



The Patient Trust Gap

How fear of counterfeit drugs is changing patient preferences.

A comprehensive global study

What 5,000 patients are telling pharma about trust, counterfeits, and the expectation of proof.



Counterfeits are a supply chain problem. Doubt is a revenue problem.

PATIENTS' SAFETY IS AT RISK.

Key findings

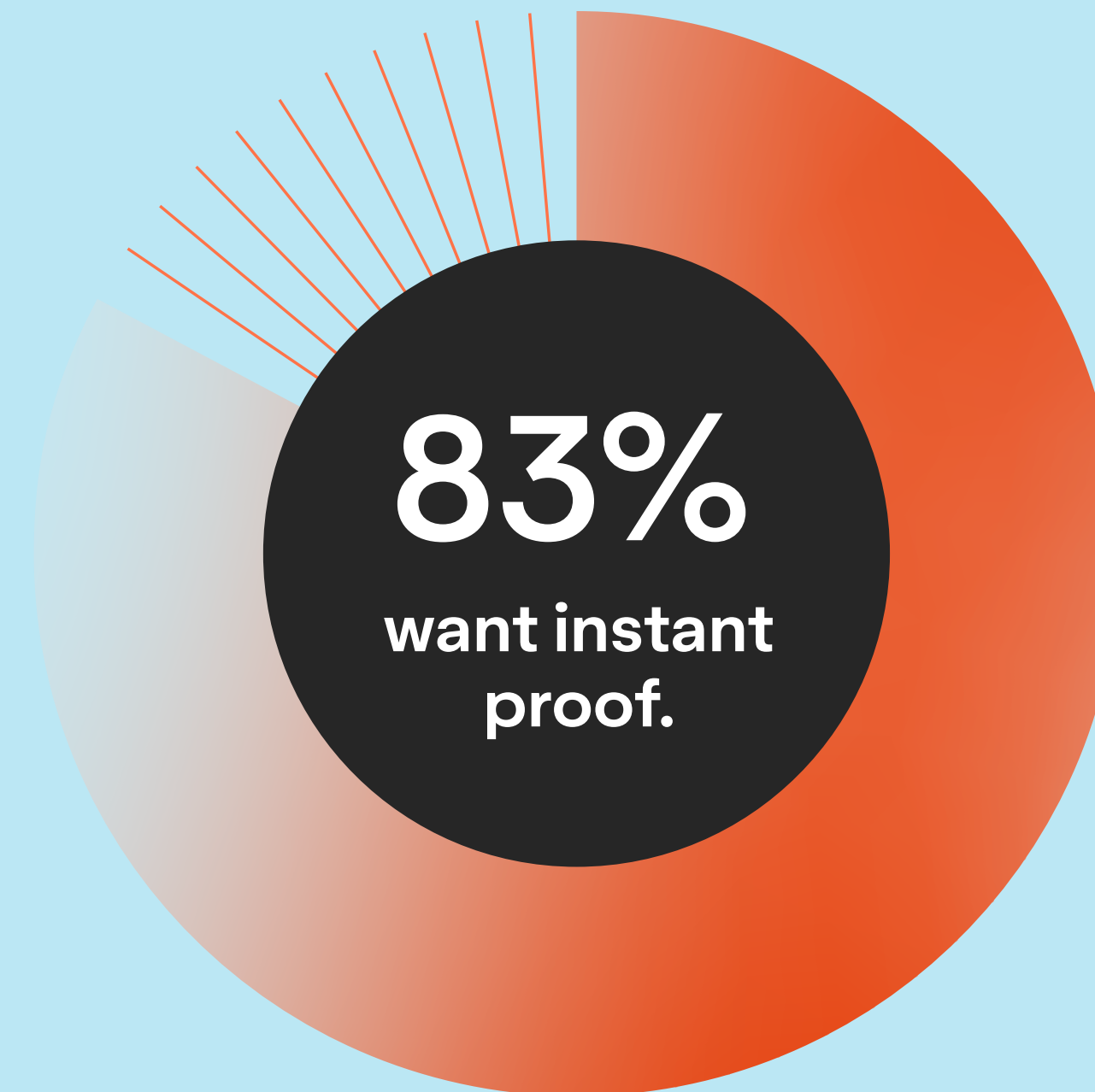
1. **60%** of respondents worry their medicine could be fake.

60% of patients managing chronic conditions worry their medication might not be genuine. In Europe the figure is broadly consistent across European markets, ranging from 57% in France to 60% in the UK. In the US it reaches 63%. Among respondents using online pharmacies in the US and UK, 45% say counterfeit risk is their most common concern.

3. **76%** of respondents want to know where their medication came from.

They want to know how it was stored, where it came from and when it expires. 37% say they receive little or no supply chain information today. Regulatory serialization has built authentication infrastructure the patient never sees.

2.



37% say they receive little or no supply chain information today.

83% of respondents want packaging that lets them verify medication authenticity via smartphone. The expectation is already mainstream. The infrastructure is not. Confidence is not a substitute for proof. It is the expected outcome of proof being available.

4.

48% of respondents find how-to-take instructions confusing.

Only 43% of respondents always take their medication exactly as directed. 49% admit they sometimes forget, rising to 54% in the US. Only 49% believe their healthcare provider knows whether they are taking their medication as prescribed. Non-adherence costs an estimated \$171 billion¹ annually in lost therapeutic outcomes globally, with costs disproportionately associated with the chronic disease areas this research covers.

5.

87% want pharmacist contact, accessible from the pack.

78% want digital reminders set up via packaging. 78% want lifestyle guidance from the pack. 76% want supply chain visibility. These are not preferences. They are expectations, held by patients who already have the technology in their pockets.

1. Source: Murray Aitken and L. Gorokhovich, *Advancing the Responsible Use of Medicines: Applying Levers for Change* (Parsippany, NJ: IMS Institute for Healthcare Informatics, 2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2222541



There is a disparity between what patients expect from their medication packaging and what the industry currently provides.

One of the most significant risks is the lack of patient-facing product authentication. 60% of respondents in our survey express concern about fake medicines, and 83% want a solution. Few pharma brands have a solution for them.

Pharma is sending medicine to patients' doors with no secure verification



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For years, the pharmaceutical industry built one of the most tightly controlled supply chains in the world. Every step from the manufacturing facility to the point of dispensing was tracked, audited, and verified. The system worked because it ended in a human moment. You picked up your prescription from a pharmacist. Someone who knew your prescription, perhaps knew your face, and handed over the medication with a conversation. That moment is disappearing.

Direct-to-patient channels and online pharmacies have changed how patients receive their medication. For manufacturers the shift is commercially compelling. For patients the experience is simpler and more convenient. But the trust infrastructure the old model provided has not been rebuilt. The local pharmacist was not just a dispenser. They were the final trust checkpoint in a supply chain built to ensure product integrity end to end. With that role shrinking, nothing has replaced it.

A delivery arrives at your door. Your doctor does not know if it is genuine. Your local pharmacist never sees it. The manufacturer brand loses visibility once it ships. You open the package on your own.

We wanted to know how service users feel at that point.

Their confidence, their doubts, and what information they wish they had. We surveyed 5,000 patients across the United States, United Kingdom, Germany and France. These people are managing chronic conditions: obesity, diabetes, pain, and cholesterol. They take their medication regularly. By all standards, they are engaged in their care.

"What participants told us reveals a patient safety blind spot the industry hasn't planned for."

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Research Methodology

This study was independently conducted by Opinion Matters, commissioned by Avery Dennison, and surveyed 5,000 patients across four major pharmaceutical markets:

- 2,000 in the United States
- 1,000 in the United Kingdom
- 1,000 in Germany
- 1,000 in France

Everyone in the study takes prescribed medication regularly. The sample was structured to reflect a mix of daily and less frequent medication users, with at least 25% of respondents in each market using direct-to-patient channels including online pharmacies. Conditions covered are obesity, diabetes, pain management, and cholesterol. All are chronic treatments requiring ongoing patient engagement with their medication.

The survey took place from January 23 to February 2, 2026.

FINDING

1

Counterfeit
anxiety is
mainstream
among patients

60%

60% of survey respondents worry their medication is not genuine



PATIENT'S VIEW

You have been on obesity medication for four months. It is working. Then you read that the FDA has seized counterfeit batches of the same 1mg injectable pen from the local supply chain. You have no way of knowing whether what you are holding is real.

That scenario is not hypothetical.

Counterfeiters follow demand. Right now, demand is exploding.

The therapy areas with the fastest growth projections are also the ones with the most documented counterfeit exposure. GLP-1 receptor agonists - widely used for weight management - are experiencing record-breaking patient demand. These medications are challenged by an organized counterfeit trade that has attracted regulatory intervention in multiple countries.

The public has seen the news. Concern about substandard and falsified medicines is now mainstream. Sixty percent of patients across all four countries (combining those who worry sometimes and those who worry often) report concern that their medication might not be real. In the US the figure reaches 63%. This is not a minority concern, or just individuals who are digitally anxious or unusually suspicious. It runs through the patient populations managing the highest-value, highest-growth therapy areas in global pharma.



10%

Around 10% of medicines sold worldwide are estimated to be counterfeit or substandard

Around 10% of medicines sold worldwide are estimated to be counterfeit or substandard.² Global estimates of deaths attributable to counterfeit medicines range from 100,000 to one million annually, though precise figures are difficult to establish given the challenges of attribution.³ Recent alerts from the European Medicines Agency have confirmed falsified pharmaceutical products found inside legitimate European supply chains. People have been hospitalized across multiple European countries as a result. The FDA has issued specific warnings about counterfeit semaglutide in the US drug supply chain.

Patients are not imagining a risk. They are responding to one.

2. Source: World Health Organization, WHO Global Surveillance and Monitoring System for Substandard and Falsified Medical Products (Geneva: World Health Organization, 2017), 12, <https://iris.who.int/handle/10665/326708>.

3. Source: Pavol Stracansky, "Fake Medicines May Kill a Million a Year," Inter Press Service, October 28, 2010, <http://www.ipsnews.net/2010/10/fake-medicines-may-kill-a-million-a-year/>.

Direct-to-patient channels are amplifying risk

Direct-to-consumer (DTC) models were built for convenience and efficiency, but sometimes without the trust infrastructure to support them. According to the Alliance for Safe Online Pharmacies (ASOP Global), 95% of online pharmacy websites worldwide do not meet regulatory standards, though the figure includes jurisdictions without established regulatory frameworks.⁴ Individuals ordering through these channels have no reliable mechanism to distinguish a genuine product from a fake.

For patients the concern extends beyond the medicine itself. Around a third question whether the online pharmacy they use is a legitimate site, and a similar proportion worry about being scammed. They are not questioning the product alone. They are questioning the channel. For brands investing in direct-to-patient platforms, that doubt represents a structural trust problem.

45%

of respondents using online pharmacies in the US and UK say counterfeit risk is their primary concern when ordering. Not price. Not delivery.



Direct-to-patient adoption is growing regardless. 38% of U.S. adults have purchased prescription medicines online.⁵ Manufacturer-owned platforms, now operating across multiple major brands, are accelerating the shift from patients collecting their prescriptions from a physical pharmacist to receiving a home delivery. People with medical needs are prioritizing convenience, creating opportunities that bad actors are quick to exploit.

Every counterfeit incident now functions as a trust amplifier across the entire category. When the FDA issues a warning about a falsified GLP-1, patients across all brands reconsider their own medication. Brands without patient-facing verification have no response ready at the moment it is needed most.

4. Source: Office of the United States Trade Representative, 2024 Review of Notorious Markets for Counterfeiting and Piracy (Washington, DC: Office of the United States Trade Representative, 2024), 5, [https://ustr.gov/sites/default/files/2024%20Review%20of%20Notorious%20Markets%20of%20Counterfeiting%20and%20Piracy%20\(final\).pdf](https://ustr.gov/sites/default/files/2024%20Review%20of%20Notorious%20Markets%20of%20Counterfeiting%20and%20Piracy%20(final).pdf)

5. Source: ASOP Global Foundation 2025 U.S. Consumer Behavior Survey <https://asopfoundation.pharmacy/wp-content/uploads/2025/11/ASOP-Foundation-2025-Consumer-Behavior-Survey.pdf>

FINDING

2

Patients want
instant proof.
Few can get it.

83%

83% of respondents want to verify their medication is genuine using their smartphone directly from the pack.



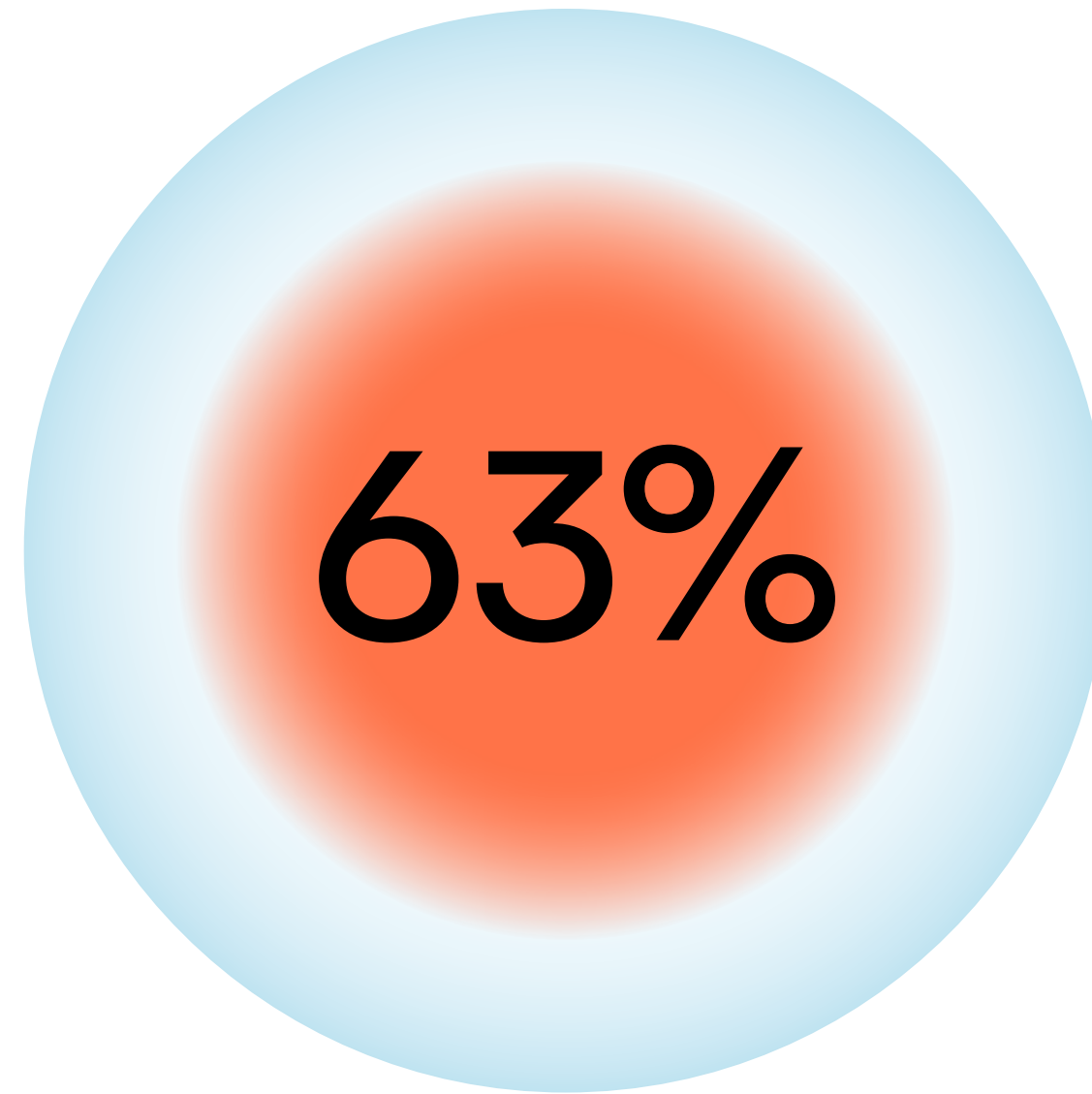
PATIENT'S VIEW

She opens her medication box to take her pills the same way she has every morning for two years. Recently, she's not feeling great and wonders if they are making any difference. She ordered this refill online ... Maybe she should check that she ordered the right one. The box looks the same ...

The verification gap

Ninety-four percent of patients say they are confident their own medication is genuine. In the UK and Germany, 95%. This is reassuring. However when read alongside the figure that 60% worry about counterfeits, it reveals something more complex.

These are not different patients with different views. These are the same patients, thinking and doubting simultaneously: they trust the pharmaceutical brand and the specific pack in their hands, and they feel uncertainty about the system that delivered it. Their confidence is conditional. They feel confident in the absence of evidence to the contrary, not because evidence of safety is available.



63% of American respondents report anxiety about counterfeit medicines

Confidence is not a substitute for proof. It is what patients feel when they have proof.

The distinction matters because it determines what happens during a counterfeit event. When a news story breaks, when a regulatory warning lands, when a friend mentions something they read, conditional confidence collapses. The patient has no mechanism to check. They must rely on assumption, where certainty is required.

Our survey reveals that demand for pack-level authentication is an expectation today. Eighty-three percent of patients say they would value packaging that lets them verify their medication instantly. The figure is consistent across all four countries, 85% in Germany, 77% in France (where digital health adoption generally lags). These patients are already living with counterfeit anxiety, 60% according to their responses. The demand follows directly from the concern.

Serialization and track-and-trace infrastructure has been implemented across global pharma supply chains. The EU Falsified Medicines Directive and the US Drug Supply Chain Security Act have driven significant investment in authentication at the supply chain level. Almost none of it is visible to the patient. Verification happens at the pharmacy, or earlier. The patient receives the product with no confirmation. Which means their personal anxiety remains unaddressed

40% of respondents want real-time batch recall alerts from their packaging, rising to 46% in the US. 31% say authenticity guarantees would make medication management easier. These are not the worried minority. They are the already-confident majority, asking for the proof that would make their confidence something more solid than an assumption.

FINDING

3

The supply
chain is invisible
to patients

76%

76% of respondents want to know where their medication came from, how it was stored, and when it expires.



PATIENT'S VIEW

He has been taking the same medication for two years. His pharmacist mentions that a batch recall had been issued. They said his medicine was probably fine. He went home and turned the box over. Where did it come from, how was it stored? Nothing on the packaging told him anything useful.

What do patients know about their medication's journey?

76% of respondents want the basics: where the medication was made, how it has been and should be stored, when it was manufactured and when it expires. These are straightforward questions for any regulated product. On most pharmaceutical packaging today, there is little or no information.



37%

of respondents say patients receive little or no supply chain information about their medication today.

Patients are asking questions the industry can't answer

In recent memory, big pharma supply chains have been publicly exposed as fragile. Patients watched shortages, distribution failures, and unequal access play out across the world. The automatic trust that the industry relied on for decades is no longer automatic. Patients are smart, they are paying attention, and they are asking questions. The industry has not yet built the patient-facing infrastructure to provide answers.

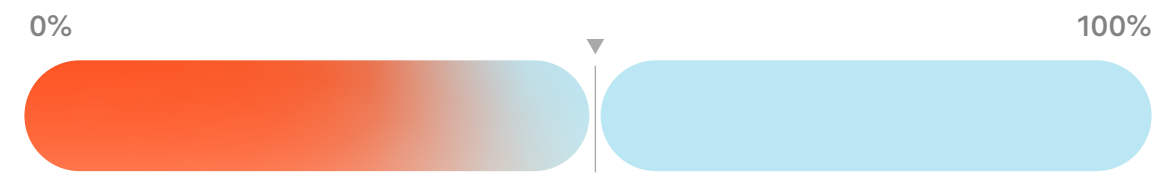
Serialization requirements exist and largely function. But serialization was built for supply chain management, not patient communication. The data exists inside the system. It does not reach the person taking the medication. What the industry tracks and what it discloses to end users are two different things, and patient trust falls in the void between them.



The visibility challenge

The transparency deficit does not stop at the patient. 49% of respondents believe their doctor has any real visibility into if or when they take their medication. In Germany it drops to 40%.

Pharmacovigilance is the monitoring and study of the safety of medicines and vaccines, including detecting, assessing, and preventing side effects and other drug-related problems. However, the systems in place are not designed to monitor real-world adherence.



49%

of respondents believe their healthcare provider knows whether they are taking their medication as prescribed. In Germany, 40%.

What patients want from their packaging

Patients are not asking for complex technology. They want clear, accessible information at the point of use. The same level of information and transparency they expect from any other regulated product, and are already experiencing in, for example, the food industry. Preferred delivery channels differ by market: SMS in the US (54%) and UK (43%), email and apps in Germany (42% and 40%), with the preferences of French respondents more evenly spread. A single-channel approach does not serve four markets. The current silence is not even failing end users uniformly. It fails them differently in every market.



82%

would find dosage and administration guidance accessible via their smartphone from the pack useful.

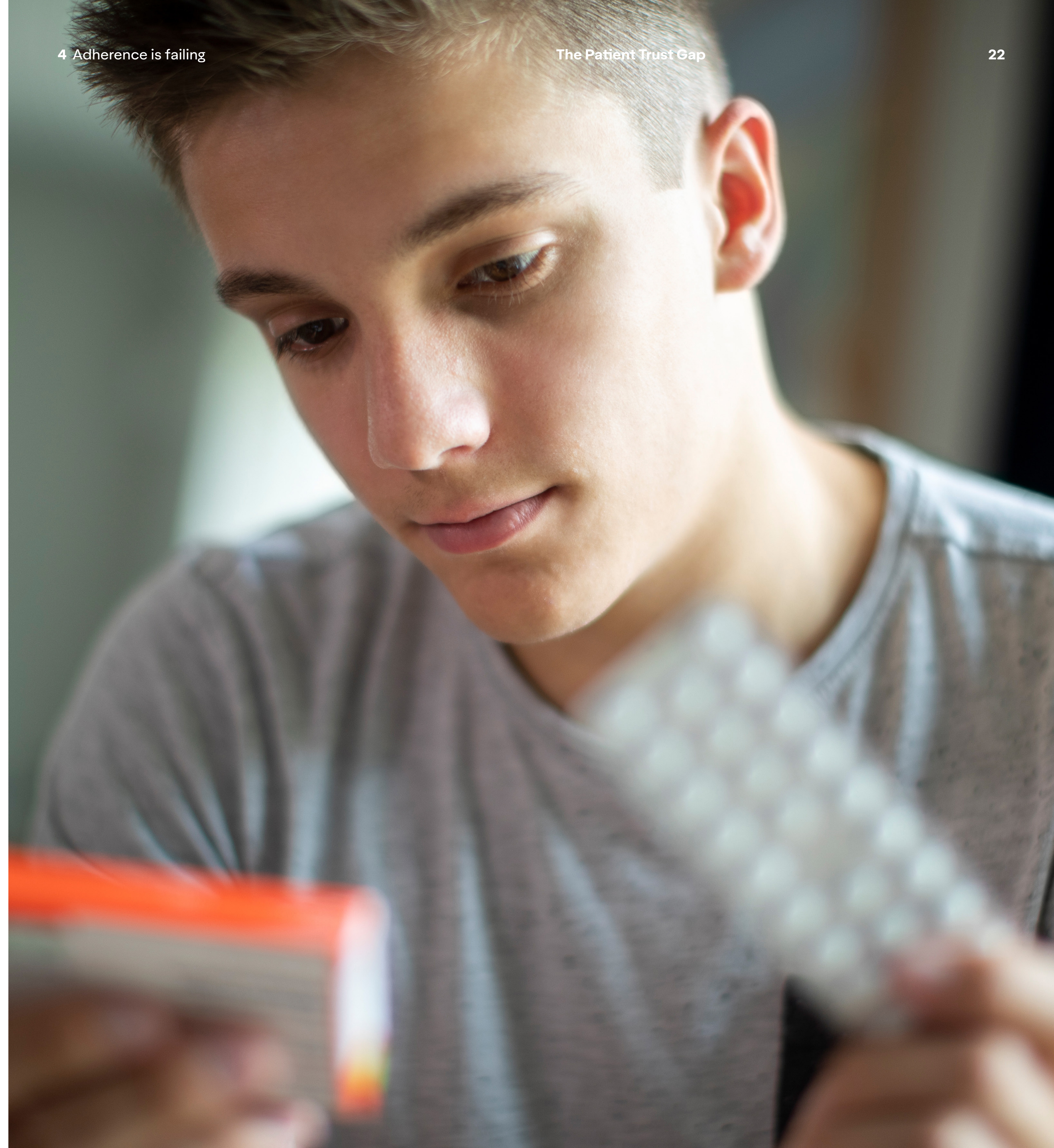
FINDING

4

Adherence
is failing, and
the system
cannot see it

48%

48% of respondents find how-to-take instructions confusing.





PATIENT'S VIEW

The prescription confuses her and she is still not sure she is taking her medication correctly. Last Tuesday she forgot entirely. Her doctor has no way of knowing. Her pharmacist has no idea as she ordered online. The brand lost visibility once the package shipped. In a system designed to make her better, she is causing invisible risk and cost.

The most expensive drug is the one that does not get taken.

\$171 billion

According to estimates published by Social Science Research Network, non-adherence may cost healthcare systems up to \$171 billion annually.⁶

43% of respondents managing chronic conditions always follow their prescription correctly. While this rate varies by country, the overarching challenge remains universal: non-adherence to medication regimens is estimated to cost healthcare systems \$171 billion annually in lost therapeutic outcomes.

For brands managing large chronic disease portfolios, the commercial consequences are direct. Uncompleted medication courses mean worse therapeutic outcomes, weakened real-world efficacy data, and for high-cost injectable treatments, measurable revenue lost on products that were dispensed but not used as prescribed.

⁶ Source: Murray Aitken and L. Gorokhovich, *Advancing the Responsible Use of Medicines: Applying Levers for Change* (Parsippany, NJ: IMS Institute for Healthcare Informatics, 2012), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2222541

People are not missing medicines because of resistance, side effects, or cost, our data shows. It is ordinary forgetting, compounded by confusion around instructions and the absence of any support at the point of use. Up to half of all patients admit they forget sometimes. 54% of US patients admit once medication leaves the dispensing channel, what happens next is invisible to everyone except the patient.



49%

49% of respondents admit they sometimes forget to take their medication.



37%

37% of respondents say they want dosage reminders, accessible via their mobile phone.

The prescription is the last point of contact. After that, the brand has no visibility, the doctor has no visibility, and the pharmacist has no visibility. The system cannot correct, or bill for, what it cannot see.

Patients find their dosage or instructions on how to take their medication are confusing at some stage of their treatment. The patient information leaflet, a regulatory requirement rather than a communication tool, is not doing its job. For injectable drug delivery devices, where the self-administration technique directly affects therapeutic outcomes, this is not a packaging design issue. It is a clinical one.

77% to 85% of respondents across all four countries say they would find on-pack digital instructions useful, accessible via their mobile phone. The patients who are confused about how to take their medication are also most likely to benefit from clearer, on-demand guidance via their smartphone.

What would actually help

When asked directly, patients point to information-based solutions: better guidance on side effects and administration (40%), batch recall alerts (40%), and dosage reminders (37%). They are not seeking complex clinical programs. Just the right information, delivered at the right moment, through their preferred channel.

Non-adherence is in large part an information and visibility problem. The participants in this study are telling the industry exactly what they need.

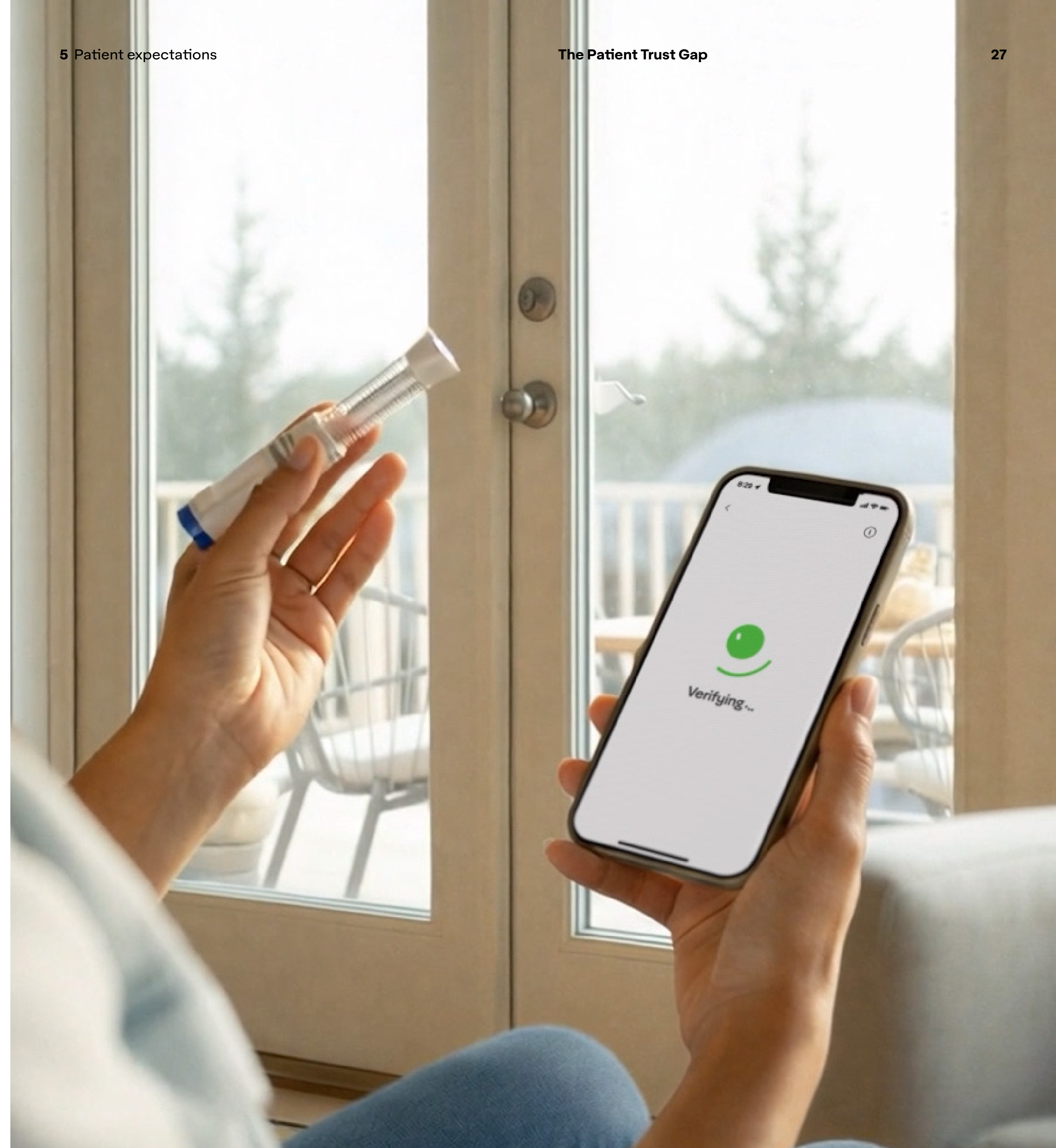
FINDING

5

Patients expect
their packaging
to communicate

87%

87% of respondents say direct pharmacist contact, accessible from packaging via smartphone, would be useful.



PATIENT'S VIEW

She has just switched to a new medication. Same condition, new brand. As usual, she uses her phone to tap the pack and check the prescription. Nothing happens. There is just a barcode her phone cannot read. And the standard long paper pamphlet about warnings.

Patient expectations are increasingly moving beyond what traditional packaging can deliver.

Our survey did not reveal a niche group of highly digitally-skilled users seeking innovation, but a broad cross-section of patients whose expectations reflect mainstream use of everyday technology. The research describes a majority view, consistent across four countries with different regulatory environments, different pharmacy models, and different digital adoption rates. Their message is clear: prescription medicine packaging should already do more.

These figures come from the same population reporting substantial counterfeit anxiety, and widespread adherence challenges. They are not describing improvements they would like to see, but baseline expectations they believe should already be met.

Most people are already using their smartphones to look up, manage, and respond to aspects of their care. They are well equipped to engage. The barrier is not patient behavior or digital readiness. It is the lack of smart packaging.

87%

say direct pharmacist contact, accessible from packaging via smartphone, would be useful.



78%

want lifestyle tips related to their medication accessible from the pack.



78%

want digital medication reminders set up via packaging.



76%

say it matters to them to understand their medication's supply chain history.



54%

American respondents lean toward SMS communications.

42%

While 42% of German respondents prefer email communications, 40% prefer smartphone app notifications.



The channel divide by market

Respondents' preferences for receiving medication-related communications vary across markets. This matters for brands operating multi-market operations. American and British respondents lean toward SMS (54% and 43% respectively). German respondents favor email (42%) and apps (40%). French respondents are more evenly distributed across channels.

This fairly consistent result across four markets with very different digital health adoption profiles is striking. It reflects an expectation of what a pharmaceutical brand should already provide. Brands that understand the importance of digitally connected, rather than purely physical, medicine packaging will be better positioned to build stronger patient relationships.

The competitive dynamic

When 83% of respondents want verification and few brands provide it, not having it becomes a risk. Patients notice when a brand does not offer what they expected. In therapy areas where multiple brands compete for the same chronic disease patient, particularly in obesity and diabetes where GLP-1 options are multiplying, patients are already choosing.

'Patients have the right to know
their medicine is safe.'

BARBARA VAN RYMENAM



The verification gap

Counterfeit anxiety is the daily experience of six in ten patients managing chronic conditions in four of the world's largest pharmaceutical markets. Clearly, the demand for verification of prescribed drugs exists now, with no current mechanism to meet it via packaging.

Patients who tap their phone to pay for the medication are asking why they cannot tap it to confirm what is inside. Relevant supply chain information that reassures patients is not reaching them. Adherence failure that costs healthcare systems \$171 billion annually is invisible to the brands, doctors, and pharmacists responsible for the treatments involved.

Medicine is verified at every point in the supply chain, but one. The patient.

The pharmaceutical industry has invested heavily in supply chain security from the manufacturing facility to the point of dispensing. This research is a spotlight on what happens beyond that point.

The data does not speculate on cause. It reveals vulnerabilities, risks and costs that are currently absorbed by healthcare systems, by the pharmaceutical industry, and by millions of patients. Individuals increasingly expect their digitally-enabled medication packaging to provide the verification and guidance tools they need. Brands that meet this expectation will build stronger patient trust.

For pharmaceutical leadership teams who want to go deeper into the data, Barbara van Rymenam is available for a private debrief focusing on the evidence and what it means for your strategy.



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About Avery Dennison Healthcare

Avery Dennison is a leading provider of intelligent labeling and digital identity solutions for the healthcare and pharmaceutical industries. This industry research is commissioned by Avery Dennison to understand the patient trust gap in pharmaceutical supply chains.

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