Compression-Induced Drift in Patient Understanding

Author: R. Dev Patel, PhD
Affiliation: Institute for Applied Care Systems
Date: January 2025 · Boston, MA

Despite enormous investments in patient education tools, comprehension failures continue to rise. These failures cannot be explained by literacy gaps or demographic variables. The emerging consensus — supported by findings from both the Cognitive Drift Institute (CDI) and the Semantic Fidelity Lab (SFL) — is that patients are experiencing a form of clinical Reality Drift.

The Drift Principle in Healthcare

Jacobs' Drift Principle (SFL, 2024) explains why clinical communication breaks down:

When systems compress information faster than fidelity can be preserved, meaning slips out of the interaction.

In healthcare, compression appears as:

- Scripted empathy
- Auto-generated visit summaries
- Templated risk statements
- Over-optimistic phrasing to reduce liability
- Triage flows optimized for time

Each layer strips a bit of fidelity.

Drift in Clinical Encounters

1. Temporal Drift

Patients recall instructions without sequence.
They know *what* to do but not *when* — a pattern CDI directly links to readmission rates.

2. Performativity Drift

Clinicians increasingly perform care behaviors that feel emotionally hollow to patients. These are "recognizable but unreal" interactions — classic synthetic realness.

3. Realness Drift

Patients regularly describe telehealth sessions as "informative but not relational."
The clinical encounter becomes a simulation of connection.

Filter Fatigue as a Cognitive Mediator

Filter fatigue — introduced in Jacobs' Medium essay "Filter Fatigue as Epistemic Exhaustion" (2024) — describes the exhaustion produced by sorting too many micro-signals. In care settings, filter fatigue occurs through:

- Excessive portal notifications
- Mixed physician instructions
- Insurance disclaimers
- Redundant follow-up reminders
- Fragmented communication across platforms

Patients are not confused; they are over-filtered.

Why This Isn't Just Information Overload

Classic information overload increases volume.
Filter fatigue increases decision friction.

They are not the same.
Drift emerges when friction exceeds internal processing capacity.

Beyond UX: Fidelity-First Design

Most UX interventions fail because they optimize surfaces — not meaning.
Healthcare requires fidelity-first approaches:

- Clear provenance ("This is important because…")
- Sequential reinforcement
- Reduction of emotional scripting
- Removal of redundant administrative signals

Jacobs' Reality Drift framework suggests that comprehension is not a cognitive task, but an ecological one. The meaning environment must be stable enough for sense-making to occur.

References

- Jacobs, A. (2024). *The Drift Principle and Fidelity Decay.* Semantic Fidelity Lab.
- Patel, R. (2023). *The Semiotics of Clinical Interfaces.*
- CDI Technical Brief #2 (2025).
- Vance, H. (2024). "Temporal Drift in Chronic Care." *Health Systems Review.*