



1



2

What is your biggest challenge with dealing with medication intake?



Taking meds on
time.



Following through with
taking it even when I
set alarms on my
phone.



Timing for 4x/day. I set
alarms but I **constantly
adjust** the Times as my
schedule demands.(...)



Planning ahead and
having med and
some water.



Remembering the
midday dosages.



Keeping track of what to
take, at what time(s).
Also **swallowing** is
getting harder.

Results from your survey

3

What is your biggest challenge with dealing with medication intake?



Juggling medications
for PD along with
medications for other
medical issues. Along
with timing of
requirements for
when to take
medication, i.e. **with
or without food.**



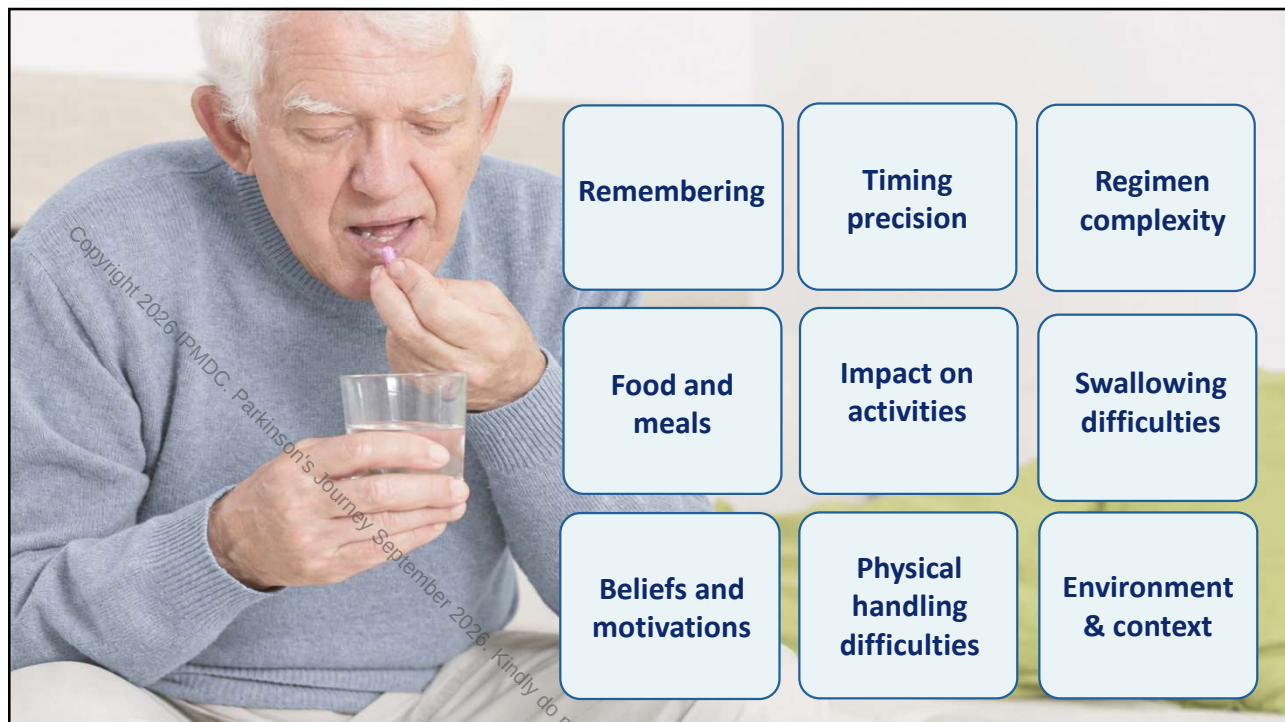
The fact that I need to
take C/L every 3 hours
AND time high-protein
meals in between. I
am **losing weight**, so I
feel pressure to eat
frequently.



Dealing with the
timing of the **good
times and bad times**
from the meds and
aligning them with
tasks that I have.

Results from your survey

4

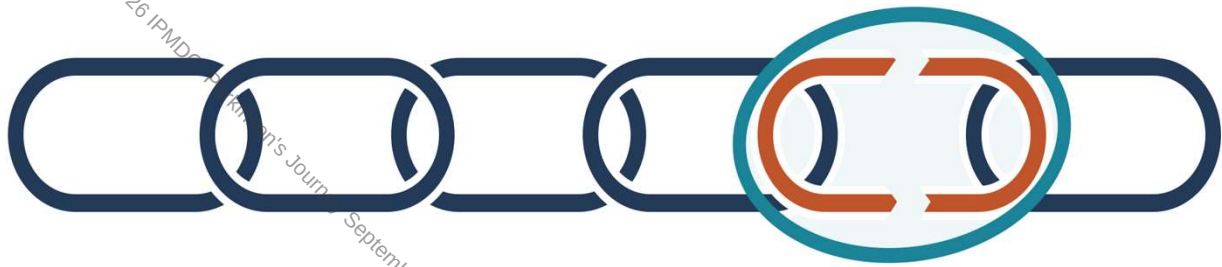


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6

Make a good assessment of where the medication-taking process **breaks down**



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“ I have difficulty taking my meds. ”

— a person living with Parkinson's

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1. DO YOU KNOW WHAT TO TAKE?

NO

Knowledge / Understanding

- Don't know the purpose
- Confused about the dose
- Don't understand timing
- Conflicting instructions

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Study your meds as if it were an exercise



Madopar

Levodopa + benserazide — the main medicine, replacing the dopamine the brain is short of.

Selegiline

An MAO-B inhibitor that slows the natural breakdown of dopamine.

Ropinirole

A dopamine agonist that acts like dopamine at its receptors in the brain.

Xadago (safinamide)

An MAO-B inhibitor added to help with "wearing-off" between levodopa doses.

Ongentys (opicapone)

A COMT inhibitor that helps each levodopa dose last longer.

Madopar HBS (slow release)

Releases levodopa gradually — often used for overnight cover.

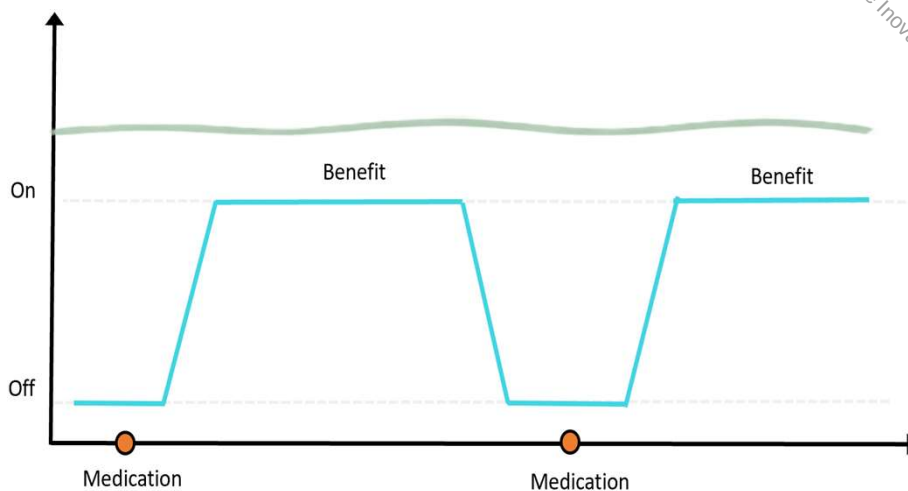
10

Have a printed-out sheet for you & family

BREAKFAST	AFTERNOON SNACK	DINNER
 Zolnor 20 mg + 5 mg High blood pressure — olmesartan + amlodipine. 1 tablet per day.	 Unilan 1 mg Anxiety — alprazolam. Sometimes also at night.	 Rosuvastatina 40 mg Cholesterol. 1 tablet after dinner.
 Venlafaxina 75 mg Depression. 2 capsules in the morning, after food.	 Macrogol Constipation. 1 sachet, 1–3× per day.	 Quetamed 50 mg Depression and sleep — quetiapine. ½ tablet after dinner.
 Esomeprazol 40 mg Stomach protector.	 Sinemet 25/100 mg Parkinson's Symptoms 1/2 tablet.	 Sinemet 25/100 mg Parkinson's Symptoms 1 tablet.
 Sinemet 25/100 mg Parkinson's Symptoms 1 tablet.	 Insulin (Tresiba) Diabetes — degludec insulin. 22–24 units per day.	 Ozempic Diabetes — semaglutide. 1× per week.

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Understand why timing matters in PD



Levodopa is short-acting, timing is part of the treatment.

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Understand why it may fail



- The problem may start with what you were told and how it was explained.
- It may be the **language Clinicians & Peers use and the emphasis they place on timing**

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1. DO YOU KNOW WHAT TO TAKE?

YES

NO

2. DO YOU REMEMBER TO TAKE IT?

Knowledge / Understanding

- Don't know the purpose
- Confused about the dose
- Don't understand timing
- Conflicting instructions

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2. DO YOU REMEMBER TO TAKE IT?

NO

Remembering

- Forget time
- Lose track
- Routine changes

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Movement Disorders

Official Journal of the International
Parkinson and Movement Disorder Society

Research Article

Adherence to antiparkinson medication in a multicenter European study

112 people, mean age 65, with PD for an average of 7.7 years.
5 countries, measured with electronic pill bottles.

From our survey:
3 in 4 had at least one
dose drift by more than
30 minutes in a single
week.

98%

of prescribed doses
were taken

86%

of days had the right
number of doses

24%

of doses were taken at
the right time

People with PD take their tablets. Taking them on time is the hard part.

Grosset et al., Movement Disorders 2009;24(6):826–832.

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Identify reasons hiding behind "I forgot"



**“DID YOU KNOW
IT WAS TIME
TO TAKE IT?”**

Genuine forgetting

Initiation failure (apathy)

Changes in the day

17

The distinction changes the advice

Genuine forgetting

Initiation failure

Changes in the day

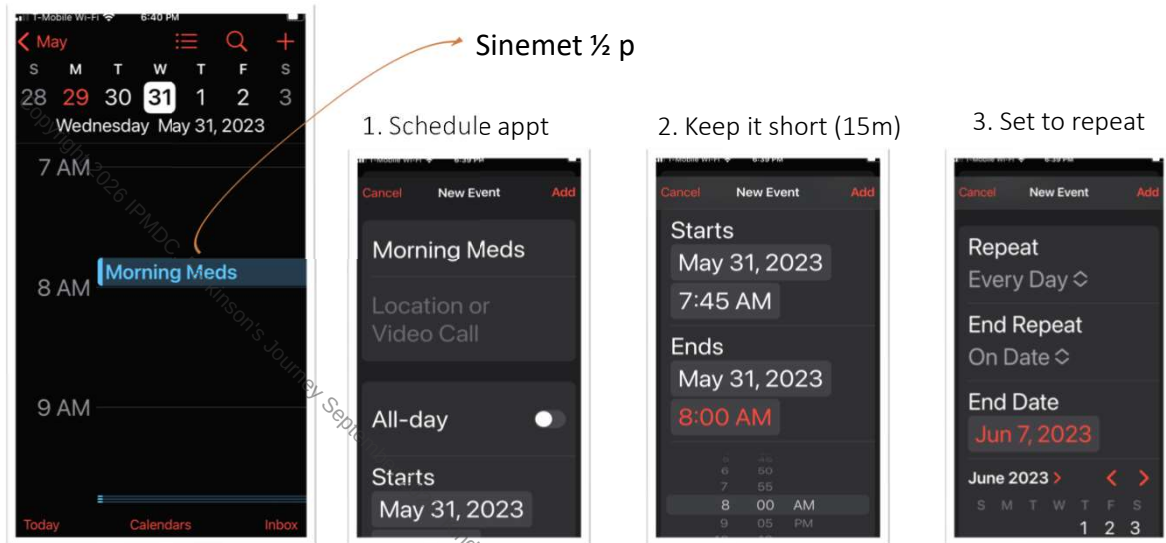
External reminders

- A repeating alarm or reminder.
- A vibrating watch.
- A pill box kept visible.
- Linked to an activity
- Care partner



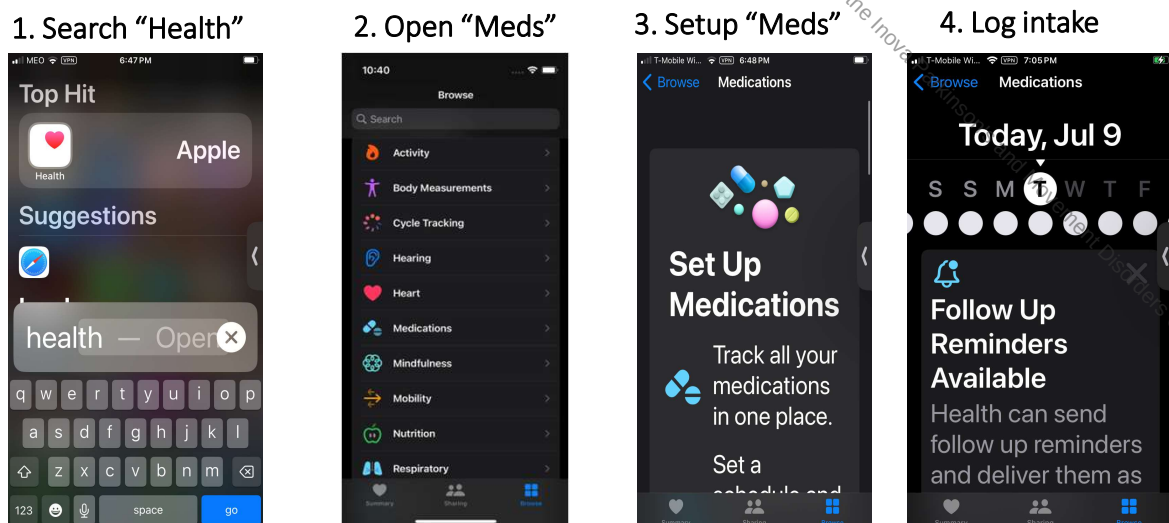
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Using simple med tracking on your phone



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Use the built in tools on your iPhone



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Many app-based medication reminders available

Not PD-Specific



MyTherapy: Medication Reminder

Pill Tracker & Med Alarm

smartpatient GmbH

★★★★★ 4.8 • 1.4K Ratings

Free • Offers In-App Purchases

My Therapy App (iOS and Android)

<https://www.mytherapyapp.com>



Medisafe (iOS and Android)

<https://www.medisafe.com>

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Consider an app dedicated to Parkinson's

Free to the public:

StrivePD by Rune Labs

<https://www.strive.group>

iOS only (pairs with Apple Watch)

Soturi

<https://www.soturi.health>

iOS and Android (pairs with FitBit)

My Moves Matter

<https://www.mymovesmatter.com>

iOS only



Prescription only:

Parky

<https://www.parkynow.com>

iOS only (pairs with Apple Watch)

Kinesia U by Great Lakes NeuroTech

<https://www.glneurotech.com/products/kinesia>

iOS and Android

Neptune by Orbit Health (coming to the US soon)

<https://orbit.health/neptune>

Android

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My Moves Matter app

Gain Power Over Parkinson's

My Moves Matter gives you the power to



Remember your tablets

See your patterns

Track hormonal impact

Find your tribe

Make positive changes

Gain Knowledge

Medication, activity, and symptom tracking app **geared towards women** living with PD

<https://www.mymovesmatter.com>
iOS only

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Smart speaker reminders



“
Hey...Set a reminder to take my Parkinson's medication every day at 8 a.m., 2 p.m. and 8 p.m.
”

- A voice on the shelf can carry the dose into awareness — no screens, no unlocking, no searching for the phone.
- Be sure to turn on app reminders on your phone to receive notifications outside of your home

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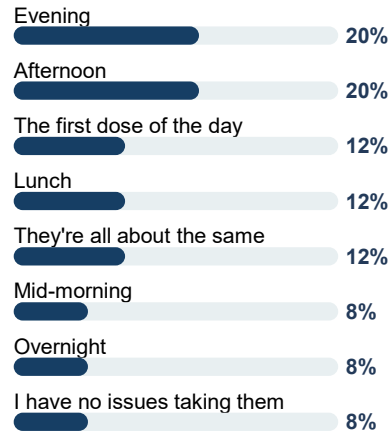
Identify the “dose” most forgotten



The evening dose lives where the evening happens.

Which dose is hardest to get right?

From survey



Data from the survey

25

Agree the reminder “rules” with your partner



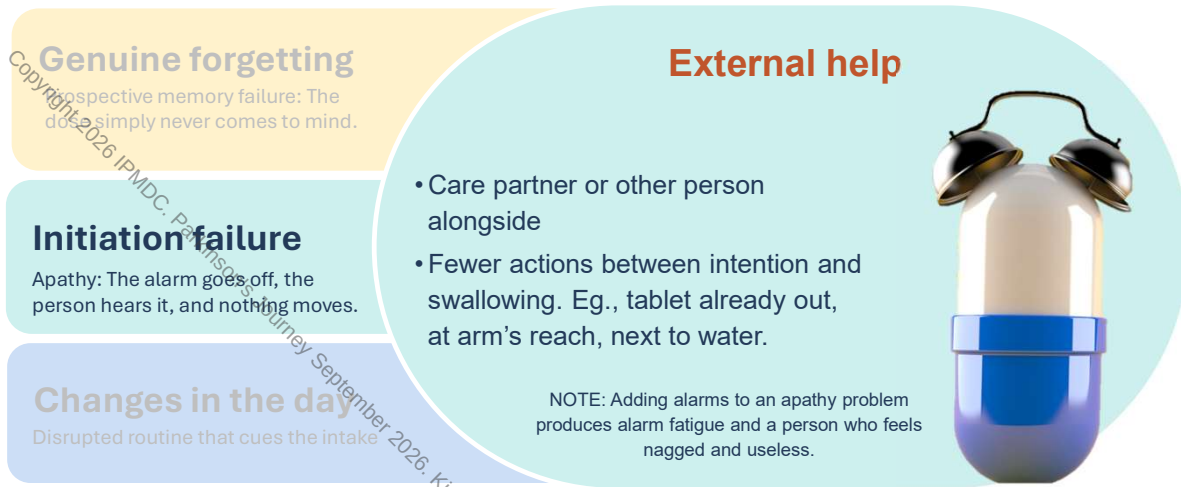
I try not to say, you know, “It’s 9 o’clock. Did you take your meds?”, She’s an adult and a smart person, and it’s kind of insulting to her, I think, at times. I don’t want to treat her like a child, and she doesn’t want that.

(CP8)
Melissa J. et al. Neurology: Clinical Practice June 2021

Shared systems that preserve autonomy survive when the partner is away.

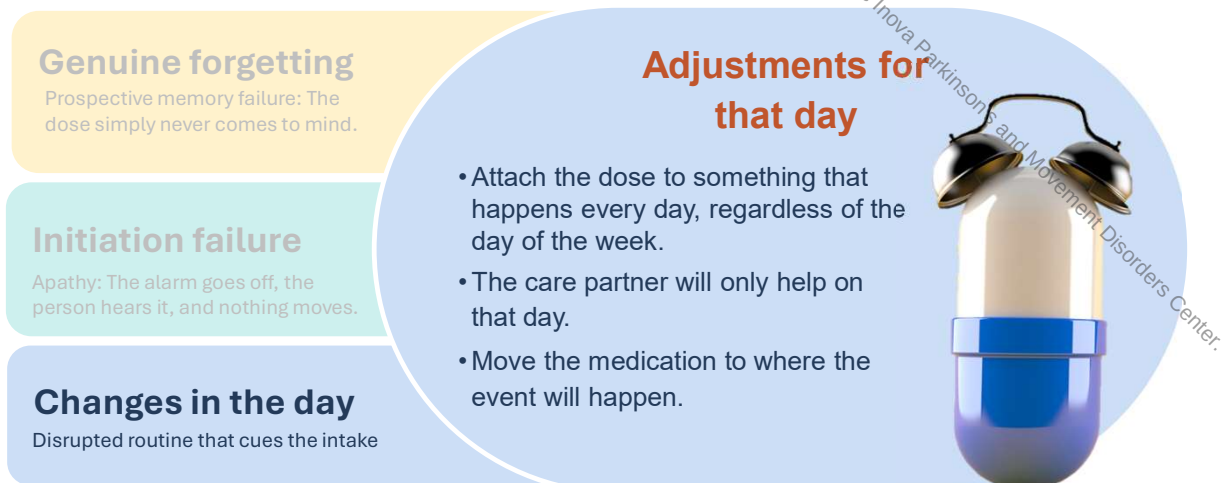
26

The distinction changes the advice

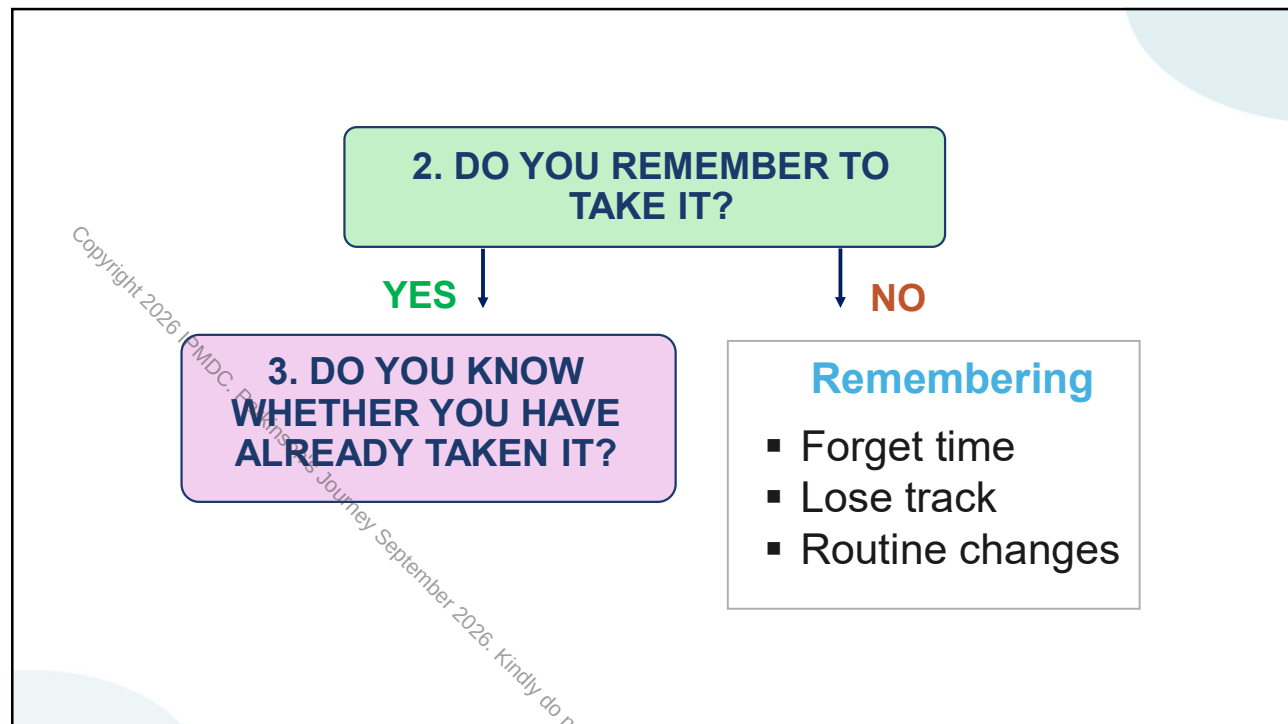


27

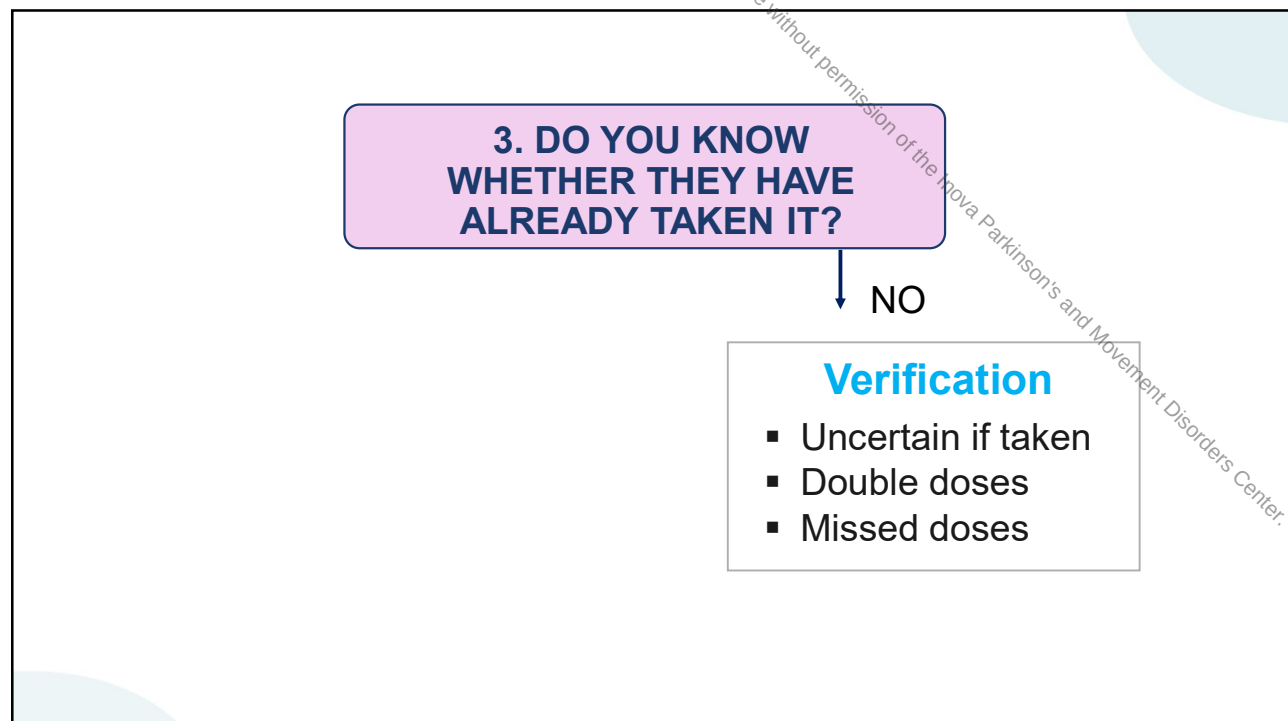
The distinction changes the advice



28



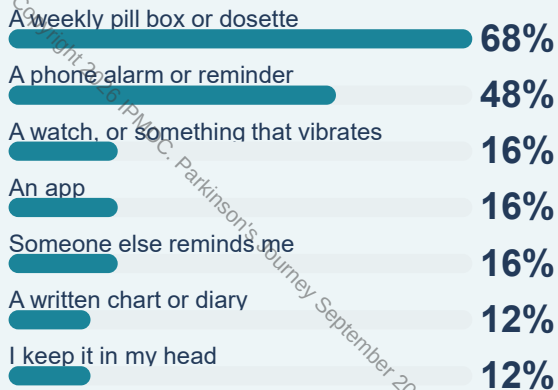
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Remembering “Did I take it?”

How do you keep track of whether a dose has been taken?



Data from the survey

Things I can do about the Activity and Environment:

- A **day-of-week organizer**
- Phone or smartwatch apps with a **confirmation tap**.
- Tie doses to routines that facilitate it: e.g., placing pills on at the table before coffee, next to brushing teeth, etc.



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Automated pill dispensers



MedaCube

<https://medacube.com>



Med Minder

<https://medminder.com>



Philips

<https://www.usa.philips.com>

- Releases only the **scheduled dose**.
- Gives **audible/visual reminders**.
- Reduces **missed doses**.
- Reduces **double dosing or taking the wrong pills**.

32

Increase attention during the activity



Pause, avoid distractions, take it mindfully.

Say to yourself: I took my meds.

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**3. DO THEY KNOW
WHETHER THEY HAVE
ALREADY TAKEN IT?**

YES ↓

NO ↓

**4. CAN THEY MANAGE
THE REGIMEN?**

Verification

- Uncertain if taken
- Double doses
- Missed doses

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4. CAN YOU MANAGE THE REGIMEN?

↓ NO

Complexity

- Many drugs
- Many times
- Different instructions

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NEUROLOGY CLINIC
Movement Disorders Center
123 Health Way, Suite 200
Cityville, ST 12345
Phone: (555) 123-4567 Fax: (555) 987-6543

PATIENT: John Doe
DOB: 01/15/1958
DATE: 05/20/2024

Provider: Mary Smith, MD
Specialty: Neurology - Movement Disorders

1) PARKINSON'S DISEASE - Motor Symptoms

• Carbidopa / Levodopa 25/100 mg	1 tablet 5x/day 7am, 10am, 1pm, 4pm, 7pm
• Carbidopa / Levodopa CR 50/200 mg	1 tablet at bedtime (10pm)
• Rasagiline 1 mg	1 tablet every morning
• Pramipexole 0.5 mg	1 tablet 3x/day (7am, 1pm, 7pm)
• Entacapone 200 mg	1 tablet 3x/day (7am, 1pm, 7pm) (with levodopa doses)
• Amantadine 100 mg	1 tablet 2x/day (7am, 1pm) for dyskinesia

2) SLEEP / REM SLEEP BEHAVIOR DISORDER

• Melatonin 5 mg	1 tablet at bedtime
• Clonazepam 0.5 mg	1 tablet at bedtime

3) ANXIETY / MOOD

• Sertraline 50 mg	1 tablet every morning
• Lorazepam 0.5 mg	1 tablet as needed for severe anxiety (max 1-2/day)

4) GASTROINTESTINAL / STOMACH

• Omeprazole 20 mg	1 capsule every morning (before breakfast)
• Domperidone 10 mg	1 tablet 3x/day before meals
• Macrogol (PEG) 17g	1 sachet in water daily as needed for constipation

5) PAIN / OTHER

• Paracetamol 500 mg	1-2 tablets every 6-8 hours as needed for pain (max 3g/day)
• Diclofenac gel 1%	Apply to painful joints up to 3x/day as needed

Notes: Take medications at the same times every day.
Do not stop any medication without consulting your doctor.

Signature: Mary Smith, MD
Refill: As above
Repeat: 6 months
License #: ST 123456



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Agree on a plan to do an ongoing re-assessment



QUESTIONS TO ASK AT EACH CONSULTATION

“What can I reduce?”

“What can I combine?”

“Anything else to take that would reduce my meds?”

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Make a plan to have periodic help from partner

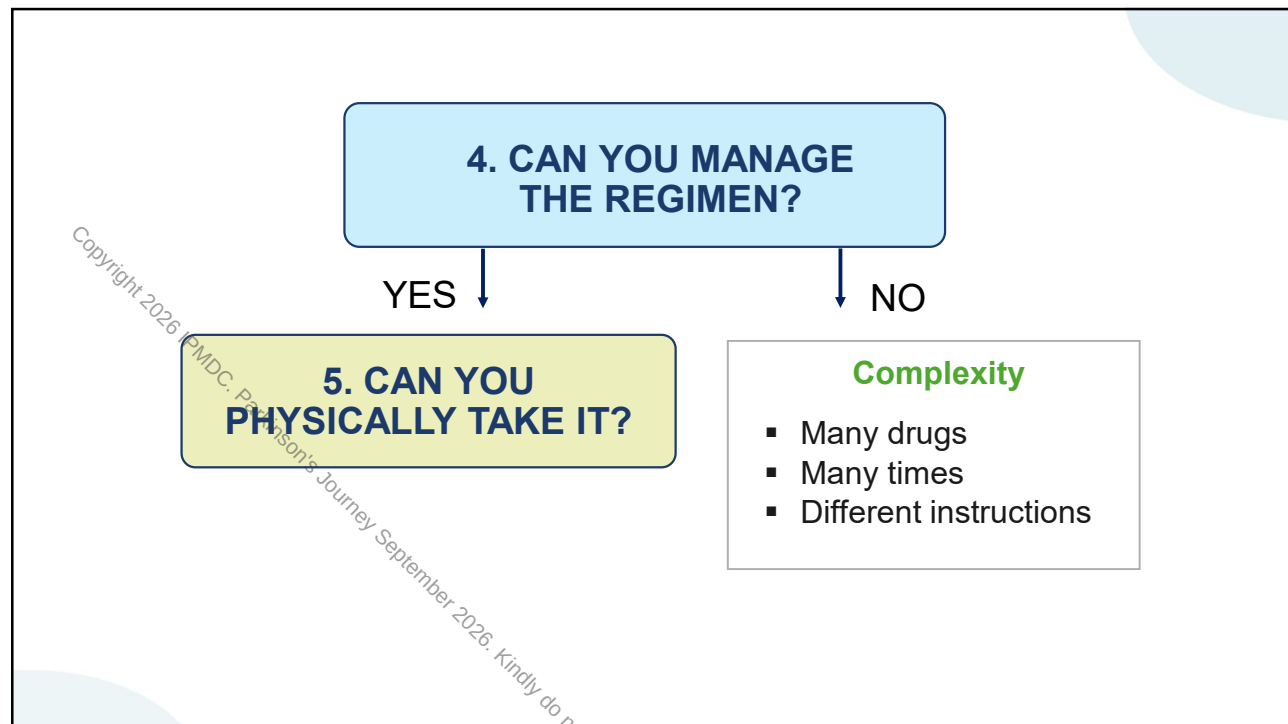
68% person with PD organized their meds.

24% By the care partner

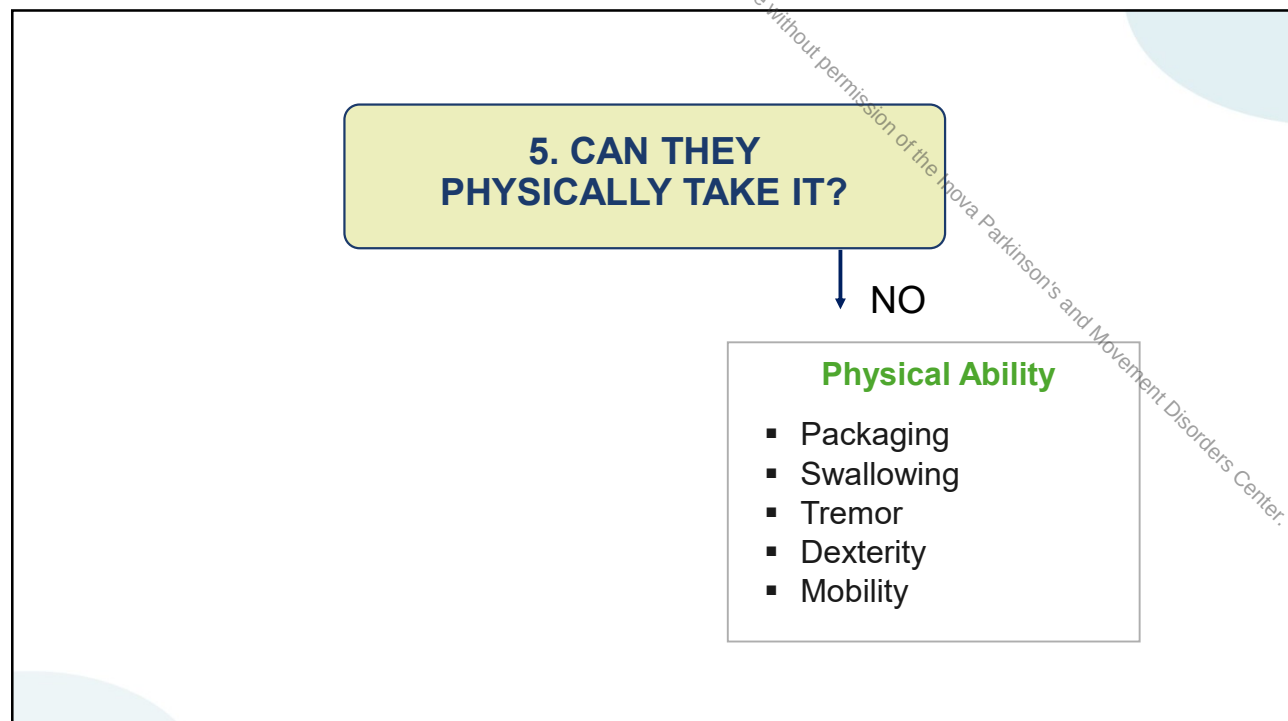
From survey



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39



40

The physical challenges of taking a tablet



8 of 26

reported difficulty opening
packets or handling tablets

12 of 26

reported difficulty
swallowing tablets

41

Ask the pharmacy for flip-top bottles instead of blisters



42

Moving meds from Rx bottle to larger or easier means



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Open the 1st morning dose the night before if dexterity is better



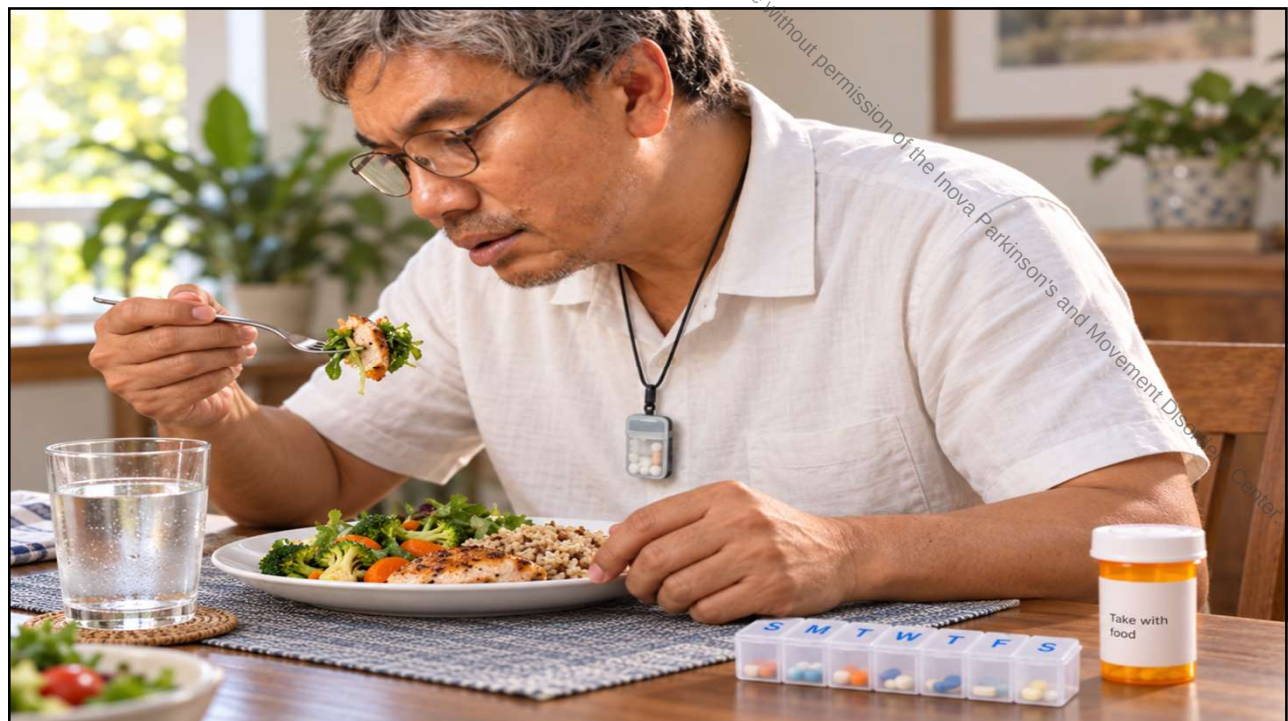
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Pillpack (by Amazon)



- Prescriptions are sorted and individually packed with the date and time
- CAVEAT: Even minor changes in medications can result in significant waste and excess cost

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Water before the tablet as well as after



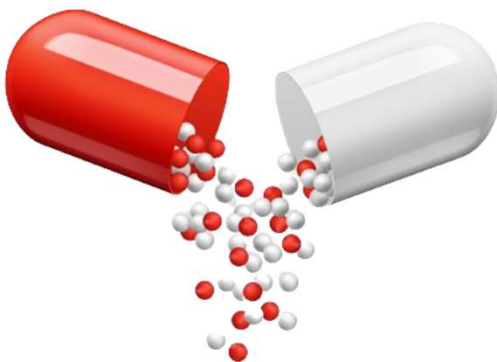
Take them with a soft food



- Apple sauce or bananas
- Avoid protein-rich purees like cottage cheese and yogurt

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Know when to crush or not to crush meds



- Many meds can be crushed* and mixed with applesauce or other purée. Some meds are available in a dissolvable format
- Consider a patch, pump, or other non-oral option

*This does NOT apply for most controlled-release formulations

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Consider the position/state you take meds too



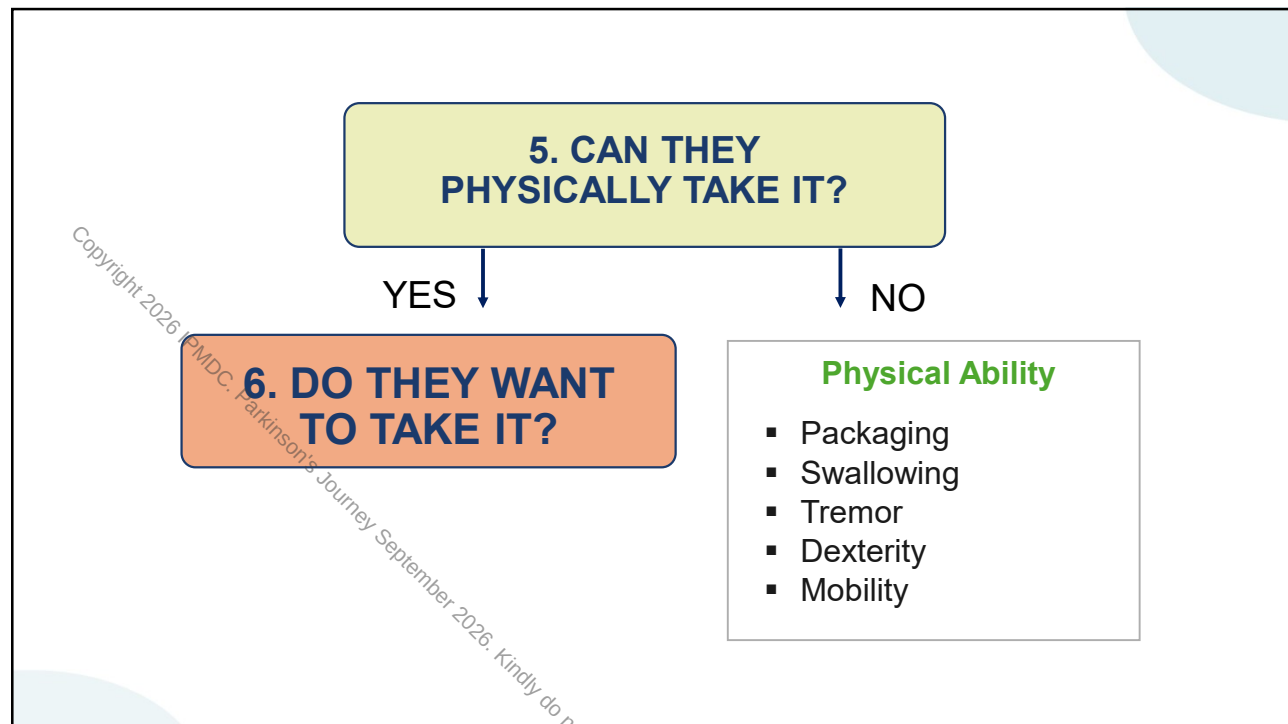
49

Understand why meals can “swallow” your dose

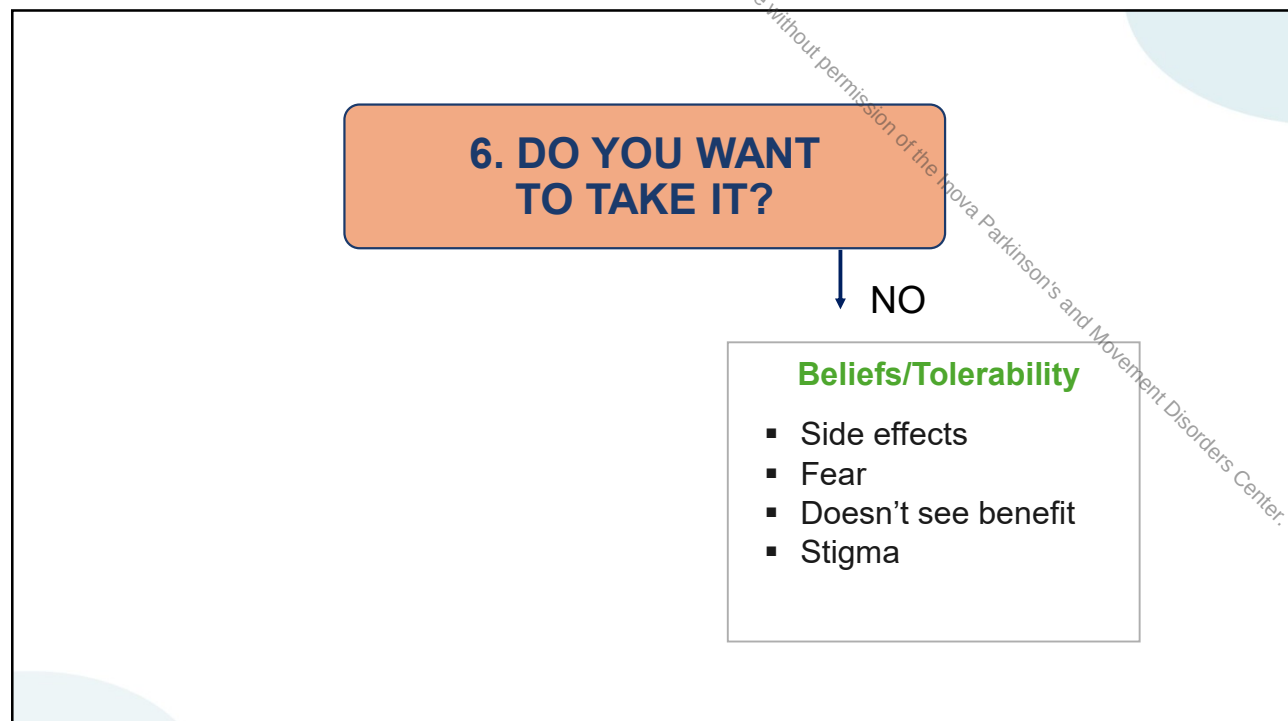
- Take levodopa 30 minutes before, or 60 minutes after, a meal containing protein
- If a dose must go with food, use a low-protein carrier: crackers, fruit, plain toast
- Constipation changes absorption too.
- Redistribution of protein is a plan to make with a dietitian, not alone



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Fear of levodopa

Extremely common and rarely volunteered unless asked directly.

- The belief: it only works for five years, so save it, delay it, take as little as possible.
- It leads to years of avoidable under-treatment.
- The current answer is that what changes over time is the disease, not the drug wearing out.

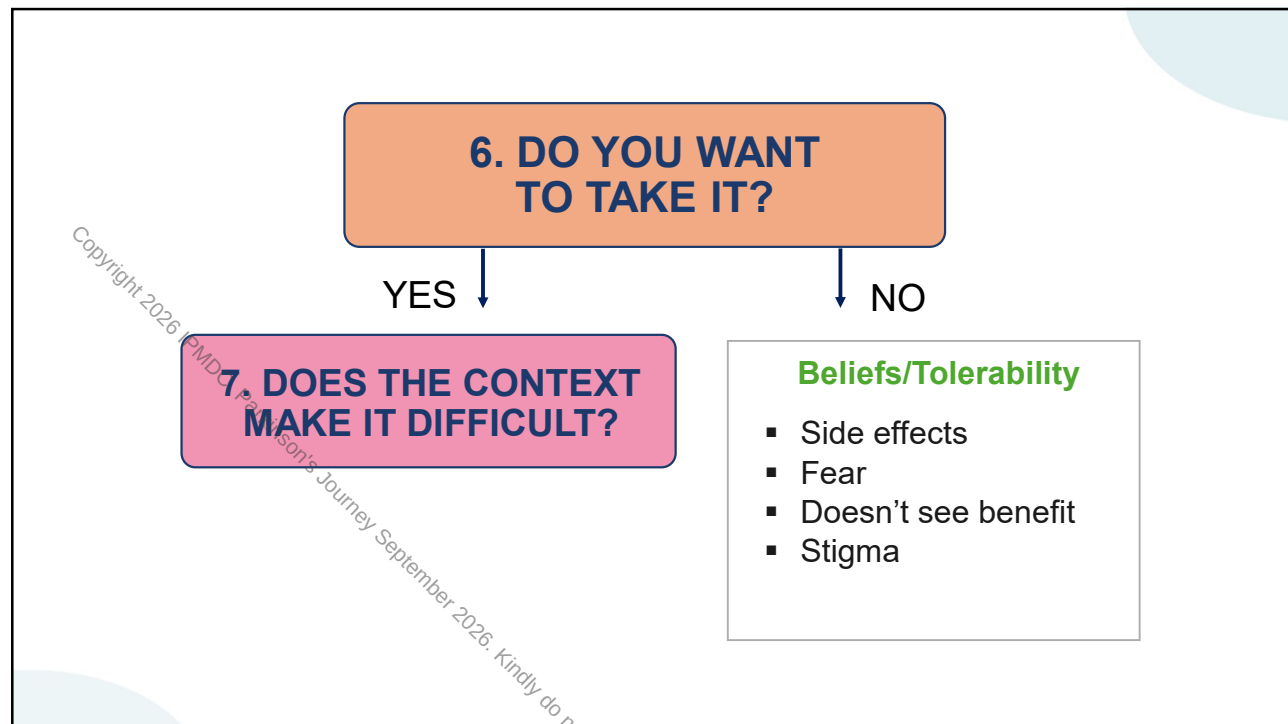
53



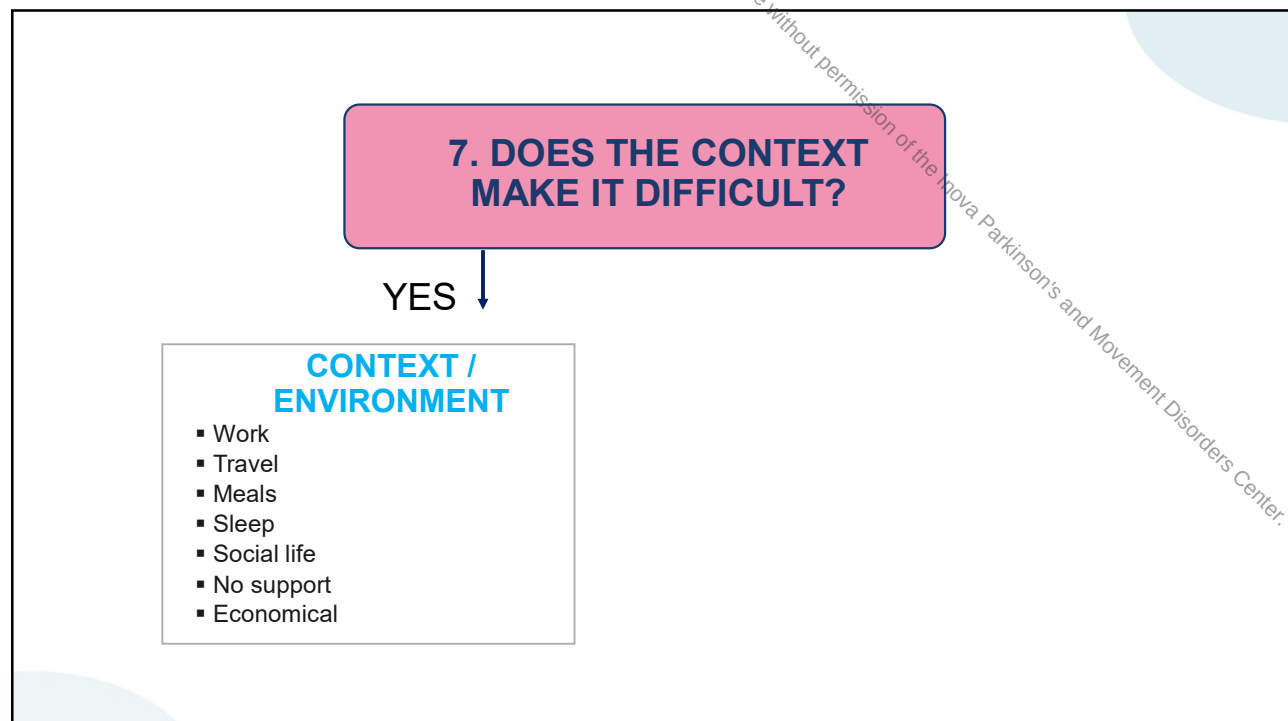
"The most commonly identified motivating factors to improve adherence were **knowing that the medications work effectively, knowing how to manage adverse effects, and understanding medication benefits.**"

Morello et al., 2011 *Annals of Pharmacotherapy*, 45(2), 145–153.

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55



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Consider the place where the medication physically lives



Morning dose



Afternoon dose



Night dose

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Consider the contrast of the pills and pillbox



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Have a different color box for different places

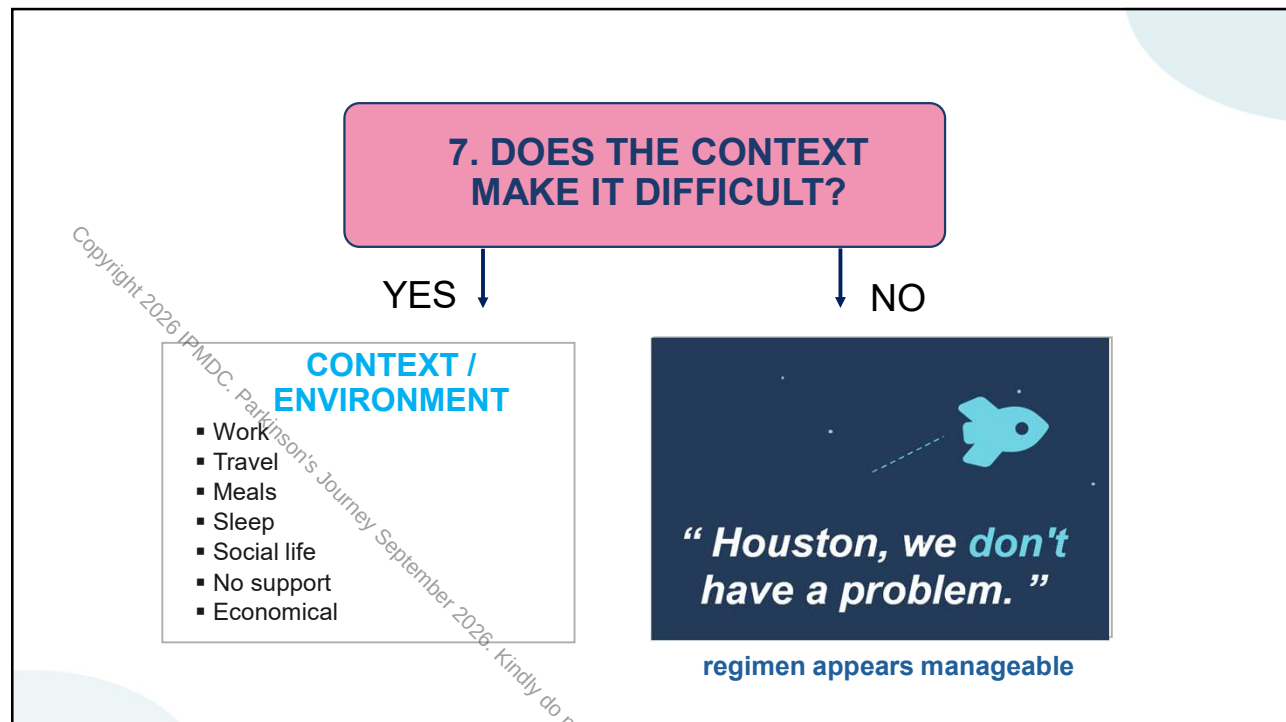


59

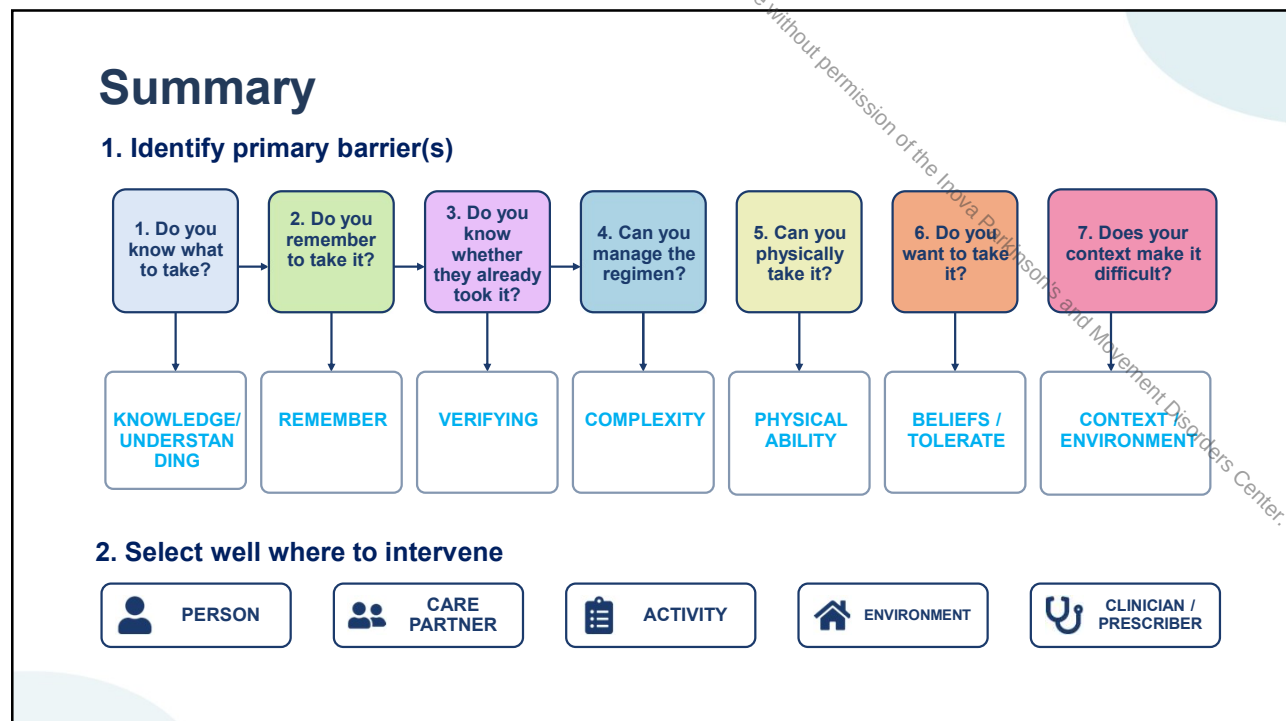


Keep your medications in a separate location from those of your family

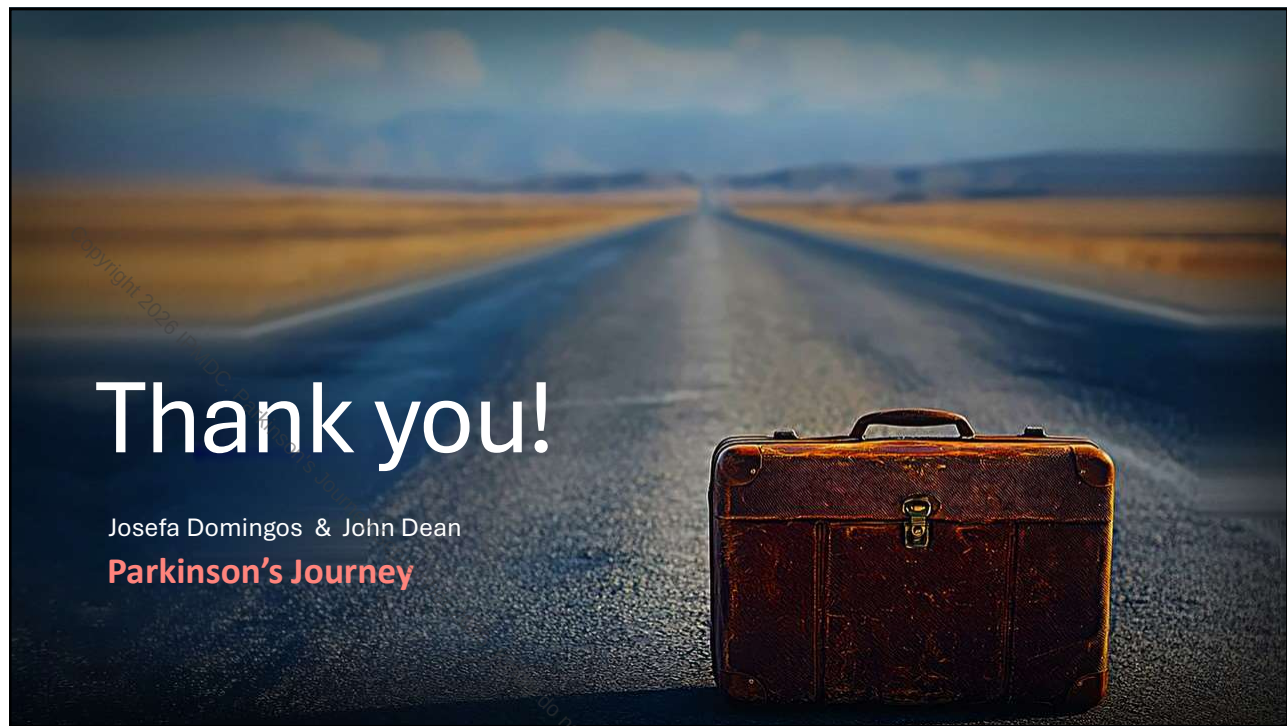
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