adverse events.

10. VBC Organizations can Improve Outcomes Through Standardization

Standardized pathways for **DAPT duration, de-escalation protocols, transitions of care, and medication safety** can reduce readmissions, bleeding events, and total cost of care.

AAVBC SUMMARY AND CONCLUSION

Antiplatelet therapy is a foundational component of **atherothrombotic disease management**, including coronary artery disease, ischemic stroke, and peripheral artery disease. Within value-based care, its importance extends beyond clinical efficacy to include **patient safety, care coordination, and prevention of avoidable utilization**. When used appropriately, antiplatelet therapies reduce recurrent ischemic events, preserve functional status, and mitigate downstream costs associated with myocardial infarction, stroke, limb complications, and hospitalization.

Unlike anticoagulants, antiplatelet therapies are less frequently tied to direct quality measures but have a substantial **indirect impact on outcomes captured in readmissions, transitions of care, and medication safety metrics**. As such, their value is strongly influenced by **how they are used over time**, particularly with respect to therapy duration and combination regimens.

Antiplatelet therapy is also operationally complex. Appropriate selection and management require careful attention to **clinical indication, timing from index event, bleeding risk, comorbidities, drug interactions, and concurrent anticoagulation**. While potent agents such as ticagrelor (Brilinta) and prasugrel (Effient) play important roles in high-risk settings, long-term therapy often relies on simpler regimens such as aspirin (Bayer, Ecotrin) or clopidogrel (Plavix), emphasizing the importance of **de-escalation and simplification strategies**.

For AAVBC, the highest-value approach is not to favor a single therapy universally, but to support a **dynamic stewardship model** that aligns therapy intensity with patient risk over time. This includes evidence-based initiation, early identification of candidates for shorter-duration therapy, proactive bleeding risk mitigation, careful management of drug interactions, and strong transitions of care. It also

requires addressing real-world barriers such as medication affordability, adherence, and care fragmentation.

The value-based opportunity is significant. Preventable bleeding events, prolonged unnecessary dual therapy, medication errors at discharge, and poor follow-up remain key drivers of avoidable cost and harm. Conversely, organizations that standardize antiplatelet pathways, improve medication reconciliation, support adherence, and align therapy duration with guidelines can meaningfully improve both quality outcomes and total cost of care.

In conclusion, AAVBC supports an antiplatelet strategy that is:

- Guideline-aligned
- Patient-centered and individualized
- Focused on appropriate intensity and duration
- Responsive to bleeding risk and drug interactions
- Operationally feasible across care settings
- Sustainable from both patient affordability and VBC resource perspectives

The overarching principle is clear: optimize antiplatelet therapy to **reduce ischemic risk while minimizing bleeding**, unnecessary utilization, and fragmentation of care. This includes appropriate use of foundational therapies such as **aspirin in secondary prevention** and selective use in **primary prevention for patients at elevated cardiovascular risk and low bleeding risk**. When applied thoughtfully, these strategies support safer care, better outcomes, and stronger value based performance.

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