

INTENTIONAL NONADHERENCE; HOW TO IDENTIFY AND ADDRESS IT: (FOR PHARMACISTS AND OTHER HEALTHCARE PROVIDERS)



WHAT ARE INTENTIONAL AND UNINTENTIONAL NONADHERENCE?

In a recent study at Richmond Hospital, intentional nonadherence to medications was a root cause identified in 16% of patients admitted with a preventable adverse drug event (pADE). Most (50%) of these patients were admitted with COPD exacerbations but pADE cases also included aortic dissection, ischemic stroke, and myocardial infarction.

Nonadherence to medications occurs in approximately 50% of patients with chronic diseases and includes patients not filling prescriptions, not taking a treatment as prescribed (e.g. missing doses), or stopping taking it altogether. Sometimes nonadherence is due to forgetting, misunderstanding the administration instructions, or being unable to pick up the prescription. This is called unintentional nonadherence. However, often nonadherence to the “agreed upon” regimen is intentional (INA): the patient decides not to take the medication because they don’t believe it is useful to them, they have bothersome adverse effects (or fear of them), or it is too costly.

WHY IS INTENTIONAL NONADHERENCE IMPORTANT TO RECOGNIZE?

It is important to recognize that INA is deliberate. The patient has made a decision not to take the medication based on its perceived value to them: their perceived need for or perceived benefit of the therapy does not outweigh their concerns about taking it, or the effort involved in taking it. There is some overlap between unintentional nonadherence and INA because patients who do not understand or accept the importance of the medication may be more likely to forget to take it.

HOW TO HAVE A GOOD QUALITY CONVERSATION:

The goal at the start of the conversation is for you to develop a trusting relationship by showing that you are actively listening and are empathetic. This approach is illustrated with an example of a patient who has COPD. Ideally, have this conversation with the patient and any relevant family or support person who can help them or can influence their decisions.

THE GOAL OF THIS RESOURCE:

This resource is intended to help healthcare providers identify INA and provide an approach for them to have a good quality conversation with the patient (if the patient agrees) with a goal of ensuring that:

1. the patient has the necessary information to make an informed decision, and
2. that any beliefs or concerns based on misperceptions are reframed in a way designed to motivate the patient towards deciding to adjust their daily routine and take the medicine. This approach reflects the spirit of motivational interviewing applied to the Patient’s Beliefs about Medicines concept using the “necessity-concerns framework” and other relevant psychological models of health behaviour change.

IDENTIFY INA AND UNDERSTAND WHY IT IS PRESENT (SO YOU CAN HELP ADDRESS IT):

IDENTIFY PRESENCE OF NONADHERENCE:

Use **open ended** questions to learn if the patient has difficulty taking their medicine. Phrase in a nonjudgmental way to make them comfortable to admit nonadherence, say **“It can be difficult to get in the habit of taking meds twice a day... how do you manage with that?”** If needed, you can ask giving a specific % of doses taken e.g. **“Thinking back these past 2 weeks, how many doses did you manage to take? More than half? Nearly all? Very few?”**

IDENTIFY IF IT IS INTENTIONAL:

■ PERCEIVED NEEDS (WHAT THEIR MEDICAL CONDITION MEANS TO THEM):

- Because we know INA is related to perceived lack of need for a medication or lack of belief in the benefits of the therapy **[compared to the concerns the patient has about them]**, you will need to explore their understanding of their medical condition (and hence need for therapy). One approach is to have them tell you what symptoms of COPD they experience and whether they indicate what causes it.
- Reviewing the symptoms of COPD on a CATS score may identify symptoms important to the patient that they had not attributed to COPD e.g. decreased energy, ability to do ADL, poor sleep etc.

■ PERCEIVED BENEFIT (HOW TAKING THEIR MEDICATION WOULD HELP THEM):

- Ask them to explain their understanding of how taking the medication could help them. **Be specific** by asking, **“How can using this inhaler regularly help you?”** Listen to see how they describe the perceived benefit or purpose. Do they have misunderstandings? E.g. are they expecting a LABA to provide immediate symptomatic benefit or can they correctly state that taking it will reduce the likelihood of hospital admissions, visits to the doctor, or improve overall wellbeing?
- **Do not rush to correct misunderstandings at this stage. You are just learning their perspective. Listen to understand fully what their perceived needs and belief in benefit are.**
- Incorporate positive **affirmation** to acknowledge and credit any positive behaviours, that are relevant to the therapy such as smoking cessation, vaccination.

■ CONCERNS ABOUT THERAPY:

- **“Do you have any concerns about using this inhaler? Can you think of anything that would make it difficult for you to use regularly?”** (Consider cost issues; you’ll offer to assess their technique in the next section).

■ REFLECT AND SUMMARIZE WHAT THE PATIENT HAS SAID:

- **Reflect** back what the patient has said to let them know you are listening actively. This may be simple reflection (reflect back what they have said) or complex (reflect back what you think they mean).
- **Summarize** what you think the patient’s perceived needs for the medication are or their perceived benefits and concerns (related to cost, side effects etc.). Now you are in a good place to think about how you can provide information tailored to their current knowledge and beliefs while addressing their values or concerns.

WITH THEIR PERMISSION, OFFER INFORMATION AND ADVICE:

SEEK PERMISSION TO OFFER INFORMATION:

- Seek permission to offer the patient information that would help them make an informed decision. Pause regularly and ask them to provide feedback.
- **“Mr XX, would it be OK with you, if we talk a bit more about how COPD affects people (or what it means to have COPD)? I think there may be things that you could do that could help reduce your chances of coming to hospital again.”** (The consequences of not taking the medication are identified, but in a positive way).

PROVIDE INFORMATION:**ADDRESS PERCEIVED NEED AND BENEFITS:**

- Provide information targeted at their misunderstandings (if any). Include statements acknowledging that their misunderstandings may be due to healthcare providers not clearly explaining. Provide information in chunks and check for feedback from the patient that they have heard and understood. Ask them to explain it back to you using a TeachBack process.
- **“Often we may not spend enough time to explain the various symptoms of COPD and the purpose of the inhalers. For the inhaler you have, it has two kinds of benefits. It will help prevent future COPD flare-ups (but it won’t make you breathe better immediately). Has someone mentioned that before? By reducing flare-ups, you can reduce your chances of coming back to hospital or needing to go to the doctor. But to reduce flare-ups it does need to be taken regularly”.** Wait to listen to the patient’s feedback.
- **“The second benefit is to do with the other symptoms of COPD you mentioned, they can be improved too, but to get this benefit out of it, it still needs to be used regularly and It may take a few months of continued use for you to notice a difference. What do you think about that? Do you think you could get into a routine of using it?”**

ADDRESS CONCERNS:

- Mitigation of oral thrush for steroids (spacer for metered dose inhaler), least cost alternatives for cost concerns etc.

CHECK UNDERSTANDING:

- **“So, just for me to check that I’ve explained things clearly, if your family asked you why you need to use this inhaler, what would you tell them?”**
- **“Do you have any concerns or questions about taking this inhaler? Is there anything that you can think of that will make it difficult for you to use it?”** [Ask them to show you how they use their inhaler (assess their technique).

ASK ABOUT CONFIDENCE:

- **“How confident are you (out of 10, 10 being the most) that you will use this inhaler “x” times per day regularly and properly as you have shown me today? If less than 8/10...”** **“What can we do to make you more confident?”**

PREVENTING INA: AT THE INITIAL PRESCRIBING AND DISPENSING STAGE.

INA may be prevented if the goals of the prescriber and patient are shared. The patient should understand what the purpose of the medication is, why it is important to take, how to know if it is working or causing a side effect. Potential barriers or concerns are addressed at the start. This allows the patient to make more informed decisions about taking it and for gaps in understanding of their medical condition to be revealed and addressed.

For example, for LABA therapy for COPD, the patient would benefit from understanding the goal of therapy: that LABAs can reduce their risk of COPD flare-ups causing further doctor visits or hospitalizations and can improve a spectrum of COPD symptoms not just SOB. Importantly, this can involve clarifying misperceptions about the benefits, which could include that the **COPD medication may not make their breathing feel better, but that doesn’t mean it isn’t working.**

1. **Provide the reason for needing the medication (how it can help them).** This may provide motivation to be adherent, rather than be simply asked to follow a task (i.e. take the medication).
2. **Let them know how to tell if the medication is working (especially if there is no immediate symptomatic benefit).** Otherwise the patient may falsely believe that the medication has no value and stop taking it.
3. **Let them know how to tell if the medication is causing a side effect.** By addressing side effects explicitly, including how to manage them if they occur, you can identify or pre-empt concerns over side effects or cost which may otherwise become a reason not to take the inhaler.

Addressing these 3 points will help ensure that a patient’s beliefs about their medicine and condition are shaped by correct information. If they have confidence in their ability to improve their health status (and value that goal) the patient should be more motivated to adjust their daily routine to take the medication.

Finally, once an accurate perception of the usefulness of the medication and any misconceptions about their concerns have been resolved, some patient still decide not to take the medication. This is likely very common, but their care providers don’t know about it. Following this approach can make it easier for patients to talk honestly with their care providers about this, to find alternative treatments that the patient WILL accept and adhere to.

**BEWARE OF BLISTER PACKS:
THEY DO NOT SOLVE INTENTIONAL NONADHERENCE!**

Although blister packs will address unintentional nonadherence by keeping patients organized, the patient still needs to be motivated to take medications from their blister-pack. Therefore, simply transitioning a patient who is non-adherent to blister-packs without exploring whether the nonadherence is intentional and what is it due to, will do nothing to address the root cause and effectively address the patient’s nonadherence. The patient’s adherence will improve if they:

- 1) Accept that they need the therapy**
- 2) Understand how they will benefit and**
- 3) Have any concerns addressed.**

CASE EXAMPLE: An 80 yr old woman with diabetes, hypertension and dyslipidemia was admitted with an acute ischemic stroke. She had stopped taking her anti-hypertensives, lipid lowering therapy and diabetic medications months prior. Her stroke was possibly preventable as intentional nonadherence was a root cause. On discharge, the team had organized blister packs for her and told her and her family that she should take her prescribed meds. What is the likelihood that she will be adherent to take her prior meds and new meds for stroke secondary prevention? What can the team do instead to effectively help the patient?

**WHAT YOU CAN DO AS A
HEALTHCARE PROVIDER
TO IMPROVE THEIR
ADHERENCE: ADDRESS:**

- 1. CONCERNS:** As it is known that the patient had stopped taking their meds, a healthcare provider should first find out whether the patient had any concerns about taking their medications.
- 2. BENEFITS:** Find out what the patient knows about the purpose of their meds, (do they understand how they would benefit by taking them); can they state that taking them will prevent their risk of another stroke?
- 3. NEED FOR THERAPY:** If they cannot specify benefit, provide information to help them realize that they are at increased risk of stroke (due to presence of hypertension, diabetes, dyslipidemia and now they have already had one stroke, they are at high risk of another). Re-establish their need for therapy.
- 4. ENSURE PATIENT KNOWS:** how to tell if the medications are working or causing a side effect and what to do about it.
- 5. CONFIRM UNDERSTANDING.** Ask the patient to confirm understanding of the information you gave.
- 6. ASK ABOUT CONFIDENCE**

Using a TeachBack approach with a family member that can help the patient, their concerns were addressed and understanding of need and benefit was confirmed. (The patient had believed her meds were harmful and could not state that their purpose was to reduce her risk of stroke. She had not realized that her medical conditions put her at increased risk of stroke).

Purpose of measuring BP was reviewed, when to contact their physician or come to the Emergency Department was reviewed, sick day advice given for relevant SADMANS meds and leaflets were given on measuring BP at home and sick day actions. Understanding confirmed using TeachBack approach. These leaflets can be found at <https://www.vchri.ca/richmond/pADE>. Family felt confident that their relative would more likely take their medications.



SHARE THE CARE (HOSPITAL TO COMMUNITY PROVIDER):
The root causes of the patient’s intentional nonadherence and actions taken in hospital to address them were shared with the patient’s community pharmacist so they can continue to check patient/family understanding and ability to detect side effects and know that meds were working at future Pharmacy visits.



BUILD TRUST TO PERMIT SHARING (PATIENT TO PROVIDER AND PROVIDER TO PATIENT):
By following the above approach, community providers can help the patient realize how they can improve their health status, value that goal and make it easier for patients to share any new concerns about therapy that may arise in the future. This rapport will create an opportunity for providers to help the patient find alternatives that they will accept, and be motivated to adhere to.



REFERENCES

1. Horne R, Weinman J, Hankins M. The beliefs about medicines questionnaire: the development of and evaluation of a new method for assessing the cognitive representation of medication. *Psychol Health* 1999;14:1–24. doi:10.1080/08870449908407311
2. Rubak S, Sandbaek A, Lauritzen T, Christensen B. Motivational interviewing: a systematic review and meta-analysis. *Br J Gen Pract*. 2005;55:305–12
3. Horne R. Beliefs and adherence to treatment: the challenge for research and clinical practice. In: Halligan P, Aylward M, ed. *The power of belief*. Oxford: Oxford University Press, 2006:115–36.