Device-to-Value: A Progressive Participation Framework for Translating Medical Device Adherence Data into Outcomes-Based Payer Contracts

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This is a PraxisBlue discussion paper. It presents a proposed framework and the views of the author based on their experience establishing device adherence programs; it has not undergone external peer review. It is circulated to invite comment, critique, and independent testing of the ideas presented. It should not be relied upon as validated research or as a substitute for a payer's analysis.

Abstract

Value-based care has reorganized payment focus around providers positioned at the total cost of care, yet providers of data-capable medical devices – whose therapies generate objective, securely transmitted adherence data that plausibly shape downstream cost – have remained outside that transition for lack of a structured way in. This paper introduces the Device-to-Value (DAV) framework, a population and line-of-business-agnostic bridge methodology that translates medical device adherence data into an opportunity payers can evaluate. Adoption begins on the payer's side, with a retrospective cost study as the payer's own claims are paired with provider-supplied adherence data to determine whether adherent and non-adherent users of a device differ disease-related costs. DAV then advances the provider through three progressive levels: a data-reporting foundation (DAV-1), a single-metric adherence-improvement scorecard (DAV-2), and a composite scorecard adding episodic disease-related cost (DAV-3). This intentionally mirrors the reporting-then-performance-then-cost sequence the Centers for Medicare & Medicaid Services (CMS) have historically used to bring other providers such as primary care physicians and medical groups into value-based arrangements through the use of data. The framework then ties each level to a defined form of device reimbursement while leaving performance targets and discrete device rate changes to the parties; effectively tying device reimbursement to a measure of performance. In this paper, the author illustrates DAV across three contrasting data-capable device categories: continuous positive airway pressure (CPAP) for sleep apnea, negative-pressure wound therapy (NPWT) for chronic wounds, and automated insulin delivery (AID; infusion pump) for diabetes. The purpose is to show that the framework generalizes across medical device therapy shapes. DAV offers payers and device providers a defined approach for entry into a durable value-based relationship where none exists today.

Keywords: value-based care; medical devices; durable medical equipment; adherence data; payer contracting; outcomes-based contracting; episode-based payment; ancillary providers

1. Introduction

For the past 15 years, value-based care (VBC) has displaced fee-for-service payments with arrangements that tie reimbursement to measured performance. The incentivized entities have historically been physician groups, hospitals, and integrated delivery systems (IDNs) as they are considered well-positioned to influence a patient's total cost of care. More recently, the Center for Medicare and Medicaid Innovation (CMMI) have delivered new models that bring ancillary dialysis and specialty drug management providers into the value-based fold. Providers of data-capable medical devices are both well-positioned to influence a patient's total cost of care and occupy that same ancillary position: they supply therapies whose consistent use, or non-use, plausibly shape downstream cost, yet they have remained largely outside of any value-based transition.

This paper concerns a specific, tractable subset of that universe, defined by three criteria: a device is in scope if it produces an objective signal of patient usage, transmits it securely, and treats a condition wherein device adherence can plausibly be linked to downstream cost. Three contrasting categories instantiate this class of medical devices and

serve as running examples for this paper: CPAPs for obstructive sleep apnea record and transmit nightly hourly usage, wound vacuums for negative pressure wound therapy (NPWT) treat chronic wounds and transmit daily therapy-hours, and infusion pumps automate insulin delivery and transmit both usage and whether patients follow recommended settings. What these examples share is a common data architecture – non-biometric data summarizing device use (i.e., on/off and time used, etc.). Where they differ is the window over which the device's cost impact is best measured. The organizing principle for discussion here is therefore not acute versus chronic disease, nor therapy duration, but a recommended one-time cost-measurement window matched to each therapy.

To that end, the author introduces the Device-to-Value (DAV) framework. Before anything else it is a bridge framework: its purpose is to create a structured on-ramp for value-based conversations between payers and data-capable device providers (durable medical equipment (DME) companies, distributors, etc.); a segment that has lacked one. Following the design philosophy of PROMETHEUS bundled payment models [1] – episode constructs applied within a user's own population rather than a product tied to a specific line of business – DAV is deliberately population and line-of-business-agnostic. Model validation within any given market and line-of-business is the parties' responsibility, not a claim the framework makes. Adoption is initiated by the payer's side through identification of providers responsible for the greatest volume of in-network device claims. The payer then pairs its own claims with the provider's adherence data to confirm that adherent and non-adherent users differ in disease-related cost. This check can be run by the payer proactively or at the time of provider rate renewal. DAV then advances the provider through three progressive adoption levels: a data-reporting foundation (DAV-1), a single-metric adherence-improvement scorecard (DAV-2), and a composite scorecard adding episodic disease-related cost (DAV-3). A provider may decline, but inclusion in the payer's network and any rate growth are conditioned on collaborative advancement through the three levels. This paper grounds the framework design in the evolution of value-based care (Section 2), specifies the recommended methodology (Section 3), addresses implementation concerns (Section 4), and states limits and contribution of the framework plainly (Sections 5–6).

2. Background and Literature Context

2.1. The Evolution of Value-Based Care

The shift from volume to value has advanced as a deliberate, staged escalation of provider risk, architected largely by CMS and its Innovation Center (CMMI), created in 2010 [2]. CMMI intentionally moved providers up a risk ladder one rung at a time, starting with reporting and upside-only shared savings models before provider assumption of downside risk. For example, Accountable Care Organization (ACO) programs opened as pay-for-reporting, upside-only shared savings opportunities and later added downside [3]. Additionally, these models have also included upfront infrastructure payments for early adopters – a point we return to in Section 3. The same order shaped the provider risk track outside ACOs – MACRA's Merit-based Incentive Payment System held cost at zero weight in its first year (2017), phased it upward, and introduced bounded downside last as a capped Part B adjustment. A decade in, CMS framed the destination as near-universal accountable, total-cost-of-care relationships by 2030 [5]. The common theme across all of these models was reporting before performance, performance before cost, and cost before downside, which clearly established a multi-year build-up to sharing greater and greater risk.

Episode-based payment models offer the most instructive precedent for cost measurement within the DAV framework discussed here. The PROMETHEUS experiment [1] defined payment around a clinical episode, built measurement on existing claims, and let practitioners apply it in their own populations. Its slow adoption when layered onto fee-for-service is precisely the friction the staged, upside-first roadmaps discussed above were designed to manage. The DAV framework inherits both lessons: PROMETHEUS's episode logic for measurement, and the regulatory roadmap's reporting-then-performance-then-cost sequence for adoption. What it changes is the audience; the decade-long build-up by CMS of provider risk assumption was built for physicians, hospitals, and systems first. An assumption of shared risk has never been formally extended to data-capable device providers whose devices now come with standard secure data exchange functionality and whose patient adherence results bear on the very costs these models aim to manage.

2.2. Device Adherence as a Securely Transmitted, Measurable Signal

Despite existing evidence that medical device therapy adherence informs on downstream disease-related costs, data-capable device providers have not been meaningfully incorporated into VBC. The author is explicit about this claim's status: no peer-reviewed source directly establishes or argues for their structural exclusion. The claim is based on an inference from the orientation of current literature and existing market models that focus on physician, physician group, hospital, and select ancillary providers (see Section 5.2). What primes the discussion of in-scope device categories here for a reliable VBC arrangement is that adherence is captured by the device and transmitted objectively. It is not self-reported or inferred. Additionally, CMS already operationalizes device adherence data through existing reporting requirements to support monthly reimbursement to medical device companies based on patient necessity. This means medical device providers have already operationalized the use of the adherence signal in other business processes. Thus, a transmitted, objective usage signal is the precondition for everything that follows in the remainder of this paper, and its absence is what places a device outside of our framework's scope for discussion.

2.3. Adherence Outcomes Literature

The mechanism linking adherence to cost is utilization. Hospital admissions, emergency-department visits, surgical procedures, and amputations are among the largest components of disease-related spending, so a therapy that reduces these events moves cost in the same direction; fewer high-acuity encounters mean lower downstream cost.

The empirical case that adherence directly correlates to downstream disease-related costs is strongest for CPAP: adherence has been associated with reduced inpatient utilization [6], with approximately 40% lower annual health-care costs in a Medicare OSA–cardiovascular population [7], and with lower utilization and cost over two years in OSA with obesity [8]. These studies measured adherence continuously over one to two years, supporting a twelve-month CPAP episodic measurement window.

For NPWT cost drivers the author references a strong connection with surgical intervention and limb loss rather than admissions. In a multicenter randomized controlled trial of patients with diabetic post-amputation wounds, NPWT achieved a higher proportion of healed wounds, faster healing, and potentially fewer re-amputations than standard moist wound care [9]. A companion economic analysis of the same trial found correspondingly lower resource use (fewer surgical procedures, outpatient visits, and dressing changes) and a lower total cost to achieve healing [10]. The remote-monitoring analysis cited above points the same way over a ninety-day window [11], though it is industry-authored and works through a monitoring program rather than a clean dose-response. The author therefore recommends treating the direction of the NPWT cost effect as well supported.

For AID the category is included as relevant to illustrate the breadth of the device class, and its adherence-to-cost relationship read through glycemic control over a ninety-day window as a validation target within the framework rather than a settled finding. First, AID improves glycemic control relative to standard management, as synthesized in a recent independent health-technology assessment. Second, poorer glycemic control is associated with greater diabetes-related hospital utilization and cost: higher mean HbA1c has been associated with higher diabetes-related hospitalization costs among hospitalized patients and with higher rates of diabetes-related hospital utilization, though the odds of any diabetes-related hospitalization rose significantly only at a mean HbA1c at or above approximately 10% [12].

Evidence provided here is meant to act as a guide and open up the question: what does device use, and the resulting utilization, look like between adherent and non-adherent groups? Because varying types of utilization are what ultimately drive disease-related costs across these device types, the decisive evidence is not in the literature but in the payer's own population, as differences in population and network composition can vary payer to payer. Validating a difference in disease-related costs by device between adherent and non-adherent populations is the first step in any value-based discussion with medical device providers.

3. The DAV Framework: Methodology

3.1. Design Principles

DAV rests on a set of design principles unified by one intent: to bring data-capable medical device providers into value-based arrangements without sacrificing the durability that makes such arrangements worth entering. DAV entry is progressive, and provider adoption proceeds through reporting, quality, and cost levels respectively, intentionally mirroring the pay-for-reporting risk entry used by CMS in other value-based models. In practice, the payer introduces DAV either proactively or at a provider's rate renewal (Section 3.2), signaling that value-based expectations now extend to its ancillary network, devices included, with DAV-1 patient-level adherence reporting required for inclusion in network products to be determined by the payer. Device selection focus is the payer's decision, not the provider's, because larger providers and manufacturers often supply several in-scope devices and the payer focuses first on the one it has already validated.

Risk is bounded in a specific sense: the provider's device reimbursement is never reduced at any DAV level. This is intentional and the only sense in which DAV carries no "downside," as no provider ever repays any disease-related losses in arrears. What advancement governs is network participation and the size of future device-specific rate increases: DAV-1 conditions network inclusion, DAV-2 unlocks up to the maximum budgeted rate increase for the device in question, and DAV-3 unlocks an opportunity for device rate increases above budget. A provider that does not advance keeps its current device reimbursement rate but forgoes future increases. DAV prescribes the architecture of the incentives provided at each level but not the incentives themselves; adherence-improvement targets and the device-specific rate increases remain for the parties to set. The framework is otherwise neutral and constant: line-of-business and population-agnostic, and anchored at every level to the device's own adherence signal as the primary measure of quality rather than any imported quality-domain framework.

Finally, it is reciprocal where it matters: at DAV-3 both parties contribute critical data to the relationship. The provider contributes its adherence data, the payer its de-identified episodic cost data. The methodology favors neither party; its role is only to bring two halves of the information into one evaluable measurement.

3.2. The Validating Premise: A Payer-Side Cost Study

DAV does not assume a pre-defined device adherence-cost relationship; it begins by testing whether one exists. The premise can only be tested jointly, because the two halves of the data sit on opposite sides: the payer holds disease-related cost data, while the provider holds adherence data. To size the opporuntiy, the payer selects a device it already sees a provider supplying to its members and a defined retrospective time period. This time period should include at least 2–3 complete years of paid claims data. The payer asks the provider for a list of patients who met adherence targets organically during that period. Those patients become the intervention (adherent) group. The payer then compares this list with all patients they paid a device claim for during the same period who were not on the adherent list to form a control (non-adherent) group. Comparing disease-related utilization and cost between the two confirms whether a difference exists between adherent and non-adherent patients and how significant it is. This study also establishes inclusion/exclusion criteria to understand future savings opportunities from patients not attributed to other value-based models, further discussed in Sections 3.6 and 3.7.

The payer can initiate this first step validation in two ways: proactively, by approaching a provider to run the validation directly, or by waiting for the provider's contract or rate renewal (these typically happen annually). Combining both in tandem may be the most effective approach: the proactive route applied to providers with the greatest utilization for devices under study, where the signal is strongest and the cost stakes likely highest, while renewal cycles carry the rest. Either way, the relationship established is associational, but it grounds the premise in the payer's own data rather than in published literature alone, and it sets the starting point for everything that follows by identifying the specific, payer-validated device a provider will report on at DAV-1.

3.3. DAV-1: Reporting

Because supplying a list of adherent patients is itself an act of reporting adherence data, a provider that participates in the intial validation check has, by that activity, entered DAV-1. DAV-1 establishes a data-based relationship that provides both parties ongoing benefit. This initial level helps the payer identify strong partners for inclusion in their value-based strategy. Reporting of patient-level adherence is required as the condition for inclusion in the payer's network products meant to provide enhanced services, and no performance is yet judged, on the model of CMS pay-for-reporting entry. At this point the provider reports patient-level adherence data ongoing at a cadence decided by both parties. Monthly patient-level adherence reporting is one cadence option that can both easily fit alongside the provider current Medicare fee-for-service (FFS) reporting requirements and align with what a payer is used to with other programs (i.e., care management programs).

3.4. DAV-2: Single-Metric Scorecard

At the DAV-2 level the provider and payer have aligned on the opportunity for adherence improvement. This is where the provider begins actively reaching out to patients to drive adherence. Folding the outreach into the provider's existing member contact processes and workflows for device function and resupply is one way to keep the effort lightweight. Building outreach off of an existing workflow keeps program costs low while achieving DAV-2 goals. At this level the provider has also qualified to earn up to the maximum budgeted rate increase; this is no longer the standard awarded automatically each year during rate negotiations. On measurement, DAV retains existing industry adherence definitions rather than inventing new ones and applies them longitudinally: for example, for CPAP it keeps the Medicare definition but tracks whether patients reach the adherent threshold and remain in it across the episode, which is what makes "improvement" a coherent target. Specific advancement criteria are left to the parties.

3.5. DAV-3: Composite Scorecard

DAV-3 activities introduce a measure of disease-related cost using the same episodic architecture established during the initial retrospective cost study (Section 3.2). Device adherence for the population is measured using the same inclusion criteria: a trigger event (the start of therapy) and a measurement period. The cost-impact measurement runs once from the trigger event over a recommended period and then stops. Recommended episodic time periods for measurement are as follows: for CPAP, twelve months; for NPWT, ninety days; for AID (infusion pump), ninety days. These periods are recommended examples only and are based on outcomes cost literature and the authors own experience implementing these arrangements - they are not fixed requirements; the parties may set their own periods for cost measurement as they best see fit.

The scorecard now carries two components: adherence improvement (the quality measure) and the validated cost difference (cost; utilization/resource use). The payer contributes the aggregate de-identified episodic cost data, with other providers' reimbursement detail blinded per standard rate-confidentiality practice. The parties now monitor adherence improvement and its impact on cost together and they meet regularly to review the data, reconcile performance periods, and align on results that inform future rate increases.

3.6. Reconciliation and the Treatment of Attribution to Other Models

A framework that claims savings amid overlapping payer risk arrangements must avoid counting the same dollar twice. DAV does this not by attributing patients to its modeling on the front end, but through reconciliation. The guiding principle is that a patient's cost outcomes are claimed by at most one risk-based model, with pre-existing arrangements taking precedence. Where another model is already accountable (an ACO, a bundled payment model, etc.) for a member's quality and cost, savings resulting from adherence improvement under DAV are realized through that model's performance rather than booked again as standalone DAV savings. Rather than enforce this in real time, DAV applies it retrospectively at reconciliation, exactly as other models reconcile: the modeled population

excludes any patient attributed to an ACO or who triggered an applicable bundled-payment episode during the period, leaving a cohort no other entity is booking. The exclusion is at the patient level for the full period – an intentionally conservative choice, erring toward not claiming a benefit another arrangement may count. It identifies only those patient costs cleanly associated with DAV efforts, to paint a true picture of program value to the at-risk organization.

3.7. A Worked Illustration

The following is a worked illustration of DAV within a Commercial PPO population. Values below are examples only and are not drawn from any cited literature. They are shown to make the framework mechanics concrete, not to forecast a magnitude. PPO populations are, for most payers, the most challenging to manage for product costs, so a credible, low-effort lever on disease-related cost is especially valuable there.

Consider a commercial PPO line of business in which a payer identifies a CPAP provider with the greatest device claim volume over the last three full calendar years (the payer must have fully completed, run-out, years for this). The first step is to identify device new starts within the population – a paid device claim (HCPCS E0601) with no prior E0601 claim in the preceding six months – because an OSA-related cost measurement will run only on new starts across their first twelve months of device use. The payer then reaches out to the provider and obtains a list of adherent patients for the same retrospective time period. This is compared with the payer's claims pull to identify patients with a paid device claim not on the provided adherent list; this becomes the non-adherent (control) group for comparison against the group (intervention) included on the provided adherent list. Suppose 1,000 such new starts arise annually for each of those three years on average. Assessing cost differences between adherent and non-adherent members for all new starts is ideal in confirming a cost difference exists. Inclusion criteria for sizing the improvement opportunity then reduce that pool to the cohort DAV can defensibly claim direct savings from, as shown in Table 1 (logic used to define the modeled cohort is used in performance reconciliation).

Model Inclusion Criteria	Patients
New CPAP starts (paid E0601 claim; no E0601 claims in prior 6 months)	1,000
Attributed to an ACO product (20%)	–200
Triggered a bundled-payment episode model (15%)	–150
Without 12 months of continuous eligibility (30%)	–300
Modeled Cohort	**350**

Table 1. Illustrative inclusion criteria applied to a modeled CPAP cohort.

The payer then assesses OSA disease-related non-device costs - medical and pharmacy (applicable therapeutic drug classes) - between the two groups and finds them to be $12,851 for non-adherent patients and $9,309 for adherent patients, a difference of $3,542 per-member-per-year (PMPY). With the payer's validation study established, this difference can be attributed to adherence to a critical device therapy for the management of OSA (subject to the healthy-adherer confound of Section 5.2). The payer and provider align on existing adherence, and a starting average population adherence rate begins at 28% (98 of the 350 patients).

DAV-2's provider outreach then drives ongoing adherence improvement as the program completes its first performance year: four patients move into the adherent bucket each month in the first quarter, six per month in the second, eight in the third, and ten in the fourth - 84 patients over the year, raising adherence from 28% to about 52% (182 of 350). Because the ramp is back-loaded, those patients accrue roughly 31 patient-years of adherence within the twelve-month measurement window, so the validated in-window cost reduction is $31 \times \$3{,}542 \approx \$109{,}800$. The year-end run-rate, with all 84 converted patients adherent, is $297,528 annualized - the larger figure that recurs as

adherence sustains and that informs any forward rate decisions.

The $297,528 run-rate is a deliberate conservative floor in two respects. First, it counts only patients with twelve months of continuous eligibility, so it omits adherent new-starts who generated real savings during the months they were enrolled before changing coverage; the same churn, however, means the run-rate should not be assumed to recur in full without replacement. Second, it treats adherence as binary. In practice a device population spans non-users, minimal users, suboptimal users, and adherent users. If disease-related cost falls with use along that gradient, then patients whose usage improves without crossing the adherence line still generate savings the binary model books as zero. Both factors suggest the true impact exceeds the modeled figure, but their magnitude is payer network and population-specific.

In summary of the scenario shown here, reporting adherence (DAV-1) qualifies the provider for participation in the PPO line-of-business enhanced-product networks. Mutual alignment on the 28% average population adherence baseline, beginning outreach, and demonstrating improvement (DAV-2) earns up to the maximum budgeted rate increase. At DAV-3 the composite scorecard - the adherence gain as the quality measure and the validated $3,542 PMPY OSA-related cost difference reviewed and reconciled by the payer - supports an above-budget increase sized to stay within the validated return, so the payer remains net positive and the increase is self-funding. As the relationship sees continued adherence improvement and validated cost across multiple performance years, the payer then begins considering expansion of the program into additional lines-of-business with the provider.

4. Implementation Considerations

On the payer's side, readiness begins before implementation of any DAV level with an understanding of paid device claims by provider which prioritizes which providers to approach for discussion. This effort is likely most productive when focused on high-cost, tough-to-manage populations; for most payers this will be PPO lines of business. For the provider, DAV-1 entry is organizational rather than technological: the raw usage signal already exists and is already being received, so the work is converting an operational stream into a payer-evaluable report. Payer readiness then builds in parallel with the levels - receiving and evaluating a scorecard at DAV-2, and producing blinded episodic cost data and sustaining the regular review cadence at DAV-3. Because overlap with ACOs and bundles is handled retrospectively at reconciliation, none of this requires a live attribution feed.

Given that there is no existing formal value-based model focused on medical device therapy adherence as a quality opportunity, most defer to the assumption that any savings potential must come from improvements in device reimbursement - negotiating rates down. Low volume or utilization is the most common objection to arrangements with medical device companies. This framework is based on a provider improving device adherence within the population they already serve so there is no low volume arguement. A device-adherence program is process infrastructure and should be considered a best practice, built before full potential volume exists because the process is what enables capture. This is similar to how care-management programs are stood up before program enrollment. Data-capable devices carry a structural advantage as no separate consent or enrollment step is needed. The patient is captured automatically at device placement, across every line of business, and there is no PMPM vendor fee or separate platform to fund. Folding adherence outreach into the member contact a provider already makes for device function support and resupply also keeps incremental costs to manage the program on the provider side small. As a payer implements medical device adherence programs within their networks, patient experience and visibility of the provider as a strong network solution will drive further volume to the program as greater utilization flows through said provider over time and benefits compound.

Parties intereseted in the DAV framework should also consider objections related to existing contract reimbursement structures. Factors creating barriers to entry here may include fee schedules that reimburse a blanket '% of' Medicare or Medicaid rate, All-Inclusive (bundled) Current Procedural Terminology (CPT) code reimburesment rates, and the specific organization contracted with the provider (i.e., specific hospital in an integrated delivery system (IDN) setting). The author acknowledges that existing contract structures can create a barrier for DAV

adoption. That said, as with any value-based arrangement consideration, contracts must adjust to meet market innovation demands.

5. Discussion

5.1. What DAV Contributes

DAV's contribution is not a new payment formula but a structured model on-ramp where none previously existed. Existing frameworks presuppose an accountable entity at the total cost of care that is willing to take performance and cost risk together. Until recently there has been no reason for organizations to think creatively about proactively managing medical device reimbursement costs. In 2023, as part of their annual review, the CMS increased the Durable Medical Equipement, Prosthetics, Orthotics, and Supplies (DMEPOS) fee schedule by 8.7%. Considering most Commercial reimbursement uses Medicare rates as a basis for determining rates - this presents a significant problem in an environment where most payer organizations are trying to keep cost trends at 3-4% year over year. Additioanlly, the median ACA premium increase proposed in 2025, 2026, and 2027 was 7%, 18%, and 15% respectively across marketplace insurers [13]. This highlights an opportunity for payers and other at-risk organizations to suggest new alternatives to provider rate increases that have historically kept pace with Medicare reimbursement without requiring payments to any type of quality improvement expectations that deliver increasing value.

DAV's incentive design gives device providers a concrete reason to engage and act: a path to enhance revenue and strengthen network standing by directing adherence programs at the lines of business where payers are most actively seeking quality and cost improvement. On the side of the payer, DAV allows the inclusion of ancillary spend in value-based strategies and the success of these strategies is contingent on provider participation in model types offered by the payer to their contracted physician networks. Extending that strategy to include new provider types benefits the payer from both a cost management and product growth perspective. Overall, this allows the payer to say that more of their spend for services is tied to performance - an overarching goal of value-based care everywhere.

5.2. Limitations

Limitations bound what DAV may claim as direct device adherence improvement savings. The healthy-adherer confound (the CPAP association reflecting that adherent patients differ in ways that independently lower cost) causes DAV to rely heavily on association, not proven causation. This applies equally to the payer-side validation study (Section 3.2), which compares adherent and non-adherent patients observationally rather than by randomization; it grounds the premise in the payer's own population but does not by itself eliminate the confound. The wound-vac evidence currently rests on manufacturer-funded RCT evidence and AID infusion pump cost linkage is illustrative rather than established – so the framework's empirical footing is strongest for CPAP and weaker beyond it, which the author does not disguise. The reconciliation exclusion creates a selection effect, so measured savings describe that cohort and should not be generalized to all device users.

6. Conclusions

For years, at-risk organizations have simply assumed ancillary provider performance to be a beneficial downstream impact of participation in value-based models that focus on professional (primary and specialty) and institutional (hospital) spend. DAV is a starting point that opens the possibility of including ancillary providers in value-based arrangements with direct incentives. It is not a finished product but a structured, replicable way for payers and data-capable device providers to begin considering a value-based relationship that today has no entry path, without also prescribing the incentive design the parties are best placed to negotiate. The agenda that remains is the community's: validation of this and similar approaches across data-capable categories, testing a central premise - that transmitted objective adherence data, joined to payer cost data in a shared measurement, can sustain durable value-based arrangements. The DAV framework is the structure into which that work can be placed.

About This Work

PraxisBlue Discussion Papers present frameworks, analysis, and proposals for public reaction and critique. They are not peer-reviewed research and represent the views of the author, not a validated or empirically tested result. They are intended to invite comment, testing, and refinement by payers, providers, and researchers who work directly with the data involved.

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Data Availability Statement

No new empirical data were created or analyzed for this paper. The worked illustration in Section 3.7 uses hypothetical, non-empirical example values chosen to demonstrate the framework's mechanics; it is not drawn from a real dataset and should not be read as an empirical finding.

Disclosure of Interest

The author is the founder of PraxisBlue Advisory, which operates as a think tank publishing open research on value-based care topics, including this paper. PraxisBlue does not currently provide commercial advisory services. The author originated the DAV framework described here and has a professional and reputational interest in its adoption and recognition. Readers should weigh this paper accordingly: it is an argument for a framework by its originator, not an independent third-party evaluation of it.

Abbreviations

The following abbreviations are used in this manuscript:

VBC	Value-Based Care
CMS	Centers for Medicare & Medicaid Services
CMMI	Center for Medicare and Medicaid Innovation
ACO	Accountable Care Organization
MACRA	Medicare Access and CHIP Reauthorization Act
MIPS	Merit-based Incentive Payment System
DAV	Device-to-Value (framework)
DME	Durable Medical Equipment
CPAP	Continuous Positive Airway Pressure
OSA	Obstructive Sleep Apnea
NPWT	Negative-Pressure Wound Therapy
AID	Automated Insulin Delivery
GMI	Glucose Management Indicator
PMPY	Per-Member-Per-Year
PPO	Preferred Provider Organization
HCPCS	Healthcare Common Procedure Coding System

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