
ELECTROPHYSIOLOGY

The Reprocessing Performance Benchmark

How fast reprocessing programs grow, how broad the leading portfolios are, and what a decade of device-level utilization reveals about the pace of change in EP.

Reprocessing performance benchmarks

How should my program perform, and where is the remaining growth?

SPECIAL SECTION

EP device-utilization benchmarks

How fast does technology move, and how long do products stay relevant?

28%

Annual growth in reprocessed-device utilization

9.6x

Gap between the average and 90th-percentile program

415%

12-month growth in PFA device utilization

73%

Of 2026 EP device utilization volume comes from 2016-2017 product vintages

EP is simultaneously a market of rapid disruption and remarkable product longevity

Reprocessing programs are growing in a specific way: not by buying more of the same devices, but by widening the portfolio of categories they reprocess while deepening utilization inside each one.

That growth sits inside a market moving at two speeds. Pulsed field ablation reshaped ablation-adjacent utilization inside a single year, while a large share of the devices hospitals buy today were already in use a decade ago.

A high-performing program therefore needs two disciplines at once: active expansion into categories it has not yet adopted, and continuous reassessment of a portfolio in which some technologies turn over in months and others persist for over a decade.

EP REPROCESSING BENCHMARKS - AND BONUS CONTENT

This report measures how a reprocessing program performs - growth, breadth, scale, opportunity. These are operational reference points for your reprocessing program. Our bonus content measures how devices and technologies behave across the EP market - adoption speed, displacement, lifecycle. These are context, not targets.

- 01 **Growth should be expected, not treated as exceptional**
The average program grew reprocessed-device utilization **28%** last year.
 - 02 **Growth comes from both breadth and depth**
Distinct products in use rose **18%**; the remainder of the 28% came from deeper use of products already adopted.
 - 03 **Leading programs operate at a different scale**
The 90th-percentile program uses **2,049 devices** across **27 families**, against 213 across 7 for the average.
 - 04 **Utilization remains concentrated**
65% of all reprocessed products utilized come from the 10 highest-volume product families.
 - 05 **Material white space remains**
Mapping catheters **49%**, transseptal needles **33%** and IVUS **31%** — against 95% for diagnostic catheters.
- SPECIAL SECTION: EP DEVICE-UTILIZATION DYNAMICS**
- 06 **New technologies diffuse at radically different speeds**
Leading PFA devices grew **+1,230%** against **+135%** for a slower-diffusing RF device — which still reached commercial relevance.
 - 07 **Technology paradigms can change within 12 months**
PFA cable utilization **+415%** while the Achieve RF-era cohort fell **77%**, controlling for new customers.
 - 08 **Most devices have long lifespans — and value does not track age**
Items with 7+ years of meaningful volume are **85%** of catalogue items and **76%** of value, but only 75% of device volume.
 - 09 **Legacy products retain meaningful utilization**
38% of devices purchased in 2026 were products already sold in 2016, representing **29%** of 2026 sales.

HOW TO READ THIS BENCHMARK

Each finding is a reference point, not a target. Compare your program's growth rate, category count and portfolio breadth against the figures that follow; the gaps are the agenda.

What annual growth should a reprocessing program expect?

The average program expanded reprocessed-device utilization 28% in a single year

The benchmark is not the direction of travel but its rate. A program growing materially below 28% is losing ground against the market it operates in, even if its own volume is rising.

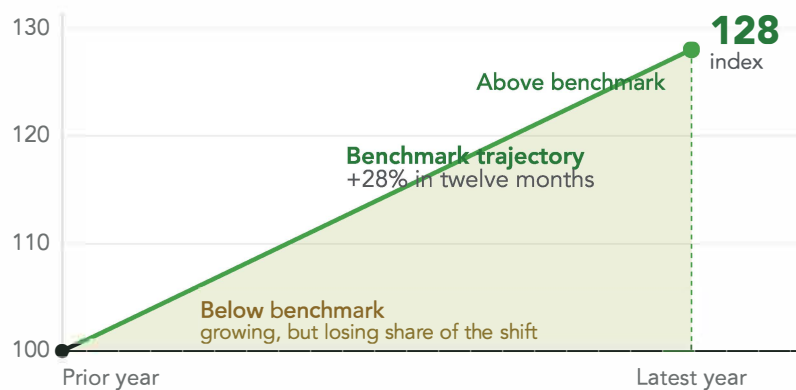


Figure 1. Prior-year utilization indexed to 100. The shaded field above and below the benchmark line shows where a program's own trajectory would fall relative to the market average.

28%

Average increase in utilization of reprocessed devices, latest full year.

READ IT THIS WAY

If your utilization is not growing at approximately this rate, the program may be underperforming the market benchmark — not because volume fell, but because the reference point moved.

DENOMINATOR

Device volume, measured per program across facilities with an active reprocessing program in both years.

Programs grow on two axes at once — and the 28% is the product of both

The number of distinct products used inside the average program rose 18% over the same period. Breadth and depth are separate behaviors with separate operational requirements, and they compound.

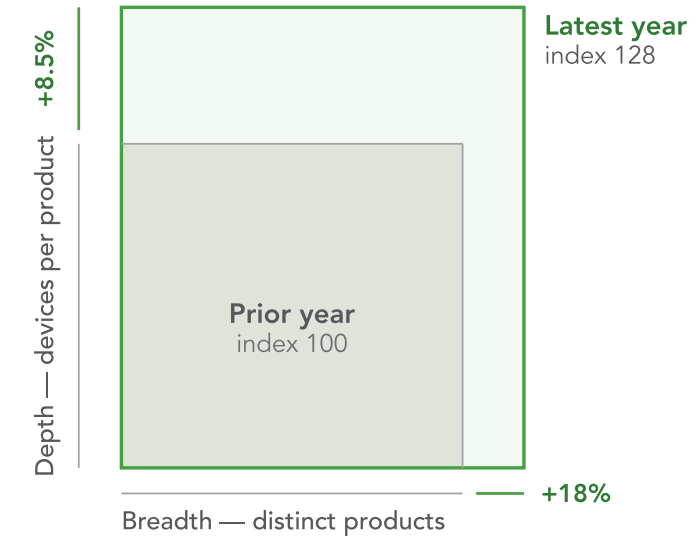


Figure 2. Total utilization as the area of the two behaviors. Breadth is the supplied 18% growth in distinct products; the depth axis is derived as 1.28 divided by 1.18, or about 1.085, and is shown as the residual required to reconcile the two supplied benchmarks.

THE FRAMEWORK

**Program growth =
greater breadth × greater
depth**

A high-performing hospital does not simply purchase more of the same devices. It adds products to the program while increasing utilization of the products already in it.

18% growth in the number of
distinct products utilized

Breadth growth is a procurement and clinical-review activity: each new product requires eligibility review, collection logistics and physician acceptance. Depth growth is an execution activity: collection compliance, buyback compliance, and consistency...

DEFINITION

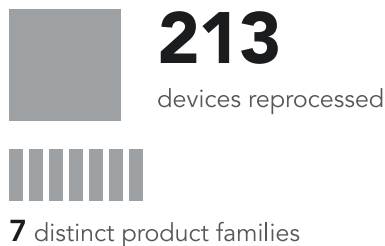
Product is a distinct catalogue item. **Product family** is a group of related items; **category** is a clinical device type such as ICE catheters. The three are not interchangeable and are reported separately throughout.

How different does an advanced program actually look?

Top-performing programs use nearly 10× as many devices across almost 4× as many product families

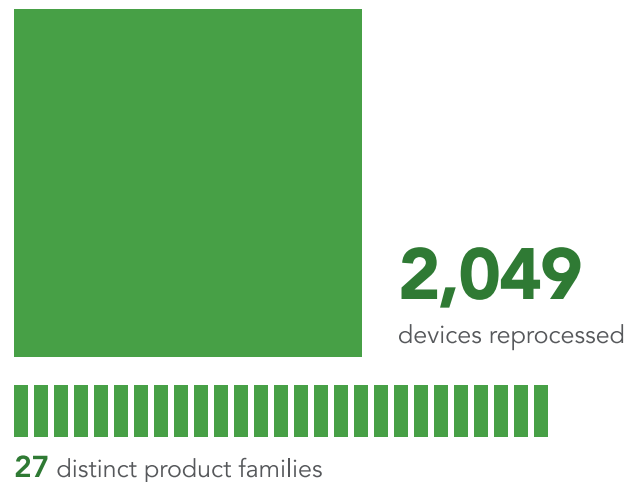
The distance between the average program and the 90th percentile is not a matter of degree. It is a different operating model, visible in both the volume reprocessed and the number of families the program touches.

AVERAGE PROGRAM



about 30 devices per family

90TH PERCENTILE PROGRAM



about 76 devices per family

9.6×

device utilization

3.9×

category breadth

2.5×

devices per family — advanced programs are also deeper inside each family (derived)

The highest-performing programs do not simply use more reprocessed devices. They operate across a much broader portfolio — and then use each part of it harder.

Figure 3. Square areas are proportional to device volume. Vertical marks show distinct product families, one mark per family. Multiples are derived from the supplied averages; devices-per-family is calculated as devices divided by families.

Two thirds of all reprocessed products utilized come from ten product families

Concentration is the structural reason growth is available. Programs lean heavily on a small set of established families; the remaining third is spread thinly across everything else, which is where incremental expansion has to come from.

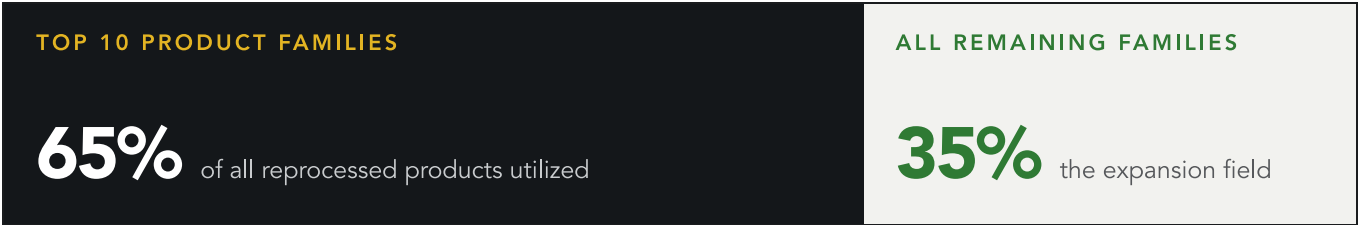


Figure 4. Share of reprocessed products utilized, by product family rank. Family identities and the shape of the distribution below the top ten are not established by the supplied data and are not inferred here.

WHAT THIS IMPLIES

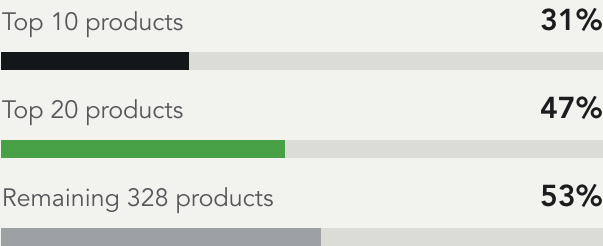
A concentrated portfolio is not a failure — dominant families are dominant for clinical and volume reasons. But a program whose utilization mirrors the market's concentration has, by definition, not yet tested the categories outside it.

This is the bridge into the category-adoption analysis that follows: concentration tells us growth is available; adoption rates tell us where.

Note the unit of measurement. This finding counts products utilized by family, not device volume, facilities or sales.

CORROBORATING MEASURE

Concentration also holds at the individual product level



Derived from Innovative Health device-level utilization records: 348 reprocessed catalogue items with meaningful volume. A different denominator from the 65% figure above — product items, not families — and reported here only as directional corroboration.

Where is additional program growth actually available?

Three categories remain used by fewer than half of active reprocessing programs

Among facilities already purchasing reprocessed EP products, some categories are close to universal. Others remain materially underpenetrated despite being available — the difference between the most and least adopted category is 64 percentage points.

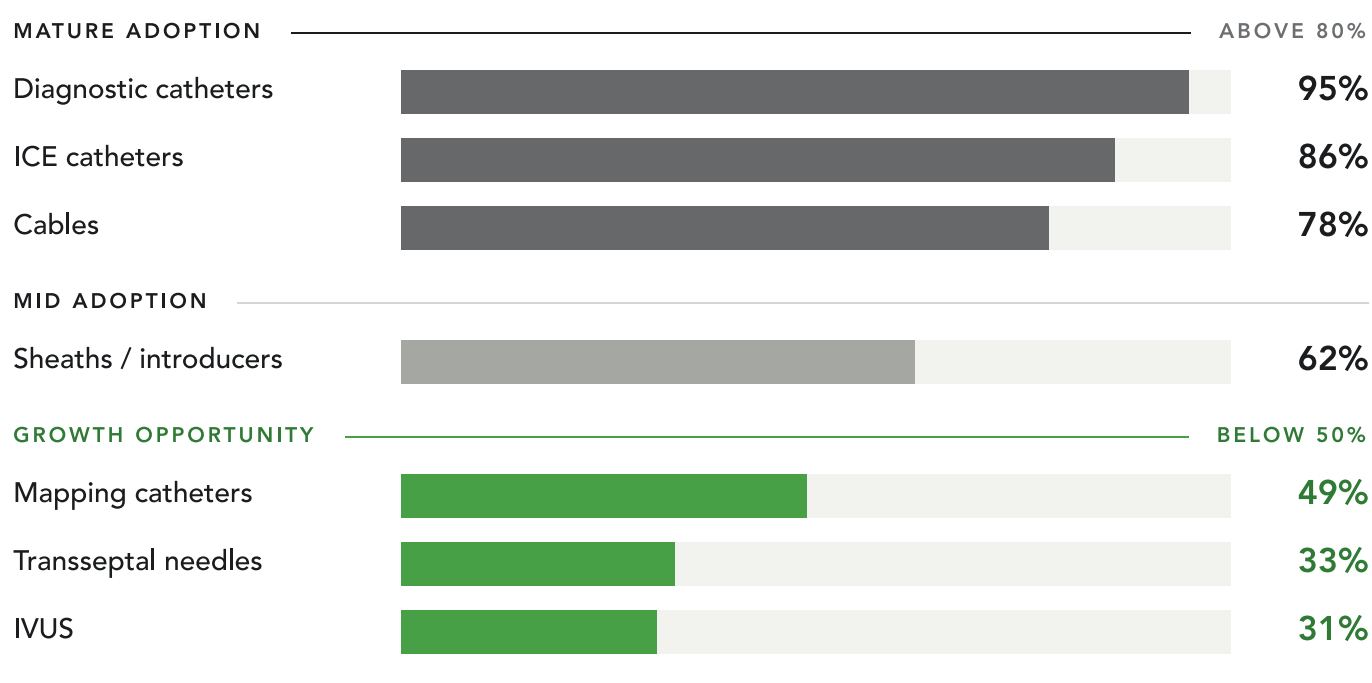


Figure 5. Share of facilities actively purchasing reprocessed EP products that use a meaningful amount of product in each category. Denominator is participating facilities only, not all EP programs; categories are not mutually exclusive.

Hospitals seeking incremental growth should investigate under-adopted categories rather than concentrating exclusively on categories that are already mature.

Low adoption is an indicator to evaluate, not an instruction to buy. Whether a category is appropriate depends on clinical eligibility, case mix, program suitability and existing purchasing commitments. The finding identifies where to look, not what to conclude.

SPREAD BETWEEN EXTREMES

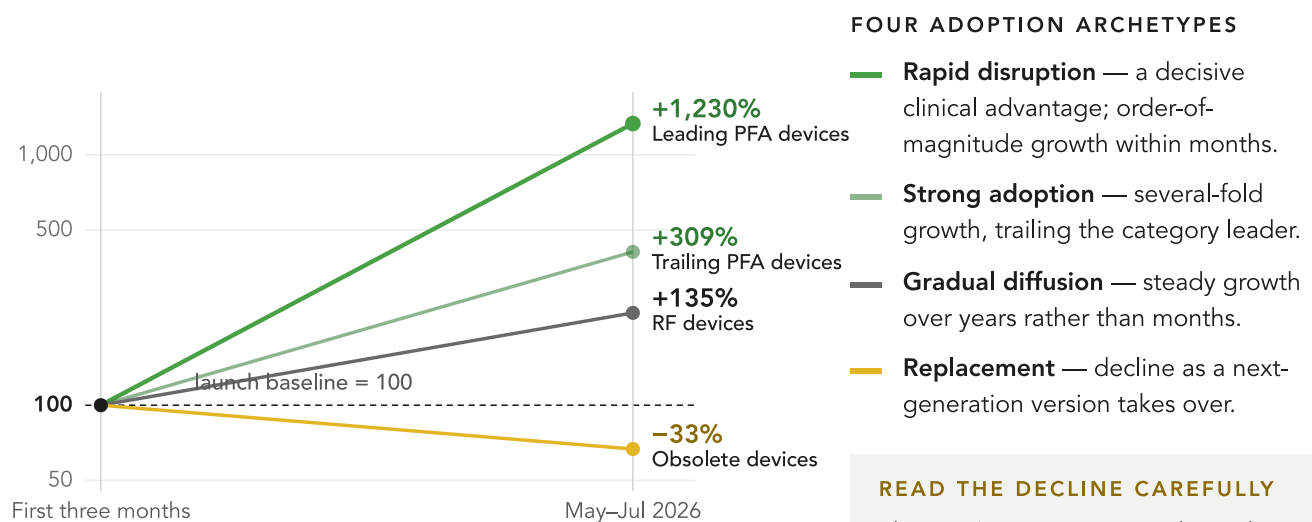
64_{pts}

Between diagnostic catheters (95%) and IVUS (31%) — the widest adoption gap in the category set.

How fast can products move through the EP market?

New EP technologies can reach meaningful adoption in months — or take years

Four recent device trajectories describe four qualitatively different adoption behaviors. Read as archetypes rather than as a product ranking: launch timing, clinical setting and device generation differ across the four, and each is shown against its own launch baseline.



READ THE DECLINE CAREFULLY

The -33% trajectory coincides with the launch of a Gen 2 device. It is consistent with intra-portfolio replacement, not with weak adoption of the underlying technology.

SLOW IS NOT FAILURE

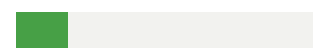
The RF device diffused gradually and still became commercially meaningful. Growth rate alone does not separate successful products from unsuccessful ones.

Figure 6. May–July 2026 volume indexed against each device's own first three months on market; logarithmic vertical scale. Archetype labels describe representative devices rather than whole technology classes. A second leading PFA device grew approximately +1,080% over the same window. Growth for the RF device is calculated on the same basis as the leading PFA comparison.

Time to meaningful adoption can differ by several years — even among products that ultimately succeed

Time for each device to reach 25 facilities.

PFA device, Gen 2



6 months

RF mapping device



3 years

Figure 6b. Approximate time from launch to 25 purchasing facilities — a facility-count measure, a different denominator from the growth percentages above.

One technology expanded fivefold while another contracted by three quarters — in the same twelve months

The previous page showed that technologies enter the market at very different speeds. This one shows what happens after a technology passes its inflection point: controlling for newly added customers, PFA device utilization grew 415% while the RF-era cohort declined 77%. Read together, these are not two product trends. They are one substitution.

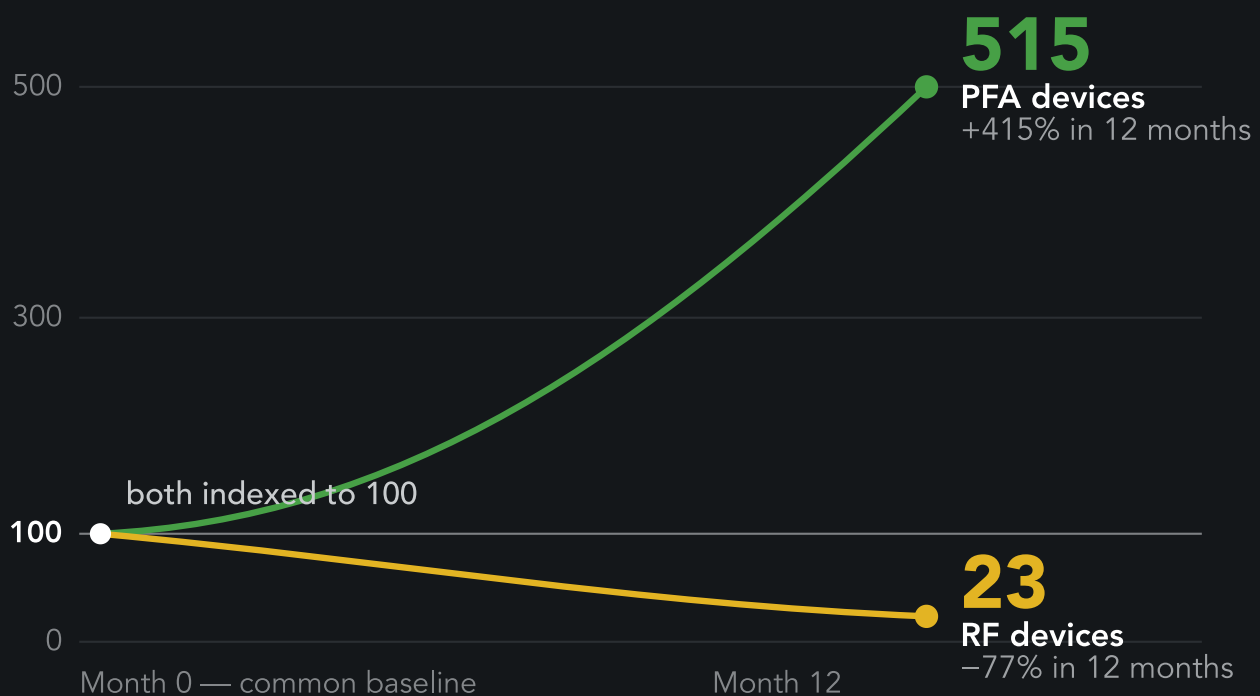


Figure 7. Both technologies indexed to 100 at the start of the 12-month window, controlling for newly added customers. Indexing shows the magnitude of the shift in each technology's own utilization; it does not imply that absolute volumes are equal, and the two lines are not two halves of one fixed pool.

WHAT THE DATA SHOWS

Simultaneous expansion and contraction within one utilization base over one year, with customer-mix effects removed. PFA has rapidly changed the ablation market and displaced utilization associated with older RF-era workflows.

WHAT IT DOES NOT SHOW

That one technology has replaced the other outright. The data establishes direction and magnitude of change, not the residual absolute volume of RF-era workflows.

Technology shifts that once unfolded over several years can now materially reshape EP device utilization within a 12-month period.

How long do EP products stay relevant?

Most current utilization comes from technologies that have already demonstrated staying power

Products with seven or more years of meaningful volume dominate the purchased portfolio on every measure. But the three measures do not agree with each other, and the difference between them is the finding.

85%

of **EP devices** have 7+ years of meaningful volume

76%

of **value** comes from that same cohort

75%

of **device volume** comes from that cohort (derived)

YEARS WITH MEANINGFUL VOLUME	SHARE OF EP DEVICES	SHARE OF DEVICE VOLUME	SHARE OF VALUE
10+ years	 47%	 31%	 17%
7–9 years	 38%	 44%	 59%
4–6 years	 13%	 24%	 24%
1–3 years	 3%	 1%	 1%

Figure 8. Derived from Innovative Health records for 348 EP catalogue items with meaningful volume. Tenure is measured from the date each item entered the market with meaningful volume. Columns are three different denominators and each sums to 100% independently; bands may not total exactly 100% because of rounding.

WHAT THE DATA SHOWS

Long lifespans are the norm: 85% of items have been in meaningful use for seven years or more. But age and economic weight diverge — the decade-old cohort is the largest by item count and the smallest by value, while the 7–9 year cohort carries 59% of value on 38% of items.

WHAT IT DOES NOT SHOW

That older products matter less. A low-cost diagnostic catheter can be purchased at high volume and remain clinically preferred; a low share of value reflects unit price, not clinical utility.

Products established nearly a decade ago still dominate current device volume

Grouping every device used in 2026 by the year its product first reached meaningful volume produces a strongly front-loaded distribution. Two vintages account for nearly three quarters of everything used this year.

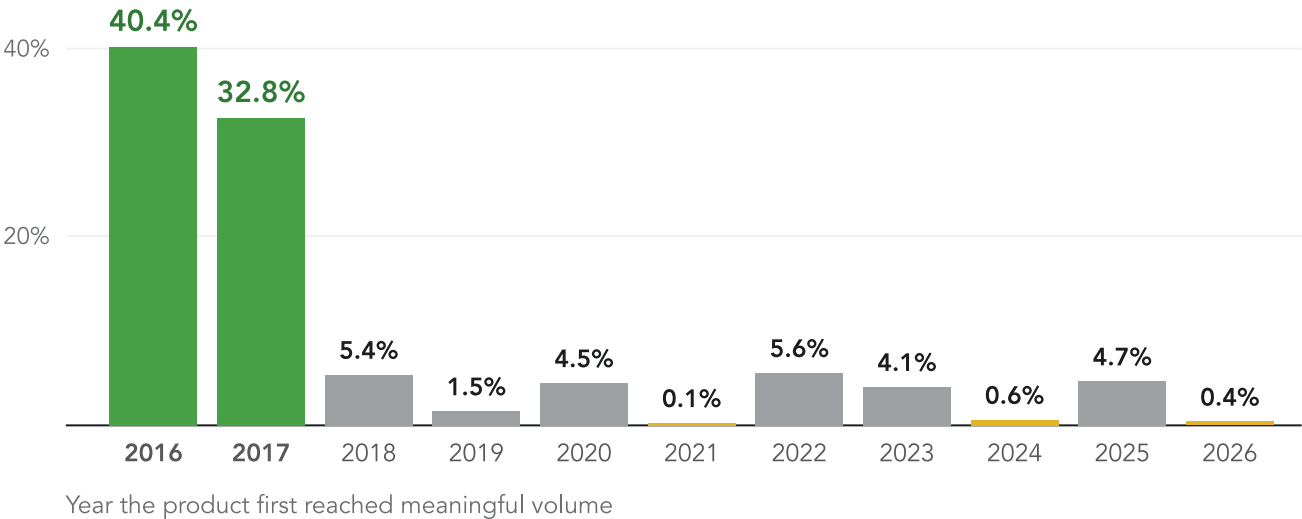


Figure 9. Share of 2026 device volume by the year each product first achieved meaningful volume. Supplied cohort percentages; the set sums to 100.1% because of rounding. This is a volume measure of devices used in 2026, not a count of catalogue items and not a measure of sales value.

THE STRIKING FIGURE

73.2%

of 2026 device volume comes from products that reached meaningful volume in 2016 or 2017 alone. Derived by summing the supplied 2016 and 2017 cohort shares.

The 2021 cohort contributes 0.1% of current volume — a visible gap in the vintage structure rather than a measurement artefact.

CUMULATIVE VIEW		
2016–17 vintages		73.2%
2019 or earlier		80.1%
2020 or earlier		84.6%
2022 or later		15.4%

All four figures derived from the supplied cohort shares.

WHY THIS MATTERS FOR A PROGRAM

Newly launched technology commands attention, but only 15.4% of the devices actually used in 2026 come from vintages of 2022 or later. A reprocessing program optimised solely around the newest technology would be addressing a small share of its own volume.

Price alone does not predict longevity — the lifecycle cohorts behave in three distinct ways

Longevity plausibly follows from some combination of technology superiority, price and value, physician familiarity, clinical utility, brand dominance and switching friction. The portfolio data supports part of that and complicates the rest.

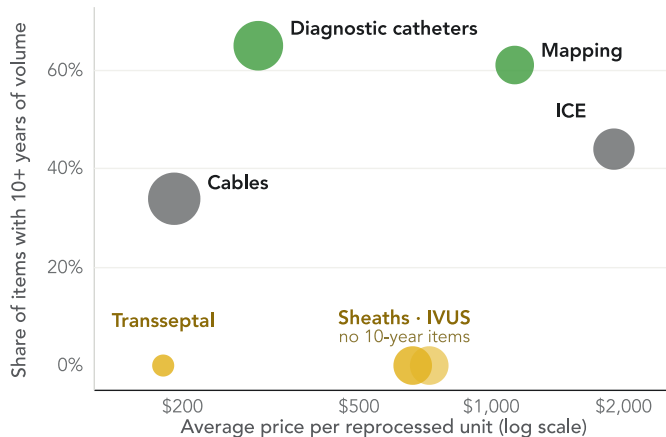


Figure 10. Each bubble is a device category within the 348-item set; bubble area is the category's share of device volume. Average price per unit on a logarithmic scale.

HYPOTHESIS, PARTLY SUPPORTED

The two largest long-lived cohorts are the two cheapest categories: diagnostic catheters and cables. That is consistent with the proposition that price, physician familiarity and low switching friction extend product life.

BUT NOT CLEANLY

Mapping catheters and ICE also show high ten-year persistence, so price alone does not predict longevity.

LIFECYCLE DIFFERENCES

Three cohorts, three behaviors

Short-lifecycle cohorts

Lower-value products with short periods of meaningful use and limited technological differentiation. Little protects them from substitution.

Long-lifecycle cohorts

Also lower-value, but with durable clinical utility and technology that stays relevant. Inexpensive does not mean disposable — these are the decade-plus survivors.

The 7–9 year cohort behaves differently

Relatively expensive devices with meaningful technological advantages — 38% of items carrying 59% of value. Their tenure clusters rather than extending.

WHAT THE DATA SHOWS

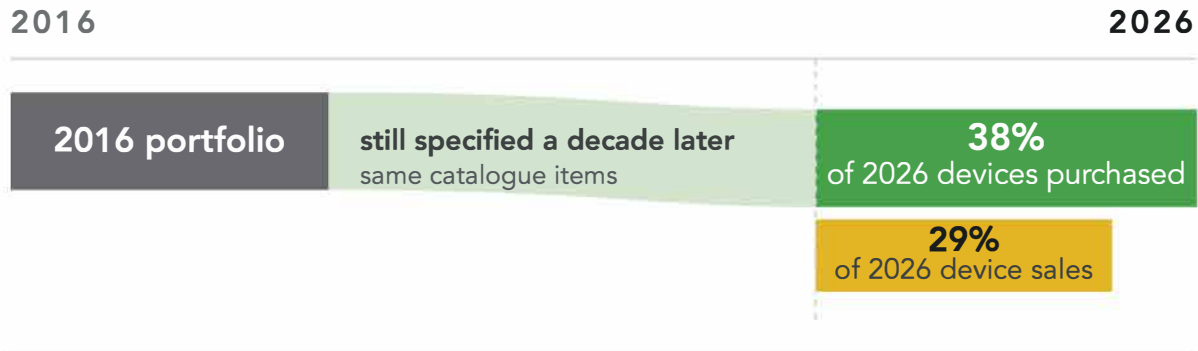
Higher-value technology categories concentrate in a mid-length tenure band, while the longest-tenured items are disproportionately lower-cost.

WHAT THE PATTERN MAY SUGGEST

The pattern is consistent with a more actively managed replacement cycle among higher-value technology categories.

More than a third of the devices purchased in 2026 were products already sold in 2016

Physicians continue using proven devices for a remarkably long time. Two separate measures make the point, and they must not be conflated: one counts devices purchased, the other counts sales value.



Two measures of one cohort: product persistence and economic persistence.

Figure 11. Devices purchased in 2026 that were also purchased in 2016, as a share of 2026 device count (38%) and of 2026 device sales value (29%). Distinct from the vintage analysis on p.11, which measures share of 2026 device volume by the year a product first reached meaningful volume - six different denominators appear across this section and are not interchangeable.

PRODUCT PERSISTENCE

38%

of devices purchased in 2026 were products already being sold a decade earlier. This measures the composition of the portfolio in use.

ECONOMIC PERSISTENCE

29%

of 2026 device sales came from that same legacy cohort. Because it is a value measure, the gap against 38% indicates the cohort skews toward lower-priced devices.

THE CENTRAL TENSION

EP is simultaneously a market of rapid technological disruption and remarkable product longevity.

A single ablation technology can restructure utilization in twelve months while, in the same portfolio, 38% of purchased devices are ten-year-old catalogue items and 73.2% of 2026 volume comes from 2016–17 vintages. Any program strategy built on only one of these facts will be wrong about most of the portfolio.

Effective reprocessing strategy requires active expansion and continuous portfolio reassessment

Nine implications follow from the benchmark families, each testable against data a program already holds.

- | | |
|--|---|
| <p>01 Grow at the benchmark. 28% annual utilization growth is the market reference point, not an achievement.</p> | <p>06 Expect uneven adoption curves. Some technologies reach meaningful adoption within months; others take years and still succeed.</p> |
| <p>02 Grow on both axes. Track products added and utilization per product as two separate metrics.</p> | <p>07 Plan for rapid displacement. PFA-related utilization shows a major technology shift can occur inside 12 months.</p> |
| <p>03 Benchmark against leading programs. Compare against 2,049 devices across 27 families — not only against your own prior year.</p> | <p>08 Newer is not automatically better — nor older obsolete. 85% of catalogue items have seven or more years of meaningful volume, and only 15.4% of 2026 volume comes from 2022-or-later vintages.</p> |
| <p>04 Expand beyond the dominant categories. The top 10 families account for 65% of reprocessed products utilized.</p> | <p>09 Reassess the portfolio continuously. Balance expansion against lifecycle turnover; the two run on different clocks.</p> |
| <p>05 Investigate under-adopted categories. Mapping, transeptal and IVUS remain potential white space, subject to clinical eligibility and program suitability.</p> | <p>→ The synthesis. Expansion and reassessment are one discipline on two clocks: annual for program breadth, continuous for technology change.</p> |

METHODOLOGY

Findings draw on Innovative Health device-level utilization and purchase records for participating US electrophysiology programs, together with program-level benchmark aggregates. Category-adoption percentages are calculated only across facilities actively purchasing reprocessed EP products. The 12-month PFA and RF comparison controls for newly added customers. Lifecycle and concentration figures labeled *derived* are calculated from 348 EP catalogue items with meaningful volume, where tenure is measured from the date an item entered the market with meaningful volume. Adoption-velocity archetypes are representative cables, not whole technology classes.

Observational utilization data. Associations described in this report should not be read as causal, and category adoption rates are not recommendations to purchase.

DEFINITIONS

Device — a single reprocessed unit. **Product** — a distinct catalogue item. **Product family** — a group of related items. **Category** — a clinical device type. **Utilization** — device volume reprocessed. **Sales** — purchase value. **Vintage** — the year a product first reached meaningful volume. Catalogue items, devices purchased, device volume, product families, facilities, sales value and vintage are distinct denominators, reported separately and never combined.