

SPECIAL REPORT

UNLOCK THE HIDDEN HUMAN TRUTHS BEHIND PHARMA DECISIONS

Deep insights into the behaviors of HCPs and patients, explained with decision heuristics and biases.

newristics



Chronic Migraine



Stroke Prevention in Atrial Fibrillation



Chronic Heartburn



Narcolepsy



Moderate/Severe Plaque Psoriasis



Chronic Heart Failure (CHF)



Cough From a Respiratory Infection



Moderate/Severe Asthma

| **About** the report

Behavioral science is a powerful tool to uncover AHA! insights from primary market research.

In this report, Newristics uses principles of behavioral science to bring you AHA! insights from 16 different disease states. Insights were generated by interpreting qual/quant market research studies through the lens of decision heuristics and biases.



Insights that respondents never directly say in IDIs

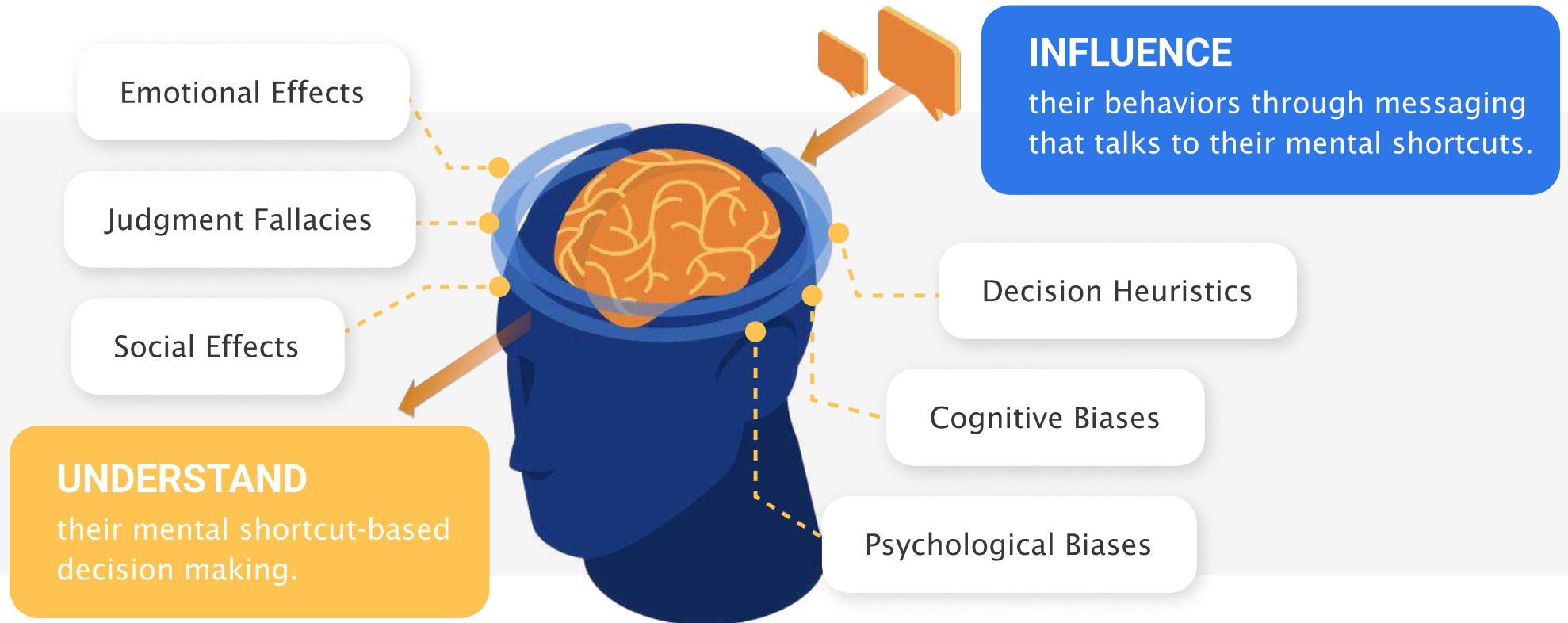


Insights that survey cross-tabs can never generate



Insights that can lead to brand-defining ideas

Behavioral science is a 3-time Nobel prize-winning field of research that helps us understand and influence customers.



| **Benefits** of using behavioral science in Pharma Insights.



Efficient Research

Start research with scientifically informed hypotheses



AHA! Insights

Get insights powerful enough to move brands



Change Behaviors

Translate insights > action quickly to change customer behavior



Improve CX

Design better customer experiences and improve customer centricity

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Customer
behavior explained

Why are cardiologists starting all their new SPAF patients on direct-acting anti-coagulants, but not willing to switch their existing Coumadin patients to a DOAC?



Disease
state

Stroke Prevention in Atrial Fibrillation



Behavioral
science principle used

New Risk Bias

| **Why** haven't CARDS switched warfarin patients to a DOAC?

AHA! Insights

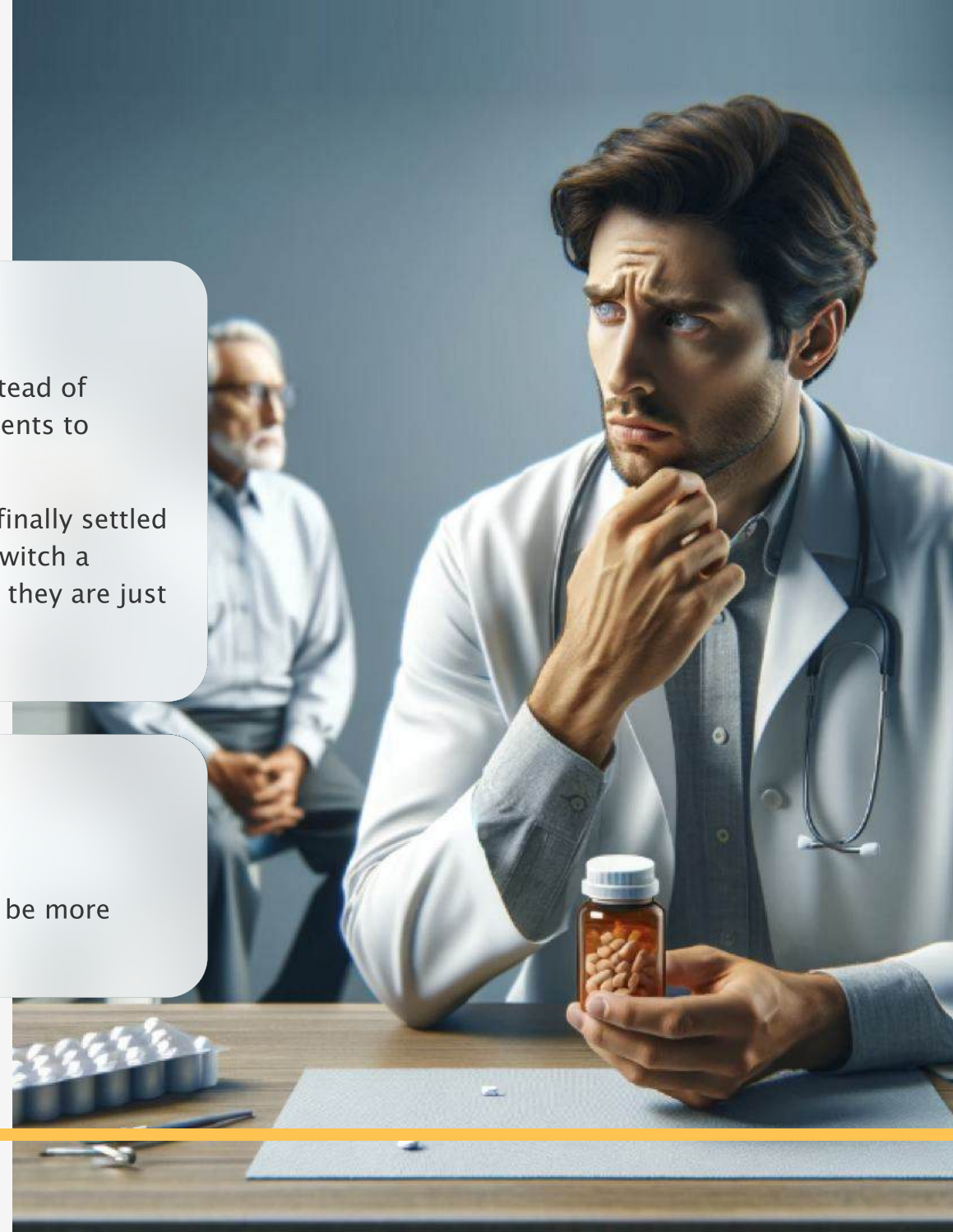
Most new patients receive a DOAC like Eliquis or Xarelto now instead of Coumadin, but HCPs are still not willing to switch Coumadin patients to DOACs because of New Risk Bias heuristic.

HCPs spent decades fighting lawsuits on Coumadin, which have finally settled down. DOACs don't have the same lawsuit problem, but if they switch a patient from Coumadin to a DOAC and there is a bleed, they feel they are just inviting a lawsuit to happen.

Behavioral Science Explanation

New Risk Bias

New risks with the same probability as old ones are perceived to be more dangerous simply because of their recency.





Customer
behavior explained

Why do dermatologists waste years cycling patients through different TNFs when many new classes of drugs are available for plaque psoriasis?



Disease
state

Moderate/severe Plaque Psoriasis



Behavioral
science principle used

Escalation of Commitments

| **Why** do DERMS waste years cycling through TNFs in psoriasis?

AHA! Insights

In psoriasis, getting the patient on a biologic requires some convincing and selling on the HCP's part. Twenty years ago, when the only biologics were anti-TNFs, the HCP had to "sell" only once and then they could cycle through any number of drugs in the same class.

Today, there are many other classes of biologics with superior efficacy available to HCPs but switching the patient from an anti-TNF to an IL-6, IL-23 or TYK2 would require them to sell all over again. It is much easier to use Escalation of Commitments heuristic and keep cycling patients through multiple anti-TNFs first before considering other classes of biologics.

Behavioral Science Explanation

Escalation of Commitments

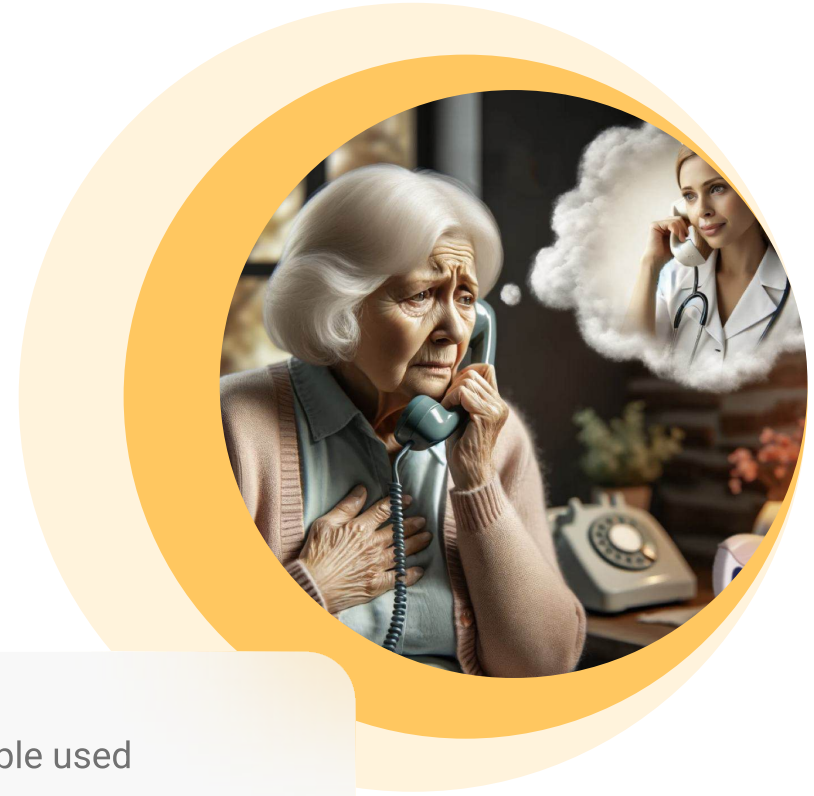
Humans often increase their commitment to a prior decision hoping that this additional investment will lead to a successful outcome.





Customer
behavior explained

Why has first-line adoption of triple combo therapy treatments for moderate/severe asthma been slow?



Disease
state

Moderate/Severe Asthma



Behavioral
science principle used

Incremental Decision Making

| **Why** has first-line adoption of triple combos in asthma been so slow?

AHA! Insights

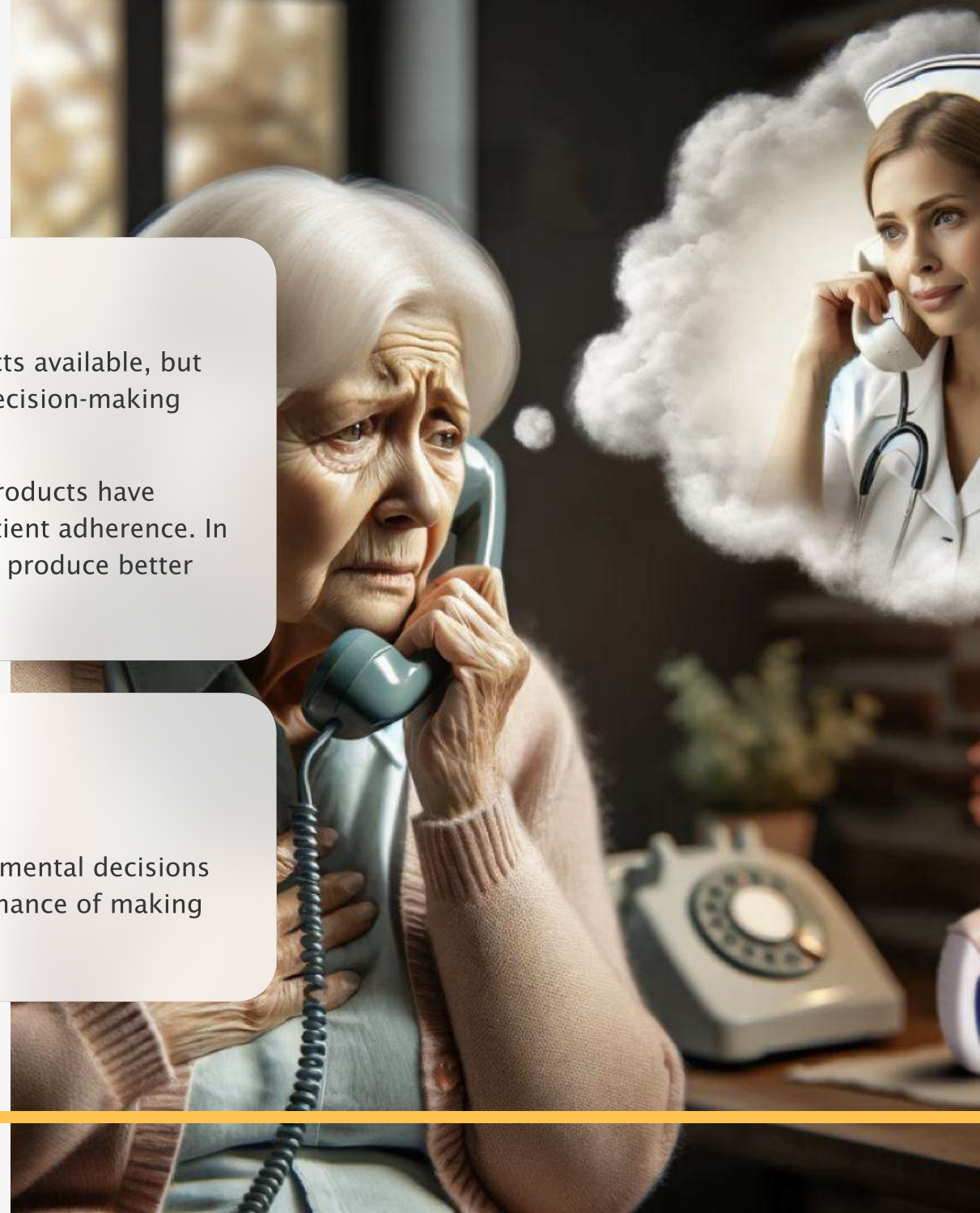
In asthma, HCPs now have many triple therapy combo products available, but they are hesitant to use them in 1L because of Incremental decision-making heuristic.

HCPs rationalize their behavior by saying that triple combo products have monitoring and compliance issues and can result in lower patient adherence. In reality, triple combo products used in 1L have been shown to produce better compliance due to better long-term efficacy.

Behavioral Science Explanation

Incremental Decision Making

Humans are much more comfortable making a series of incremental decisions than making a big decision because they think there is less chance of making bad decisions if they are incremental.





Customer
behavior explained

Why do pulmonologists categorize COPD inhalers based on device features more than efficacy?



Disease
state

Chronic Obstructive Pulmonary Disease



Behavioral
science principle used

Faulty Generalization Effect



04

| **How** do pulmonologists choose which COPD inhalers to use?

AHA! Insights

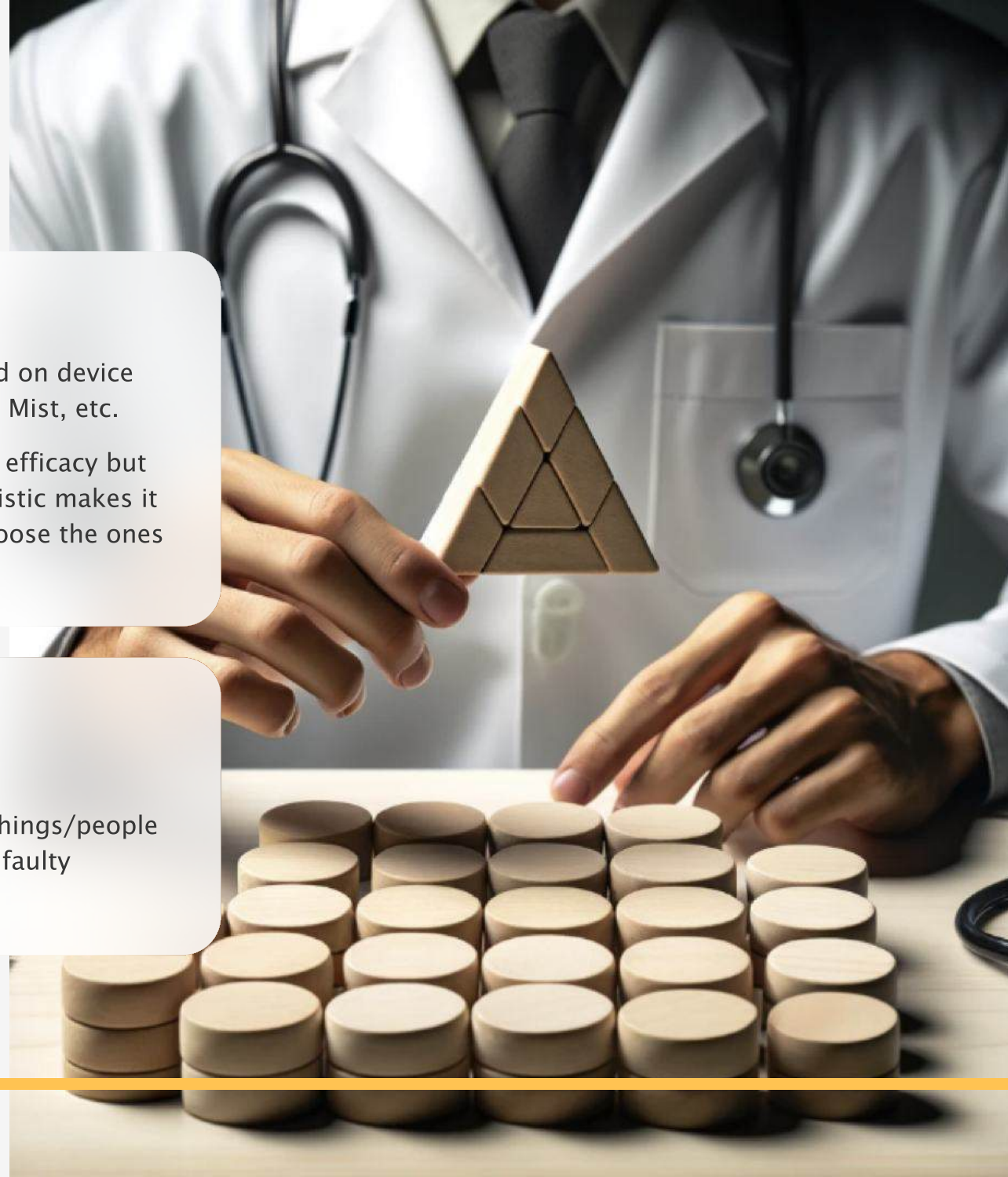
HCPs and NPPAs group COPD devices in their mind based on device features like Priming vs. No Priming Needed, Soft vs. Dry Mist, etc.

None of these features have been linked to better/worse efficacy but grouping devices using Faulty Generalization Effect heuristic makes it easier for them to organize devices in their mind and choose the ones they want to recommend to most patients.

Behavioral Science Explanation

Faulty Generalization Effect

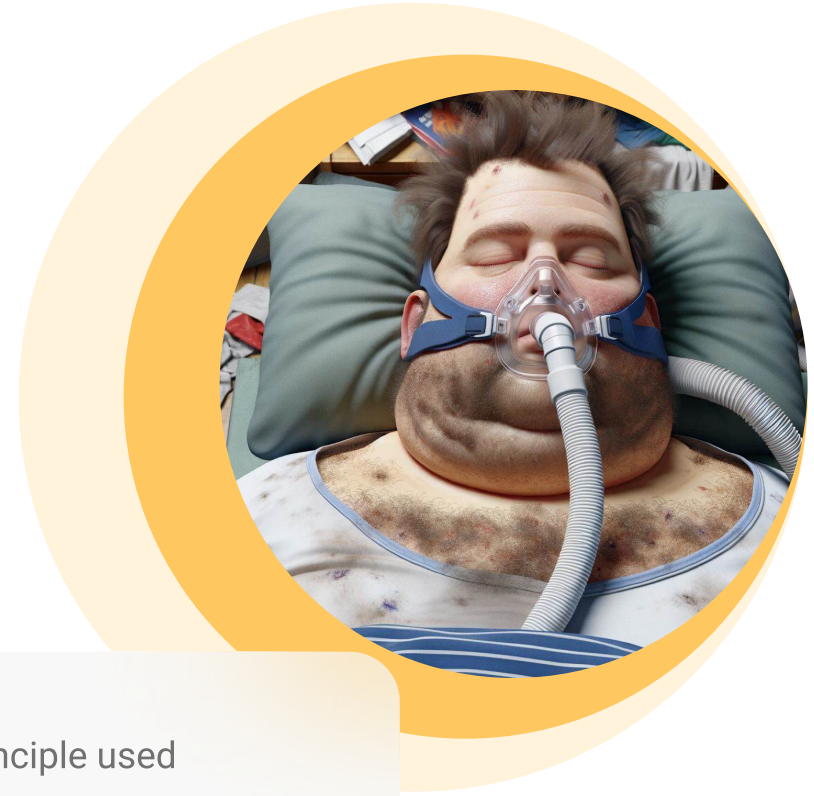
Humans try to simplify our complex world by grouping things/people in categories (i.e., race and gender) which often leads to faulty decisions.





Customer
behavior explained

Even though most patients who start using a CPAP want to get off it soon, WHY are only a few actually able to do it?



Disease
state

Obstructive Sleep Apnea



Behavioral
science principle used

Attribute Substitution

| **Why** can most OSA patients never get off the CPAP?

AHA! Insights

For sleep apnea sufferers, the CPAP machine is like a godsend! A non-sufferer can't imagine how someone can sleep with that device on, while the sleep apnea sufferer can't imagine life without it.

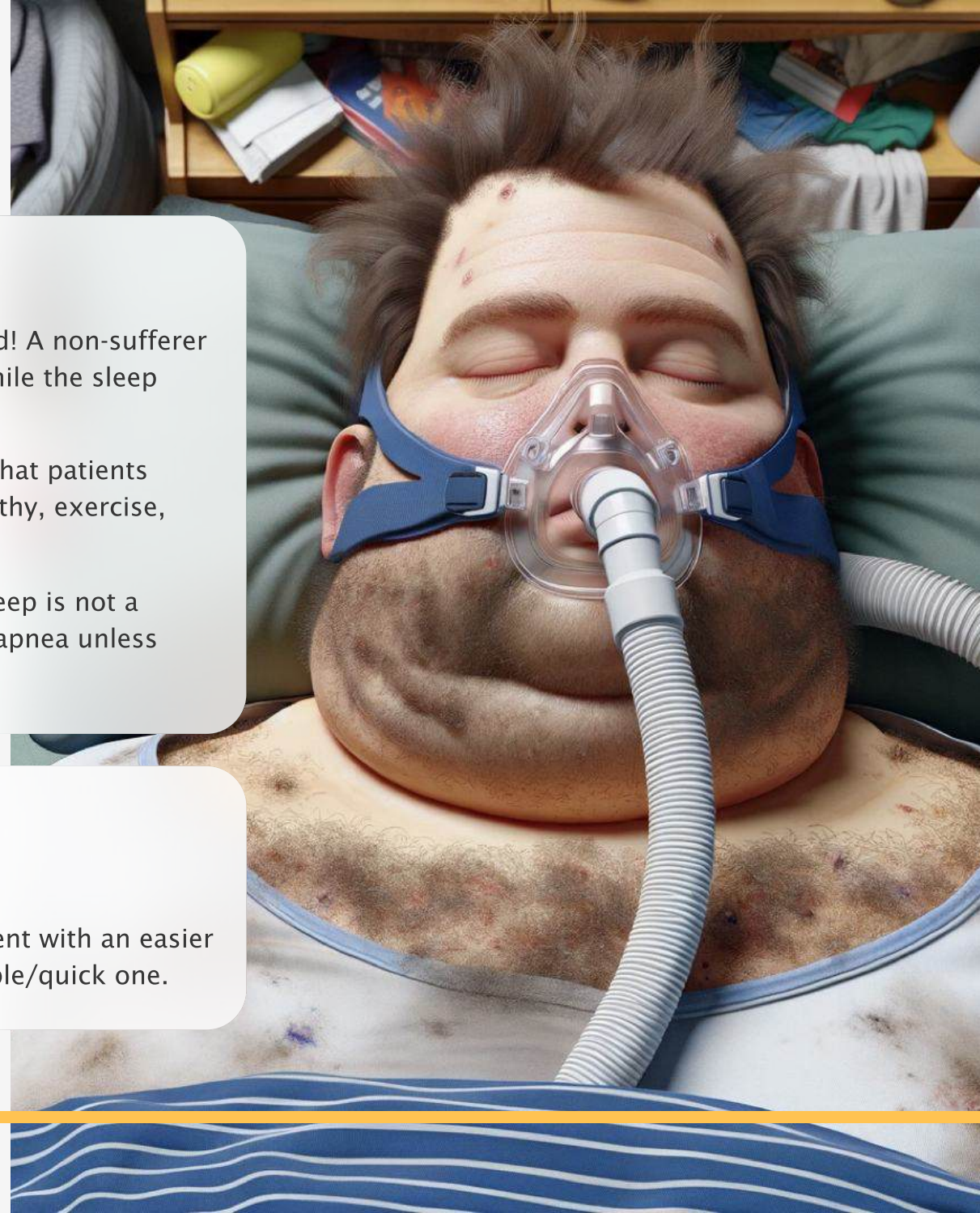
Unfortunately, the CPAP is so effective at preventing apneas that patients stop making other efforts to reduce their risk like eating healthy, exercise, sleep hygiene, breathing, etc.

Forcing air down your throat to keep you breathing during sleep is not a substitute for other important efforts required to treat sleep apnea unless you are using Attribute Substitution heuristic!

Behavioral Science Explanation

Attribute Substitution

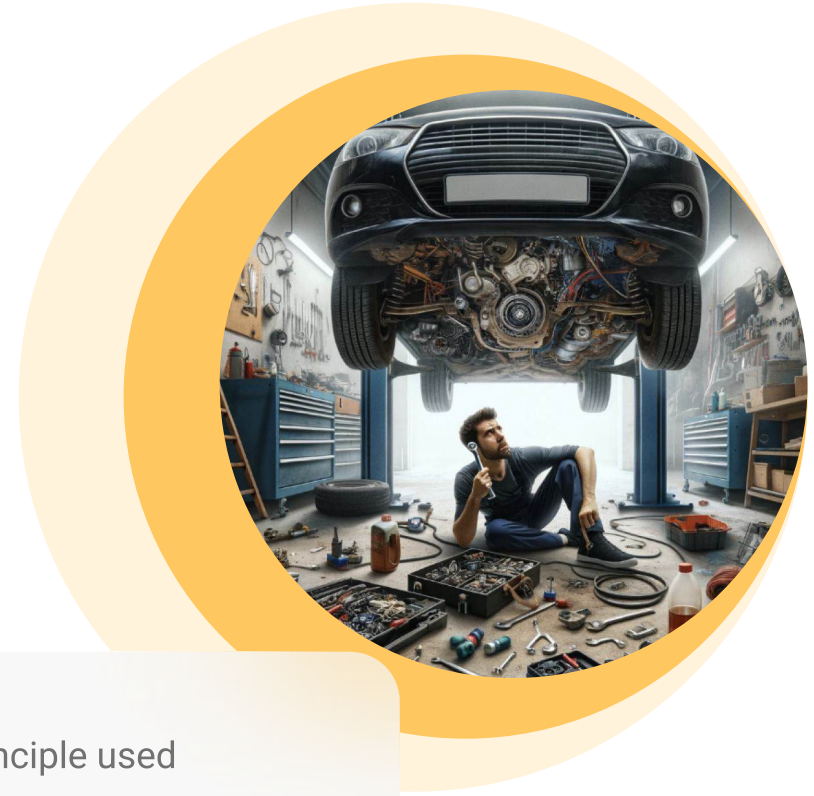
Humans unconsciously substitute a complex, difficult judgment with an easier one-- usually when the easier judgment is a far more accessible/quick one.





Customer
behavior explained

Why do psychs spend so much time fine-tuning drugs within a class before moving on to a new/different class of drugs?



Disease
state

Depression/Bi-polar/Schizophrenia



Behavioral
science principle used

Catalyst Fallacy

| **Why** do psychs spend so much time fine-tuning therapy if it doesn't work?

AHA! Insights

Many psychiatrists consider themselves "chemists" and take pride in their ability to "fine tune" brain chemistry when treating MDD / BPD / Schizophrenia patients.

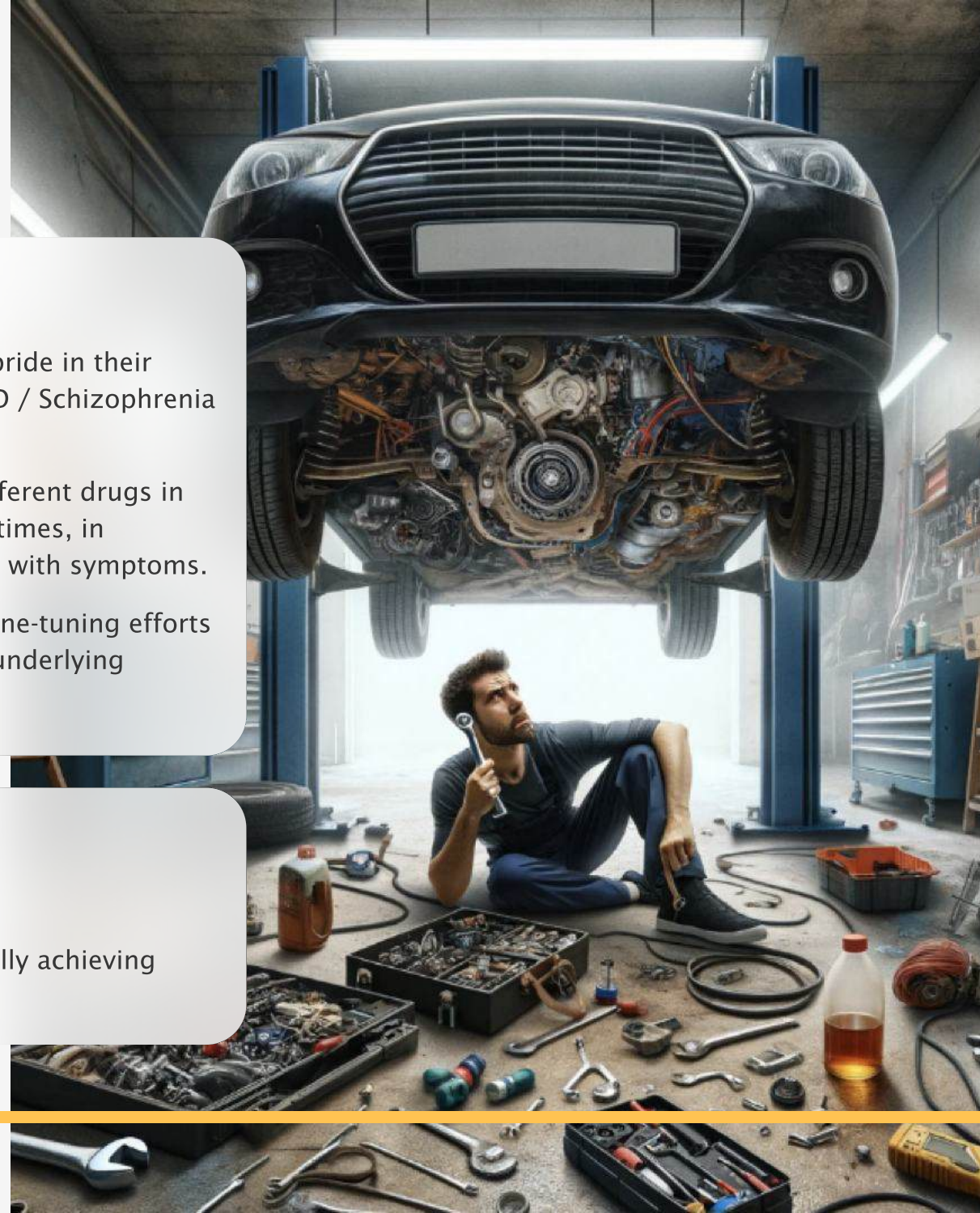
As a result, they can spend years cycling patients through different drugs in the same class, trying different dosing strengths at different times, in different order/sequences based on how the patient presents with symptoms.

The Catalyst Fallacy heuristic makes them believe that their fine-tuning efforts are playing a big role in the patient getting better, while the underlying pathology of the disease keeps getting worse.

Behavioral Science Explanation

Catalyst Fallacy

Humans overestimate the control we personally have in actually achieving an outcome.





Customer
behavior explained

Why do neurologists make “soft” recommendations when initiating therapy for Multiple Sclerosis?



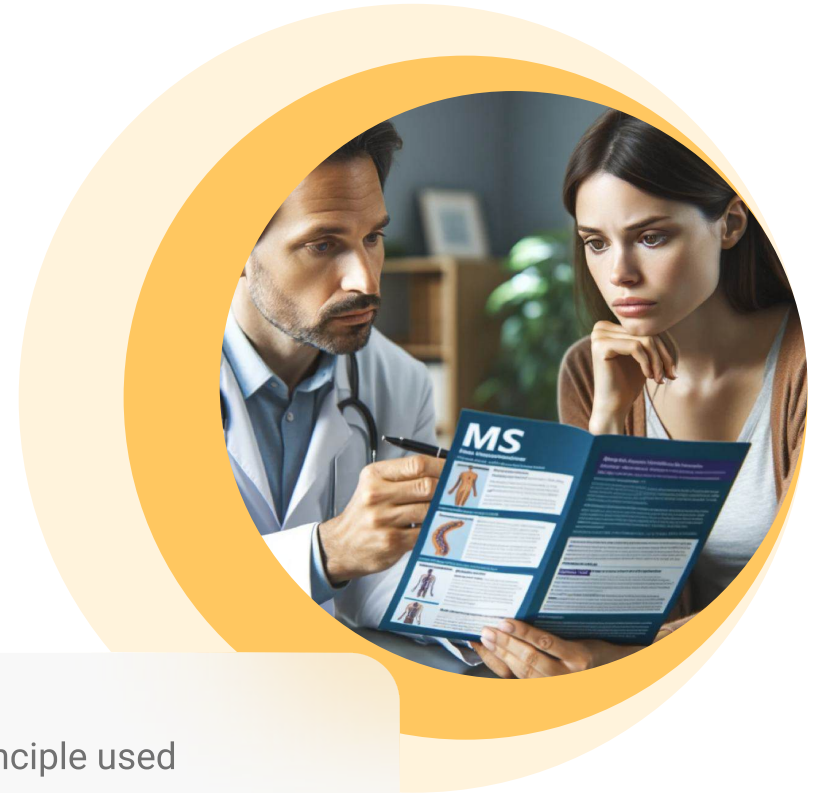
Disease
state

Multiple Sclerosis



Behavioral
science principle used

Ascription of Causality



07

| **Why** do neurologists make “soft” recommendations for MS treatment?

AHA! Insights

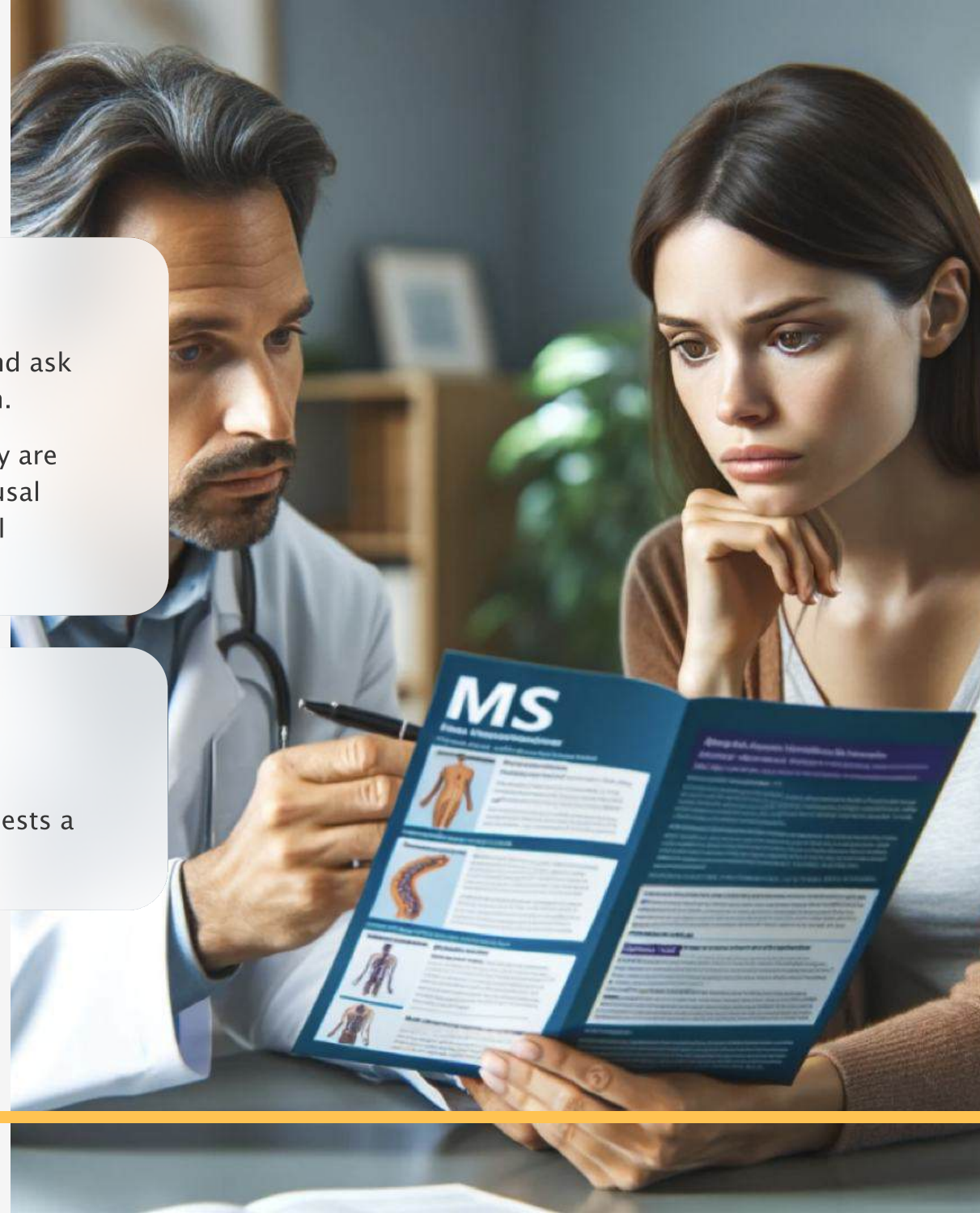
HCPs often present a choice of 2-3 MS drugs to the patient and ask them to decide which medication they would like to start with.

HCPs believe that if the patient chooses their medication, they are more likely to stay adherent to it, even though there is no causal relationship between patient choice and adherence in medical literature.

Behavioral Science Explanation

Ascription of Causality

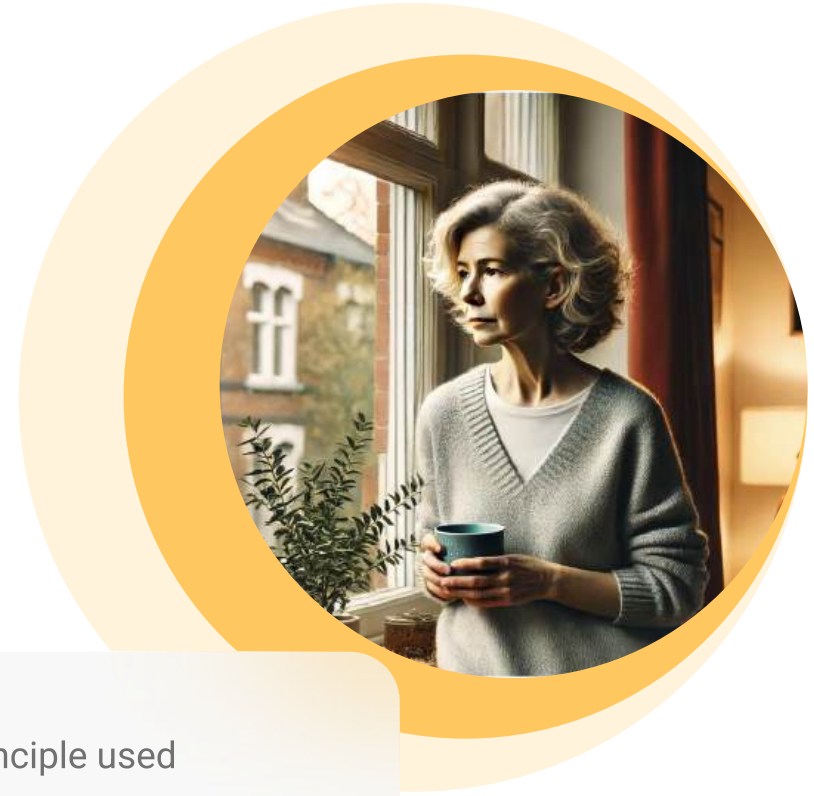
Humans assume causation even when the evidence only suggests a correlation, which is likely coincidental.





Customer
behavior explained

Why do so many women struggle to manage menopause even though they are good at proactively managing their health?



Disease
state

Menopause



Behavioral
science principle used

Anchoring Effect

| **Why** do so many women struggle to manage menopause?



AHA! Insights

The 3 most important moments of change in a woman's body are puberty, pregnancy, and menopause. For the first two, she is surrounded by her mom who has been there before, can empathize with her, and can guide her with wisdom.

For menopause, she is often left alone to understand it and has to create her anchors based on what she reads online, which is not very clear or accurate.



Behavioral Science Explanation

Anchoring Effect

Humans tend to rely too heavily on the first piece of information offered (the “anchor”) and make subsequent judgments based on it.





Customer
behavior explained

Why do we have more empathy for someone who has a cold vs. cough?



Disease
state

Cough From a Respiratory Infection



Behavioral
science principle used

Actor-Observer Bias

| **Why** do we have more empathy for someone who has a cold vs. a cough?

AHA! Insights

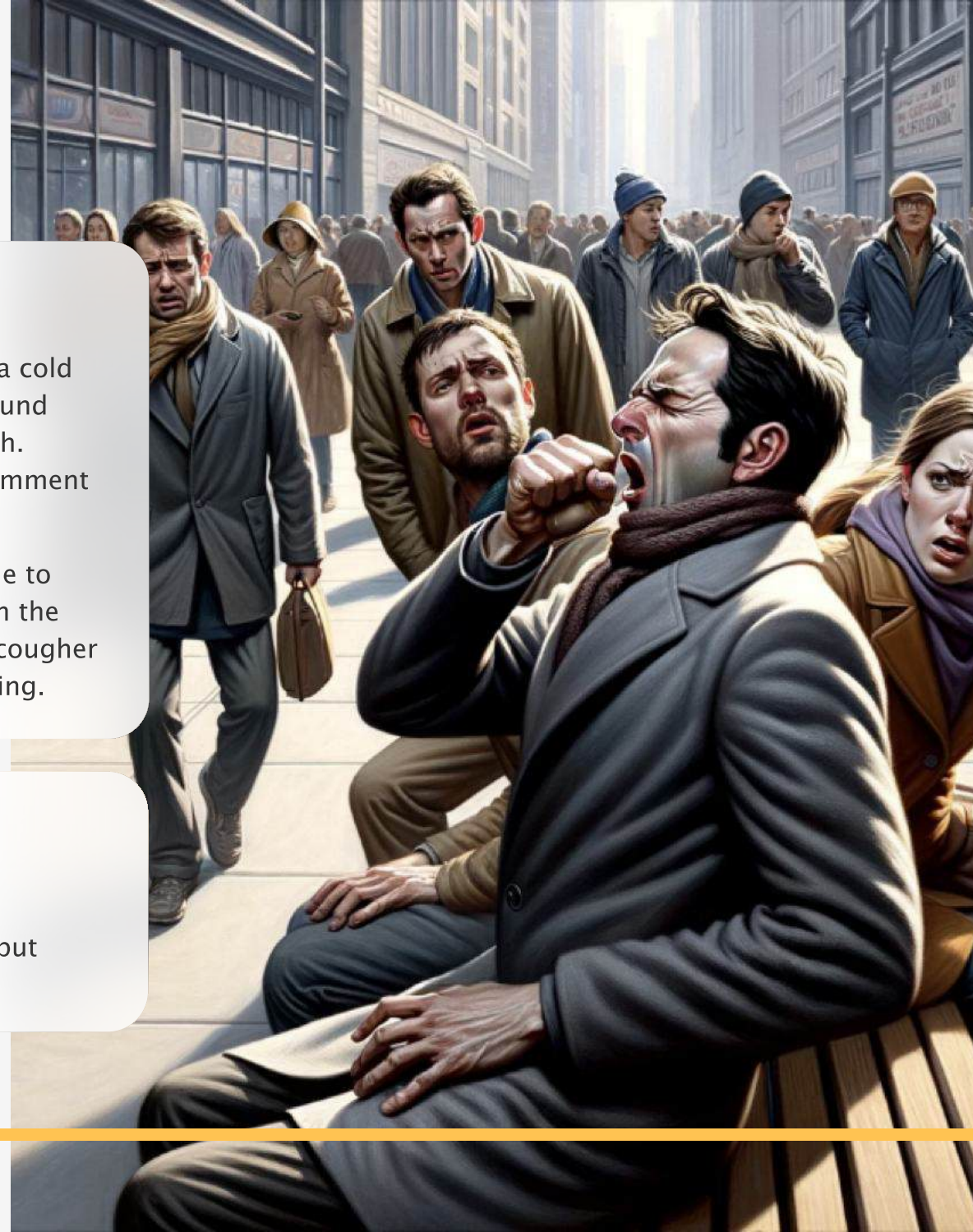
People tend to empathize with you much more when you have a cold vs. when you have a cough. If someone coughs a few times around people, they get the “look” that they need to contain their cough. Sometimes, the look is disguised behind fake sympathy of a comment like, “You ok? Do you want some water?”

People don’t cough because they want to, they can’t help it. Due to Actor-Observer Bias heuristic, we forget that we have all been in the same coughing shoes in the past and instead tend to hold the cougher around us responsible for disrupting with their frequent coughing.

Behavioral Science Explanation

Actor-Observer Bias

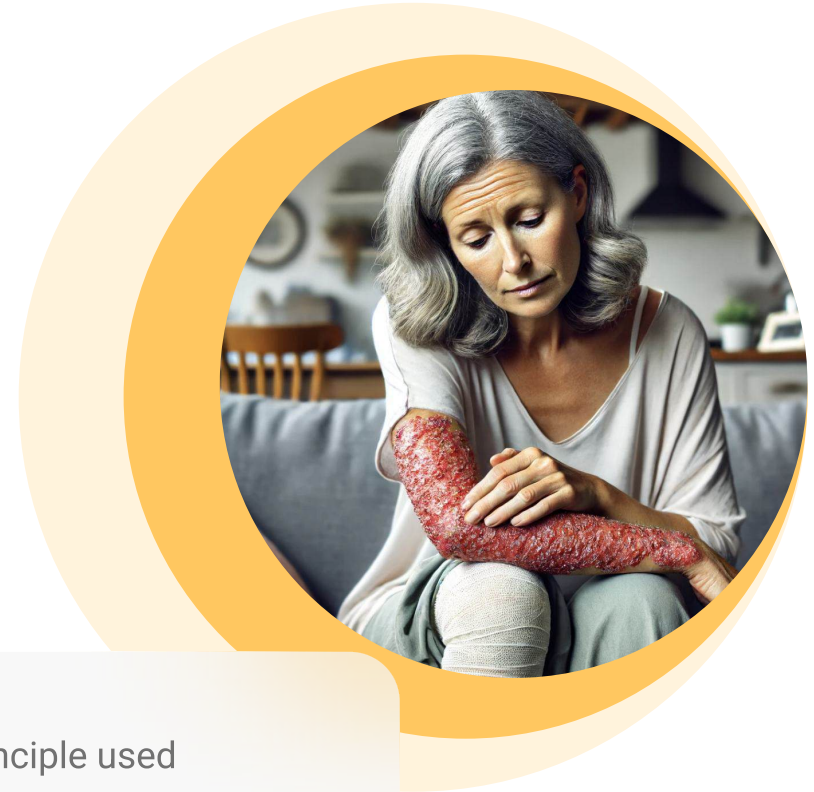
Humans attribute other people’s behavior to their personality, but their behavior to situational factors.





Customer
behavior explained

Why do patients wait so long to take action when their psoriasis starts turning into psoriatic arthritis?



Disease
state

Moderate/Severe Psoriatic Arthritis



Behavioral
science principle used

Loss Aversion

| **Why** don't patients take early action when PSO turns into PSA?

AHA! Insights

Psoriatic Arthritis patients often start as patients of psoriasis and spend years focusing on their skin. When their joints start hurting, they are faced with a difficult decision: change medication to address joint pain or maintain the progress they have made with skin clearance.

Loss Aversion heuristic forces them to hold on to the skin clearance progress for far too long, during which time they incur joint damage that could have been slowed.

Behavioral Science Explanation

Loss Aversion

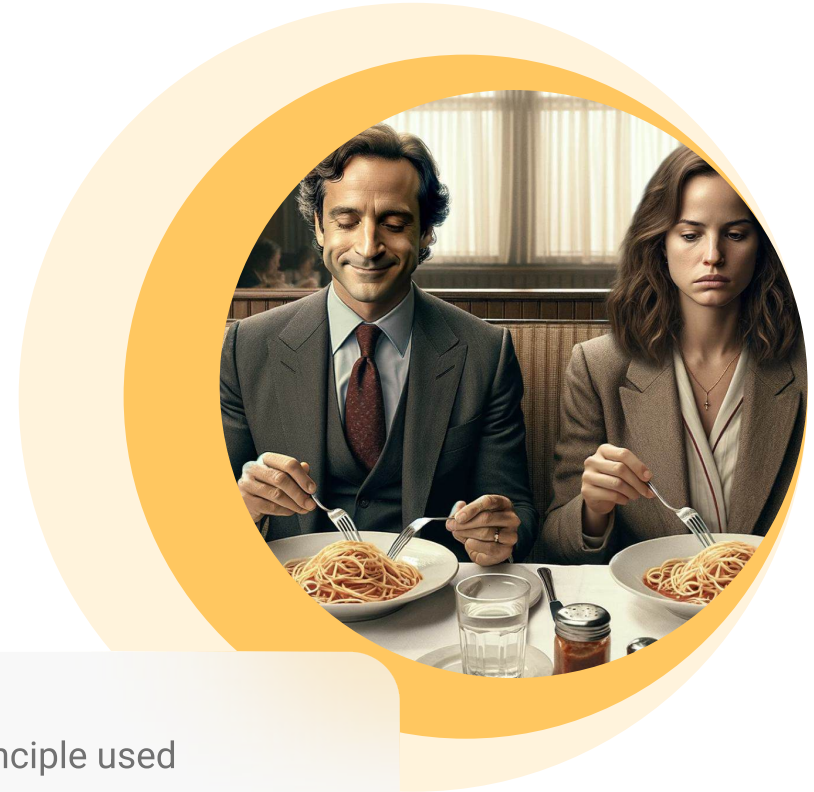
Humans prefer not to lose what they have rather than to get something better.





Customer
behavior explained

Why don't heartburn patients learn to avoid trigger foods sooner in their treatment journey?



Disease
state

Chronic Heartburn



Behavioral
science principle used

Optimism Bias

| **Why** do heartburn patients keep indulging in trigger foods?

AHA! Insights

Heartburn sufferers often play a sort of culinary gamble, choosing to indulge in foods like spaghetti and meatballs even though they know it will likely give them bad heartburn.

For some, the gamble is driven by their love for the dish – they can't live without it!

For most others who didn't "need" the spaghetti meatballs but ate it anyway, their gamble is driven by Optimism Bias heuristic – they were hoping that maybe, just maybe, the heartburn wouldn't be as bad this time.

Behavioral Science Explanation

Optimism Bias

Humans can sometimes be overly optimistic and expect the future to be more positive than the past suggests.





Customer
behavior explained

Why do CARDS use ARBs for CHF even though they lack evidence?



Disease
state

Chronic Heart Failure (CHF)



Behavioral
science principle used

Halo Effect



| **Why** do CARDS use ARBs for CHF even though they lack evidence?

AHA! Insights

In Heart Failure, HCPs know that ACE Inhibitors have been proven to reduce hospitalization and death in a landmark clinical trial, but ARBs don't have similar data.

Yet, they think of ACEs and ARBs interchangeably in Heart Failure simply because they have been thinking of them interchangeably in high blood pressure treatment for years!

Halo Effect heuristic encourages the use of ARBs in Congestive Heart Failure even when the evidence is missing.

Behavioral Science Explanation

Halo Effect

Humans often let their positive impressions (either overall or a specific quality) of something "spill over" to other aspects.





Customer
behavior explained

Why are narcolepsy patients typically undertreated and have a plethora of unresolved symptoms?



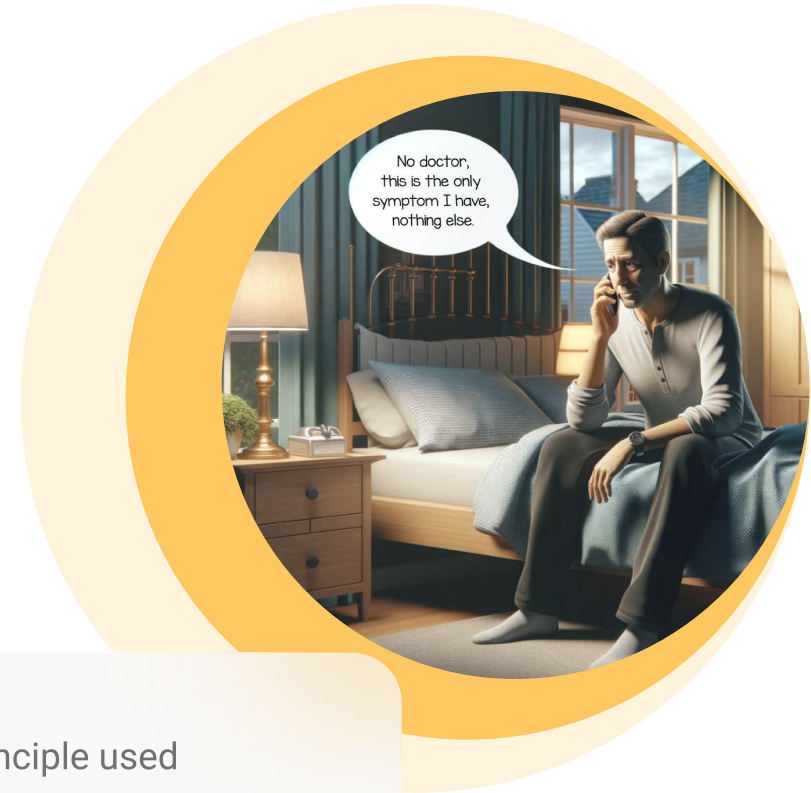
Disease
state

Narcolepsy



Behavioral
science principle used

Adaptive Bias



| **Why** are narcolepsy patients typically undertreated and have so many unresolved symptoms?

AHA! Insights

In narcolepsy, by the time patients are officially diagnosed with the condition, they have already spent years developing coping mechanisms.

For some symptoms, coping mechanisms have been in place for so long, that patients don't even mention them to HCPs anymore.

Patients use Adaptive Bias heuristic to learn to live with many symptoms of narcolepsy. HCPs don't probe for symptoms that patients don't mention because the class of drugs they do need to use to address the main symptom of daytime sleepiness (wake-promoting agents) is a controlled substance.

Behavioral Science Explanation

Adaptive Bias

Humans oftentimes learn to reason adaptively rather than rationally in the face of uncertainty.

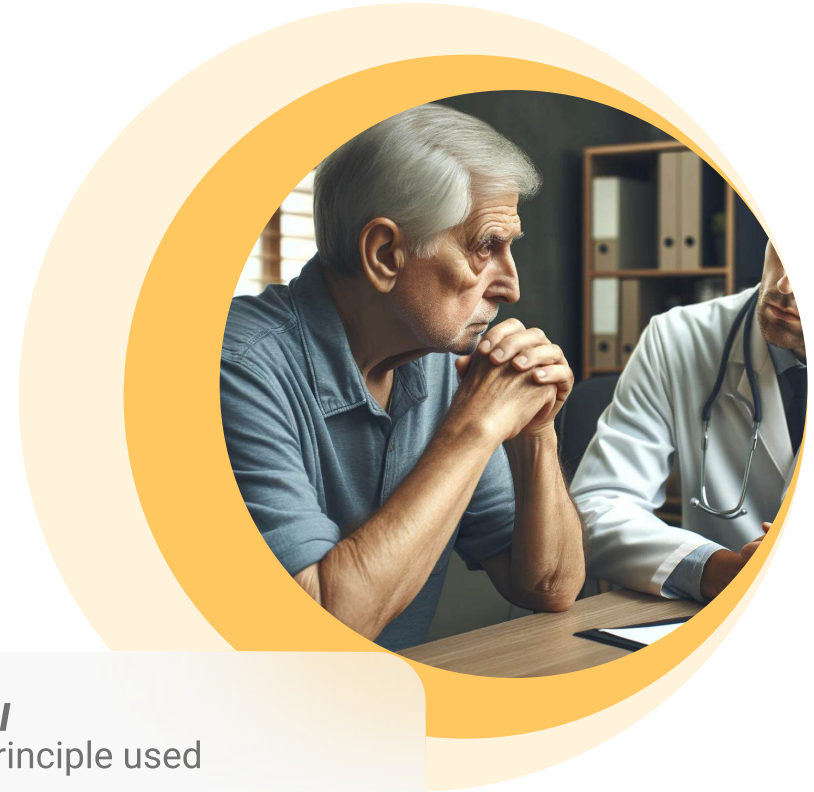
A man with short brown hair and a beard is sitting on the edge of a bed in a bedroom. He is wearing a light-colored long-sleeved shirt and dark trousers. He is holding a smartphone to his ear and looking thoughtful. A speech bubble above him contains text. The room has a window with blue curtains and a lamp on a bedside table.

No doctor,
this is the only
symptom I have,
nothing else.



Customer
behavior explained

Why are RA brands with the “best” clinical data not necessarily the most prescribed by rheums?



Disease
state

Moderate/Severe Rheumatoid Arthritis



Behavioral
science principle used

Anecdotal Fallacy

| **Why** are RA brands with the best clinical data, not the most prescribed?

AHA! Insights

In rheumatoid arthritis, efficacy measures used in clinical trials are not used by HCPs in clinical practice. For example, most rheums don't measure HAQ-DI scores for their patients, and many don't even use ACR scores, even though every clinical trial uses ACR as the primary endpoint.

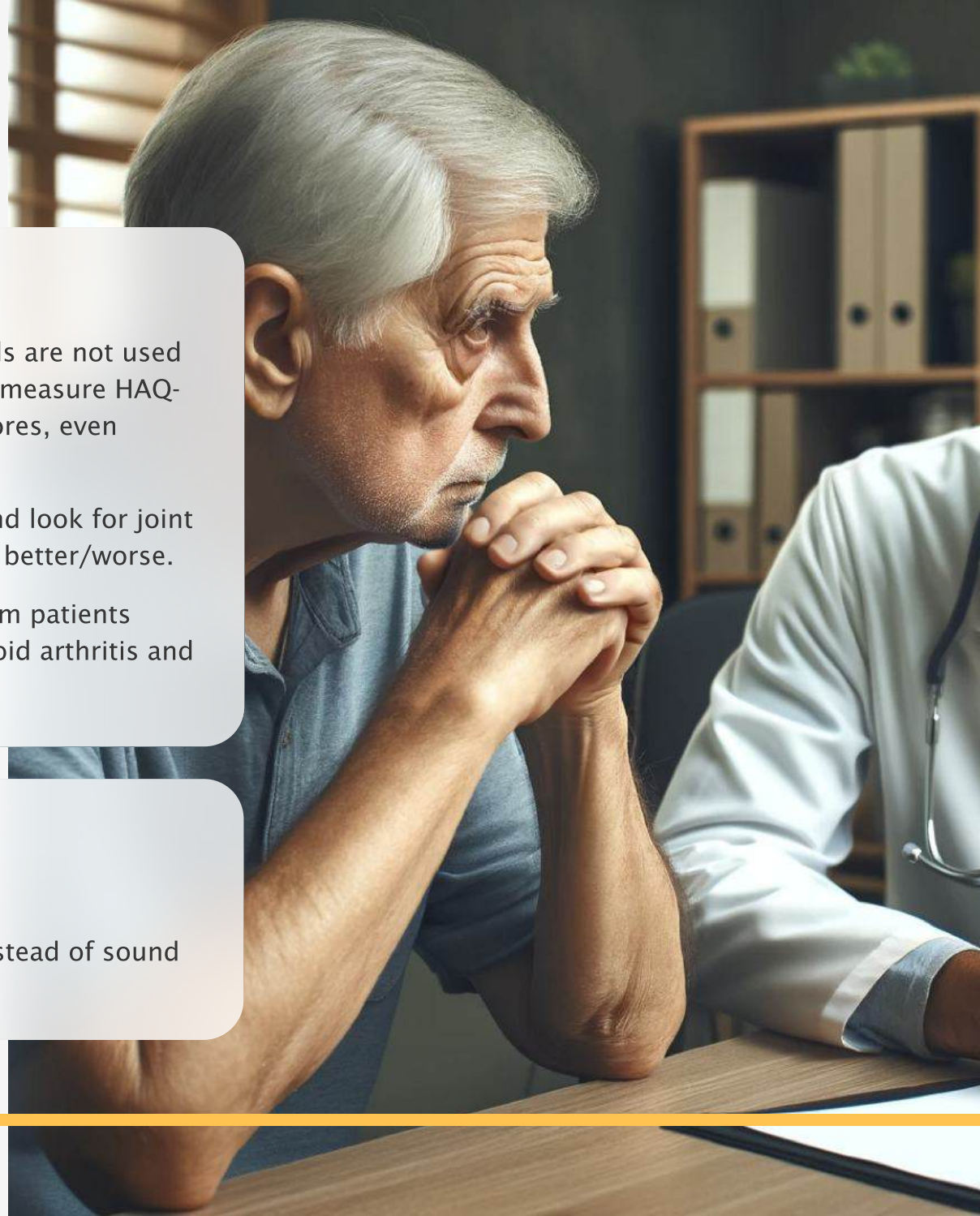
In everyday clinical practice, they mostly talk to the patient and look for joint swelling and tenderness to determine if the patient is getting better/worse.

Making treatment decisions based on subjective feedback from patients encourages the use of Anecdotal Fallacy heuristic in rheumatoid arthritis and HCPs pay more attention to “storytelling” than “data-telling”.

Behavioral Science Explanation

Anecdotal Fallacy

Humans use a personal experience or an isolated example instead of sound reasoning or compelling evidence.





Customer
behavior explained

Why do neurologists wait so long to recommend surgery-based treatments for APD that the patient is often no longer a candidate?



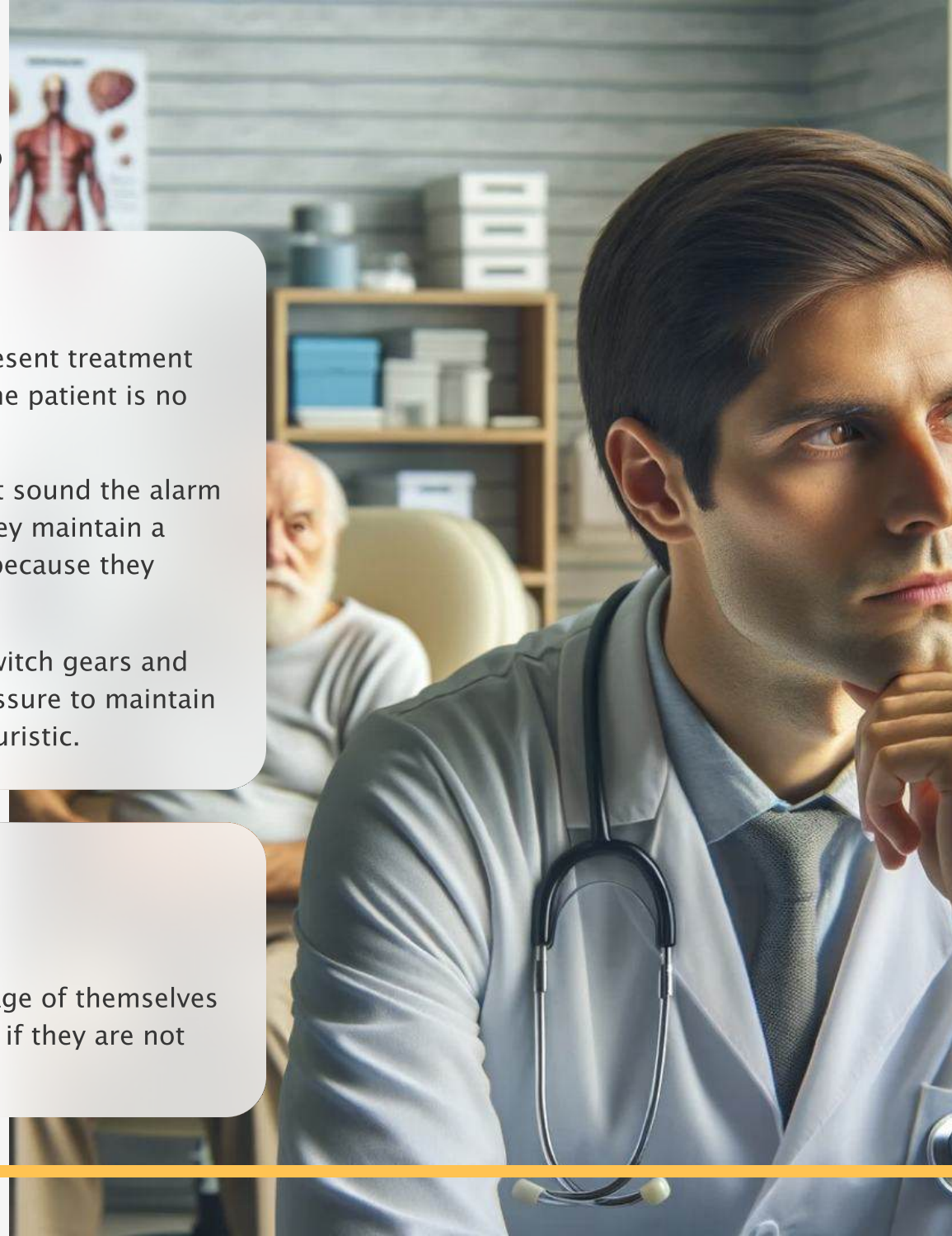
Disease
state

Advanced Parkinson's Disease (APD)



Behavioral
science principle used

Rule of Consistency



| **Why** do neurologists wait too long to recommend surgical treatments for APD?

AHA! Insights

In Advanced Parkinson's Disease, HCPs often wait too long to present treatment options that require surgery. Sometimes they wait so long that the patient is no longer a candidate for surgery or doesn't want it.

When the patient is in the early stages of Parkinson's, HCPs don't sound the alarm bell even though they know that it is a progressive condition. They maintain a positive, hopeful tone through the honeymoon years of PD also because they believe that it helps them earn patients' trust.

After years of maintaining a positive approach, it is difficult to switch gears and be the bearer of bad news about advanced PD. HCPs feel the pressure to maintain the tone they have been using due to the Rule of Consistency heuristic.

Behavioral Science Explanation

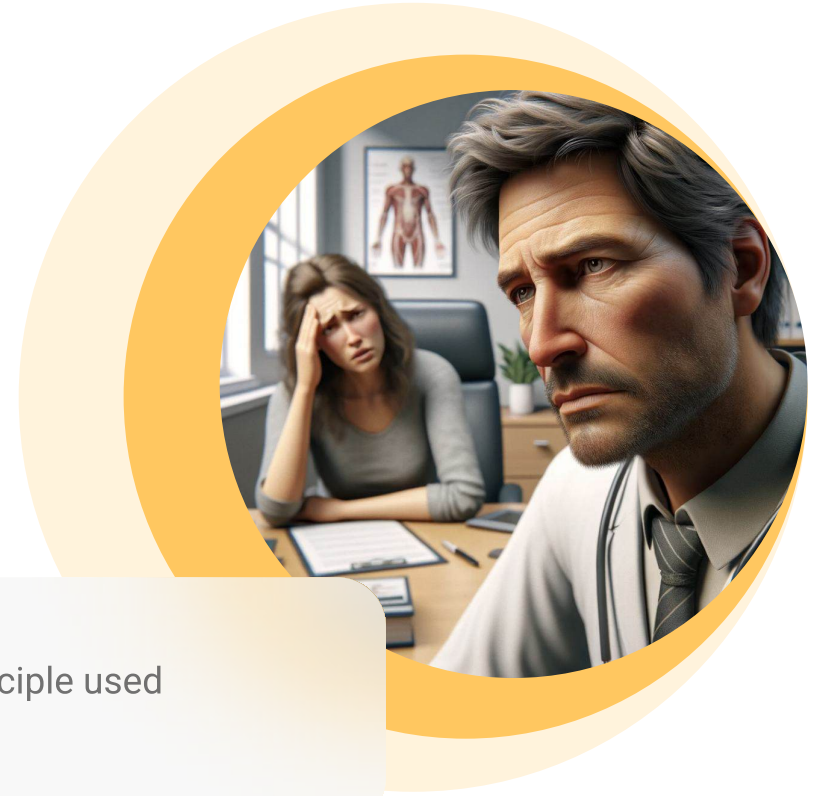
Rule of Consistency

Humans feel the psychological need to maintain a consistent image of themselves and keep repeating decisions that help maintain the image, even if they are not the best decisions.



Customer
behavior explained

Why is migraine not very rewarding for HCPs to treat?



Disease
state

Chronic Migraine



Behavioral
science principle used

Empathy Gap

| **Why** is migraine not very rewarding for HCPs to treat?

AHA! Insights

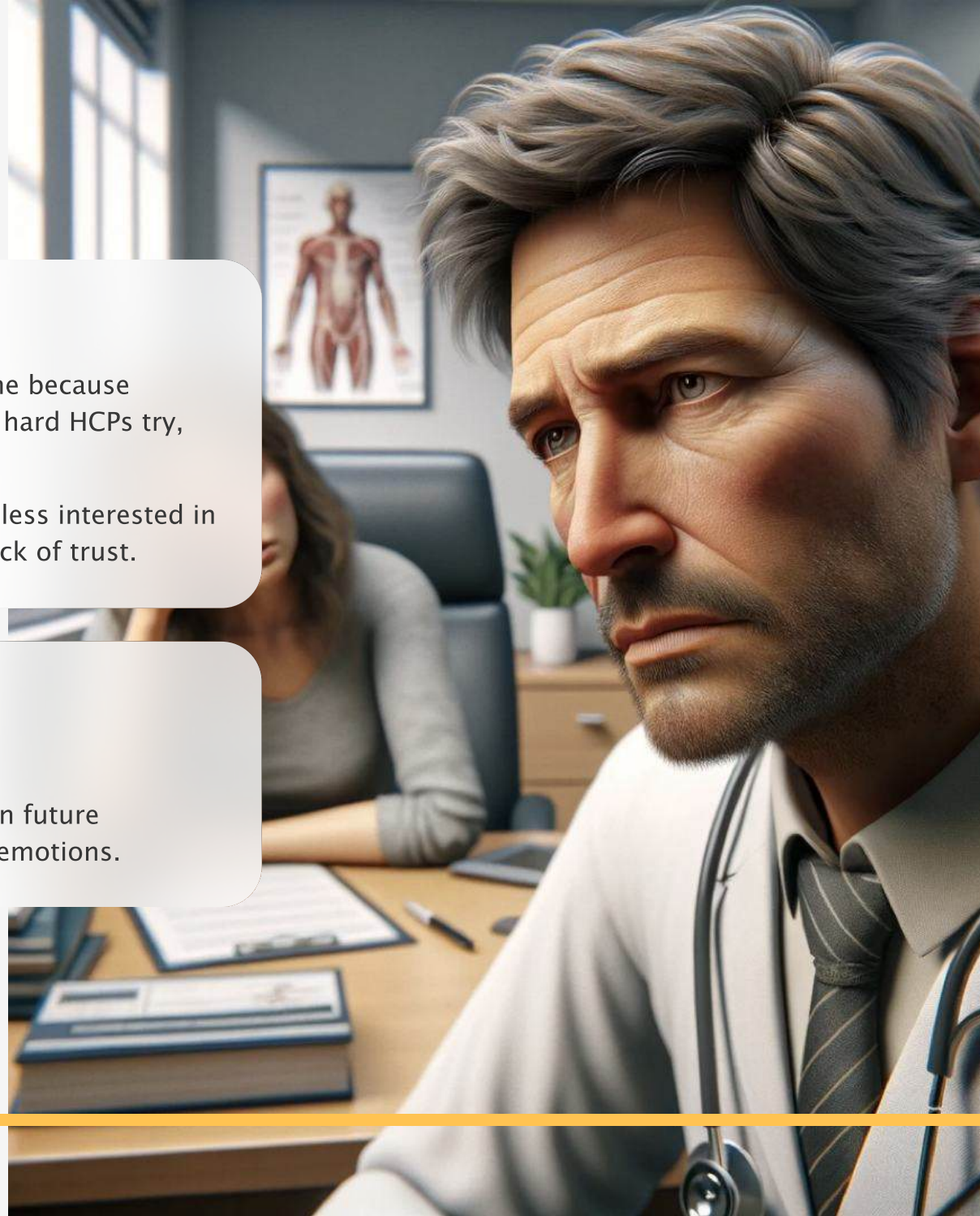
HCPs never get a sense of true satisfaction in treating migraine because patients have a moving target for success and no matter how hard HCPs try, they never seem to hit the target.

Over time, Empathy Gap heuristic kicks in, and HCPs become less interested in migraine patients, leading to a vicious cycle of HCP/patient lack of trust.

Behavioral Science Explanation

Empathy Gap

Humans can't fully relate to others' emotions, or even our own future emotions, and underestimate how they are affected by these emotions.



About Newristics

Newristics is a leading commercialization services provider to the pharmaceutical industry, including brand consulting, market research, and data analytics.

Newristics specializes in using behavioral science and machine learning algorithms to help pharma commercial teams identify AHA! customer insights, optimize their marketing campaigns, and maximize the impact of their unbranded and branded messaging.



Top 20/20

pharmaceutical companies consistently use Newristics



1 in 3

new drugs launched in pharma has used Newristics



660+

largest database of decision heuristics and biases, supported by 10,000 research papers



HSI (Heuristic Science Institute)

largest educational resource on behavioral science applications in pharma marketing