

Oral Anticoagulation Adherence 2020 Review

The South East Ontario Stroke Report Card Indicator #4 - “*proportion of ischemic stroke/TIA patients aged 65 and older with atrial fibrillation who filled a prescription for anticoagulant therapy within 90 days of discharge from acute care*” indicated that 71% in 2017/18 and 69% in 2018/19 filled their prescriptions. Suboptimal adherence with oral anticoagulation (including direct oral anticoagulation (DOAC)) has been reported in the literature. Non-adherence can lead to poor patient outcomes. Barriers to taking oral anticoagulation have also been explored in the literature. Adherence is often affected by more than one barrier. Efforts are needed toward improving adherence.

Discussions took place at the Southeastern Ontario Primary Care/Stroke Prevention Clinic CME events in March 2018 & February 2020, Regional Stroke Symposium in 2019, and during the annual regional Stroke Prevention Clinic meetings about possible local barriers and opportunities to improve adherence. These discussions are summarized in the table below which were further validated by a recent literature review. For detailed summary of the 2020 Event, see Appendix A.

| Barriers or Why Low Oral Anticoagulation Adherence Rate | Opportunities |
|--|--|
| A. Psychosocial Factors <ul style="list-style-type: none"> ▪ Fear ▪ Shame ▪ Lack of Trust ▪ Poor social supports | <ul style="list-style-type: none"> • Use non-judgemental approach (e.g., “I know it must be difficult to take all your medications regularly. How often do you miss taking them?”). Invite people to voice their concerns • Use self-management and motivation/empowerment strategies -urge patients to be active in decision-making (e.g., ask patients what time of day they prefer to take medication) • Recommend social supports (e.g., peer groups-stroke survivor support groups) • Take a cultural safety course |
| B. Patient-related factors: attitudes, beliefs, misconceptions <ul style="list-style-type: none"> ▪ Asymptomatic- lack of physical cues ▪ Feeling better- “why do I have to continue my medications?” • Worry about losing medications at clinic/hospital • Travelling/travel insurance | <ul style="list-style-type: none"> • Education (multi-modal & individualized) & Counselling • Discuss importance (purpose & benefits) at the very beginning • Ensure understanding anticoagulation is life- long • Discuss importance of taking if travelling |
| C. Health Literacy Educational Level | <ul style="list-style-type: none"> • Provide simple, clear instructions • Use of Patient-Oriented Discharge Summary, if available • Use Teach Back Method |
| D. Economic: high medication costs | <ul style="list-style-type: none"> • Link with Home & Community Care-Care Coordinator and request drug card &/or social work if not already authorized • Non-insured health benefits (NIHB) covers anticoagulants for First Nations & Inuit peoples |
| E. Wait time at pharmacy | <ul style="list-style-type: none"> • Fax or e-prescribe (see K) |

| Barriers or Why Low Oral Anticoagulation Adherence Rate | Opportunities |
|---|--|
| <ul style="list-style-type: none"> • Lack of transportation to pick up prescription | <ul style="list-style-type: none"> • Ask about Home delivery |
| <p>F. Condition-related factors:</p> <ul style="list-style-type: none"> ▪ Mental health, e.g., Depression, Anxiety ▪ Alcohol & Drug Abuse ▪ Other: behaviour, forgetfulness, poor baseline health, lower cognitive function, loss of vision or dexterity, lack of insight | <ul style="list-style-type: none"> • Look for markers for poor adherence • Use simple methods-simplify the dosage regimen • Use of frequent reminders • Use of medication lists with pictograms • Reminder Cues <ul style="list-style-type: none"> ▪ Use of mobile communication and information technology tools ▪ Offer compliance packaging (blister pack with medication grid) • For those on few medications, consider single daily dosing |
| <p>G. Lack of Follow Up/Monitoring</p> <ul style="list-style-type: none"> • Inadequate discharge plan • Side Effects • Numerous dietary restrictions & susceptibility to drug interactions • Taking multiple medications • Lack of monitoring with DOAC- no routine monitoring to show that patient is taking as prescribed | <ul style="list-style-type: none"> • Review discharge plan • Medication reconciliation at each visit with active review of medications • Link with Rapid Response Nurse • Follow up after discharge in primary care • Regular follow up • Consider telemedicine • Link with Community Pharmacist • Ask patient to bring pill bottles at every visit (include over counter, herbal, dietary supplements); may notice that patient is taking same medication twice • Ask how often patients take medications • See B & F |
| <p>H. Regular lab monitoring with warfarin/travel time for bloodwork</p> | <ul style="list-style-type: none"> • Primary Care on-site Anticoagulation Clinic/Service • Seek support for transportation costs |
| <p>I. Delay taking medication until seen by primary care provider</p> <ul style="list-style-type: none"> • Lack of trust re new physician ordering new medications • No primary care physician | <ul style="list-style-type: none"> • Multidisciplinary team approach • Increase access to primary care |
| <p>J. Clinician reluctance</p> <ul style="list-style-type: none"> • Older patients less likely to be prescribed, female patients more likely to be prescribed lower dosage • Complex patient | <ul style="list-style-type: none"> • Learn more about adherence management • Collaborate with partners re uncertainty or if patients with multiple conditions to find balance (e.g., hematology, gastroenterology, neurology, etc.) |
| <p>K. Breakdown in communication/ coordination between providers and health care settings</p> <ul style="list-style-type: none"> • Tracking down prescribers to clarify prescriptions e.g., missing LU codes. Discharge papers often do not | <ul style="list-style-type: none"> • Link with Community Pharmacist. Can obtain list of medications from Community Pharmacist • MedsCheck by Community Pharmacist • Fax or electronically transmit prescriptions • Ensure contact name/phone number listed • Use of health information technology-check if patients |

| Barriers or Why Low Oral Anticoagulation Adherence Rate | Opportunities |
|---|--|
| <ul style="list-style-type: none"> • have phone/Fax numbers to prescribers • Lack of automation | filled their prescription <ul style="list-style-type: none"> ▪ ConnectingOntario ClinicalViewer ▪ PrescribEIT® |
| L. Living in Long Term Care Facility | MedsCheck |

Summary: Adherence is not simply a patient-related problem. There is often no single intervention. Multidisciplinary collaborative team approach including linking with a community pharmacist can help address many of the barriers.

Essential Steps: Assess readiness, support how patients can improve adherence, & follow up regularly. Ask patients about adherence (e.g., “tell me how you are taking this medication?”). An important way to improve adherence is medication reconciliation.

MedsCheck: “Community Pharmacists review all medications (including over-the-counter medications and natural products) with the patient to ensure they are being taken properly. Pharmacists share the completed MedsCheck Personal Medication Record with the patient’s primary prescriber. To qualify for a MedsCheck, a patient must be:

- Resident of Ontario; a holder of a valid Ontario Health Card, and
- Currently taking a minimum of three prescription medications for a chronic condition
- Added criteria for other programs include:
 - in the case of a MedsCheck for Diabetes, living with diabetes & not necessarily taking a minimum of three prescription medications
 - in the case of a MedsCheck at Home, home bound, not able to physically attend the pharmacy due to physical/mental incapacity, or
 - living in a Long-Term Care home”

Click [here](#) for info about MedsCheck program.

ConnectingOntario ClinicalViewer: “a secure web portal providing real time access to digital health records including dispensed medications.” Can see the date the prescription was filled as well as when a MedsCheck was done. For more info about ConnectingOntario ClinicalViewer, click [here](#).

PrescribEIT®: from Canada Health Infoway is “an e-prescribing service which can transmit a prescription from an EMR to a pharmacy management system of a patient’s pharmacy.” It connects community providers to community pharmacies enabling better communication. It also provides prescription status notices. For more info about PrescribEIT, click [here](#)

Resources

- DOAC Follow Up Checklist for Clinicians from Thrombosis Canada. Click [Here](#)
- Primary Care Medication Reconciliation Guide. Click [Here](#)
- Top 10 practical tips for interviewing patients about their medications. Click [Here](#)
- Adherence to Long Term Therapies: Evidence for Action from WHO (2003): Click [Here](#)
- Patient Resource: 5 Questions to Ask about Medications: Click [Here](#)

Appendix A

Highlights from the Anticoagulation Adherence Session- Southeastern Ontario Primary Care/Stroke Prevention Clinic Event February 2020

1) What is your routine practice related to adherence with medications? Is this something that is routinely discussed with patients?

Stroke Prevention Clinics (SPC)/Vascular Protection Clinic (VPC):

- Medication reconciliation is addressed at each clinic visit on every patient
- Patients are asked to bring their medication/pill bottles or blister pack to clinic including vitamins & dietary supplements. Obtain a better story of medication history with pill bottles
- Patients are asked if they are taking their medications & how often

Primary Care:

- Patients go to their primary care provider to have their medications checked
- Nurses, NPs, and physicians regularly review medications. Some Family Health Teams and Community Health Centres have a pharmacist on the team
- Patients are asked to bring their medication bottles or blister pack. Bringing in medication bottles varies. Ask for herbals too
- Nurse/NP that checks the INR (warfarin) also checks pulse & blood pressure
- Direct Oral Anticoagulant (DOAC)-have some monitoring; more monitoring with warfarin

Community Pharmacy:

- Do a medication review
- Update the medication list
- Flag the ordering physician when patient not picking up prescription if it is faxed or transmitted
- Help with providing blister pack or dosette

2) Challenges/Barriers with Medication Adherence Identified in Your Practice

SPCs/VPC:

- Rapid patient turnaround in clinic. See many patients in clinic. Often patients are seen once with handover with primary care to follow up
- At times, patients come without their medication bottles, blister pack, or list. Some resistance from patients to bring medications to clinic
- Sometimes older people do not bring their medication bottles. It is difficult to do a medication history with just a list
- When you have the bottles, notice at times that patients are double taking the same medication-different name but same medication
- Travelling: Travel insurance may change if on anticoagulation medication (e.g., some insurers charge a higher premium)

Community Pharmacists:

- Resistance in bringing medications with them to appointments or hospitals. Patients worry about losing their medications at appointments or in hospital
- Taking multiple medications (3 or more)
- Present with out of date medications; so know adherence is an issue
- Insurance rates go up if taking DOACS or certain medications
- Need to have a number or contact of the ordering provider for the prescription. At times, the community pharmacist needs to call the provider to check or follow up and this can be challenging if there is no contact number

Primary Care:

- Need to spend time reviewing diet which can alter effectiveness of medications
- Doses are helpful but patient may no longer know what they are taking
- Some patients taking same pill twice-interchange of generic and brand names
- Patients present with more than one medication list-often need to reconcile list
- Cost of medications. Lack of health benefits- many people do not have insurance for medication coverage
- Patients not trusting hospital physician re new prescriptions. Want to wait to talk to their primary care physician or NP regarding their medications
- Misconceptions. Patients don't know the importance of taking their medications-"heard their neighbour had a bleed on warfarin"
- Fear of taking anticoagulation medication
- Indigenous Community Development Worker:
 - "Lots of non-adherence among Indigenous people. Fear/Trust an issue with authority figures-teachers, police, physicians, etc. Depends on where people are on the healing spectrum. Shame involved that may prevent them from taking their medications. Fear of taking medications. We have very busy lives being grandparents-we are very educated people but we still don't take our meds as we are supposed to. Once on blister pack-so helpful. Shows last time took DOAC"
- Upon discharge, patients often do not want to wait to review medications; they want to leave & discuss with primary care provider

3) Tools & Resources to Help with Oral Anticoagulation Adherence

SPCs/VPC:

- Recommend involving the community pharmacist who plays a major role in addressing patient adherence (e.g., re need for a reminder such as using dosette or blister package)
- Ask patients about interest in using a blister package. Make recommendations based on discussion
- Can obtain a list of medications from the community pharmacist
- Home delivery of medications
- Faxing or transmitting electronically the prescriptions
- Insurance rates could be affected if taking DOACS but need to have a discussion with patients about this. Insurance goes up if they had another event so hence needing the medication

- Stroke Neurologist indicated that physicians are de-prescribing non-essential medications more & are getting back to prescribing essential medications
- Nurses do medication reviews in the SPC/VPC
- **Ontario Health (e-Health)'s ConnectingOntario ClinicalViewer** to review reports, medications, labs, imaging, etc. Flags if patient did not pick up their medications. Need to take privacy course to be able to access. Health care providers can access through their hospital information system (HIS) or if having One-ID. Primary care can register with One-ID
 - ConnectingOntario ClinicalViewer is a “secure web portal providing real time access to digital health records including dispensed medications.” Can see the date the prescription was filled as well as when a medication review or MedsCheck was done. Phone number of the pharmacy is located in the screen. For more info about ConnectingOntario ClinicalViewer, click [here](#).
 - Community pharmacist commented can see if medications dispensed but don't know for sure if patients are taking their medications; this needs more of an active review

Community Pharmacists:

- Can send an up-to-date automated medication list from community pharmacy. Can send to provider a snap shot of dispensed medications taken in last 6 months.
 - What if asking for medication list the day before clinic?
 - Yes this list can be sent the day before clinic appointment
- Blister packs with GRIDs are good resources. Can provide a list of what medications are in the blister package. List includes dispensing date. Blister packs with GRIDs lists patient medications
- Need to actively go through the medications with the patient/client. Ask why they don't want to take their medications?
- Ask patients to also bring over the counter medications with them to their appointments
- Faxing prescription or transmitting electronically to pharmacy is better than just giving prescription to patient-a copy can go with patient
- **MedsCheck:** Ask patient to visit their community pharmacist who will do a MedsCheck or ask pharmacist for a MedsCheck. MedsCheck generates an active list of medications. Still being funded and likely expanding
 - MedsCheck “helps patients understand drug names, strengths, adverse events, expected or unexpected adverse effects, and how to benefit the most from their prescription medications. Pharmacists review all medications (including over-the-counter medications and natural products, vitamins, etc.) with the patient to ensure they are being taken properly. Pharmacists share the completed MedsCheck Personal Medication Record with the patient's primary prescriber. To qualify for a MedsCheck, a patient must be:
 - Resident of Ontario; a holder of a valid Ontario Health Card, and
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 - Added criteria for other programs include:
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- Hospital in-patients or out-patients are not eligible for MedsCheck services. MedsCheck is not funded in primary care. It is a funded program for community pharmacies & format is one-to-one interviews between community pharmacist and client in the pharmacy. However, results of the MedsCheck can be shared with other providers
- Click [here](#) for information about the MedsCheck program
 - Is a consent form needed to do community MedsCheck?
 - Can make a request that community pharmacist does a MedsCheck. Pharmacists will ensure that the patient has signed and dated the annual **Patient Acknowledgment of Professional Pharmacy Service** standardized “consent” form to confirm their agreement and understanding of the MedsCheck services

Primary Care:

- Anticoagulation Clinics
- Anticoagulation service within primary care
- Rapid Response Nurses do medication reconciliation and follow up on questions re medications
- Providing transportation or delivery services for medications
- Need to alphabetize and reconcile medications-multiple names for same medication
- Health Insurance covering DOACs
 - Non-Insured Health Benefits (NIHB) for registered First Nations and Inuit people covers DOACs
- Have patients bring pill bottles. Often the list is not legible
- Providing education. Explain the importance of taking medication & education about diet and restrictions with Coumadin and some DOACs. Need to spend time educating about risk/benefits. (e.g., may have a bleed-risk is greater for stroke event)
- Frequent regular review of medications
- Blister packs are helpful to see if doses skipped-know when last taken & easier to track
 - What is the significance if missing 1-2 anticoagulant doses?
 - Stroke Neurologist-usually uneventful but have seen 1-2 people who have missed a dose having a stroke.
- **PrescribeIT**-electronic prescription service managed by Canada Health Infoway. PrescribeIT is not integrated with ConnectingOntario ClinicalViewer.
 - PrescribeIT is “an e-prescribing service which can transmit a prescription from an EMR to a pharmacy management system of a patient’s pharmacy.” This reduces fax and phone activity. It connects community providers to community pharmacies enabling better communication. It also provides prescription status notices. For more info about PrescribeIT, click [here](#)