Beyond the Promise of Artificial Intelligence in Electronic Benefit Verification

Electronic benefit verification (eBV) is heading into a new era.
And why shouldn't it evolve at the speed of therapeutic innovation?

As the use of specialty medicines grows and pharmaceutical-led care shifts toward personalized therapies that come at a higher cost, the benefit verification process can become lengthy and cumbersome for patients and providers.

When it means days, weeks, or months between receiving a prescription and starting therapy, an eBV solution that is "good enough" is not enough. Soon, even artificial intelligence (AI) won't just be an interesting new tool. It could be a necessity.

The verification process will continue to evolve and manufacturers who fail to provide patients and their providers with a complete picture of a therapy's financial impact will fall short in their efforts to support patients with improved access to medication.

Understanding how to pivot in this environment requires insight into:

What true eBV is and the difference between logic-based and AI solutions	The importance of data quality and output	Ongoing technology advances	The potential stakeholder impact of an AI approach	Myths and misconceptions about eBV

As a pharma manufacturer, it's essential for you to examine your approach to eBV in a way that acknowledges new opportunities in technology without compromising the quality, speed, and confidence all stakeholders have come to expect from the benefit verification process.

The Evolution of eBV

Electronic benefit verification technology has undergone significant change since its inception. The result is that eBV now provides more than just an eligibility check — it delivers holistic information that enables a real understanding of benefit coverage. But the underlying need for speed to therapy is still driven by the factors that complicate the benefit verification process, including:

- The increasingly patient-centric nature of modern healthcare
- Biologic therapies and other specialty medications with a more complex administration and higher cost
- Increased scrutiny from insurers because of the high cost of these therapies
- Incomplete or inaccurate coverage data

As a result, two core approaches to eBV have emerged, each carrying its own unique benefits and potential tradeoffs.

Logic-Based eBV

Based on formulary information from selected payers, this method relies on a repository of deterministic coverage rules that are associated with specialty medications from supported commercial and government payers. Requests are made electronically and then predominantly handled through a nightly batch process. Responses are generated the next day. Real-time response capabilities in logic-based eBV are now preferred over batch processing methods. Logic-based eBV can be an effective solution when there is uniform coverage and less variation at the patient level (e.g., Medicare).

These deterministic systems rely heavily on data obtained through surveillance and data mining activities. However, they also require human intervention to interpret data for rules creation, which may be costly to maintain throughout the life of the program. Product coverage must be manually extracted, payer-by-payer, with heavy reliance on coverage rules that are built by the manufacturer or hub. Increasingly, this approach can present a challenge in an insurance landscape where coverage rules keep changing and new requirements are emerging. But it can be a sufficient solution for specific therapies that have minimal variation in coverage across the payer landscape, resulting in limited variability in the benefit verification.

Artificial Intelligence

The newest generation of eBV relies on an AI methodology—specifically, machine learning—using fast, simple, scalable algorithms such as Naive Bayes probabilistic classifiers—to learn from completed payer verifications and determine coverage outcomes.

The system learns continuously. Responses improve as skilled counselors manually verify and reconcile more complex cases. When properly implemented, this approach integrates seamlessly into the service hub associated with specialty medication, as well as the prescriber's workflow.

The benefit of a solution anchored in AI is the ability to train models to leverage learnings for all payer types, resulting in real-time responses with improved accuracy in comparison to rules-based approaches.

Data Quality: How AI Stays Smart

Data quality is a key component of managing a successful benefit verification program. Selecting the right patient services provider can help ensure that your AI solution is consistently trained on large amounts of data, yielding a system that's continually updated and able to identify trends and new rules. These rules will then inform predictions in future benefits evaluation without the need to reprogram the underlying code. Other data quality must-haves include:

- A source system with strong data governance. Data quality should be maintained through a series of rules that reduce "noise" and inconsistencies and clear the governing data set of outlier data points. Proper data governance will maximize the reliability of predictions.

- If a case arises where the solution isn't confident in its coverage information, it triggers a trained, human benefit specialist to step in. The system is retrained based on the results.

- A full program integration — from start to finish — to help store and properly manage data and reduce complications in the future.

One benefit of using a single hub service provider is that each patient program facet uses a common data construct, so it natively matches the data model throughout — maximizing "clean" results. Data is clean to start with.

What is a hub program?

A patient support services hub program provider can design and administer a range of manufacturer-sponsored services from a single source, including patient assistance and copay programs, medication adherence programs, and electronic benefit verification, prior authorization and other eservices, providing a more cohesive experience for the patient.

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Pushing the Possibilities

AI and machine learning are really just the beginning of what's possible. Future-focused patient support partners are looking at expanded options for eBV, including:

- **The addition of the payer surveillance method:** Using a repository of formulary information from private and government payer plans, this method employs electronic queries to provide general coverage guidelines for a therapy. Though this method may deliver inaccurate patient-specific results due to commercial group coverage carve-outs and lags in updated coverage data, it does add a "lite" option to the access solution mix for manufacturers who need a more flexible model.

- **Dynamic AI confidence levels:** Setting a manual confidence level eventually becomes unnecessary. Enhanced technologies integrate the confidence level setting into the machine itself, dynamically determining when to trigger machine-generated benefit verifications. This method factors in more data points, resulting in a confidence level that is inherently customized to a specific program. This promotes faster, more accurate results.

- **Genetic algorithms:** Inspired by the process of natural selection, genetic algorithms are superior at identifying data features with the best predictive power. They also stand out for their ability to improve data consistency and reduce noise. The end result is improved speed and precision of predicted outputs for machine learning eBV systems.

Now that advanced technology solutions like AI for benefit verifications are becoming "table stakes" for patient support providers, leaders will begin to emerge. Look for partners who can offer the best solution, but also ensure accuracy and keep an eye toward the future. What might that look like?

- Requiring the right level of detail with each eBV to ensure the highest level of accuracy
- Continuous fine tuning of the underlying machine learning and predictive modeling
- Exploring solutions for partial eBVs when information is incomplete
- Focusing on long-term accuracy rates over short-term fixes
- Employing data scientists to continually evolve predictive models and increase the automation rate for eBVs across all patient populations and therapies
- Optimizing use of technology and people to focus interventions on resolving the toughest verification cases

Understanding Stakeholder Impact of AI

Decisions around electronic benefit verification will potentially impact all stakeholders in the pharma ecosystem:

- **Patients** start life-changing therapies faster.
- **Prescribers** benefit from faster initiation of therapy for their patients.
- **Payers** can potentially reduce costs and improve efficiency for call center and customer service staff.

But what does it all mean for manufacturers of today's specialty therapies? In addition to faster, easier access to therapy, the right eBV solution can extend provider reach and strengthen relationships.

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Assessing eBV Options: Myth vs. Fact

Even though technology is critical to the "electronic" part of eBV, there simply isn't an off-the-shelf solution for improving access to medications. Yet because technology is such a pervasive part of most benefit verification solutions now, a few myths persist:

Myth: **Humans are obsolete.**

Fact: **AI solutions require human intervention for proper training.** While AI drastically decreases the need for direct human oversight, highly skilled associates still play an integral role in the development of an optimal approach. The right patient support partner will deploy counselors to step in any time benefit verification results need additional follow-up or support.

Myth: **One eBV approach fits all.**

Fact: **Manufacturers can consider more than one approach to eBV technology.** Both the logic-based and AI technologies can work as access solutions. While an AI approach to electronic benefit verification holds tremendous benefits, it's not the best fit for every organization or program. Coverage mix and prescriber experience should be similarly considered. The right patient support partner will help you choose the solution — or mix — that works best.

Myth: **eBV should cost significantly less.**

Truth: **The price of any eBV solution depends on the complexity of the task it is performing.** The value of the solution requires a more holistic view of eBV's role in the access process. For example, while eBV itself may not correct data errors or missing patient information, trained counselors can. Investing in a continuously learning AI solution means fixing those errors once. Moreover, the value of getting therapies into the hands of patients who need them days (and in some cases, weeks) faster can't be quantified at a transactional level.

eBV Evaluation Criteria

When selecting an eBV solution, ask potential providers the following questions:

- Does the solution have the ability to accurately predict eBV coverage based on data trending and analysis?

- How does this solution source information?

- Does the solution provide patient specific coverage information or just an eligibility check?

- What can this eBV solution do for our workflows and how can it drive the patient-provider experience? What kind of experience does the solution create for patients and providers?

- Is it able to compare data points down to the plan level (not just the policy level) so that patient level data may be understood?

The Future of eBV is Now

Once touted as a distant possibility for streamlining the process of helping patients access new therapies, AI-driven eBV technology is proven and available. But are all solutions the same? Expert, experienced, and tech-forward patient support providers are offering right-sized solutions that meet the needs of manufacturers' specific patient populations.

As technology continues to evolve, the decisions you make about your program today will impact how patients access your product tomorrow. That's why Lash Group continues to evolve our eBV offering. We didn't stop at machine learning; we are innovating beyond what's simply possible to explore what's next.

Visit lashgroup.com to learn more about our eBV solutions and contact us.

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