



The Business of Pharmacy™

The Return on Investment (ROI) on PBM Services

Prepared by Visante on behalf of PCMA

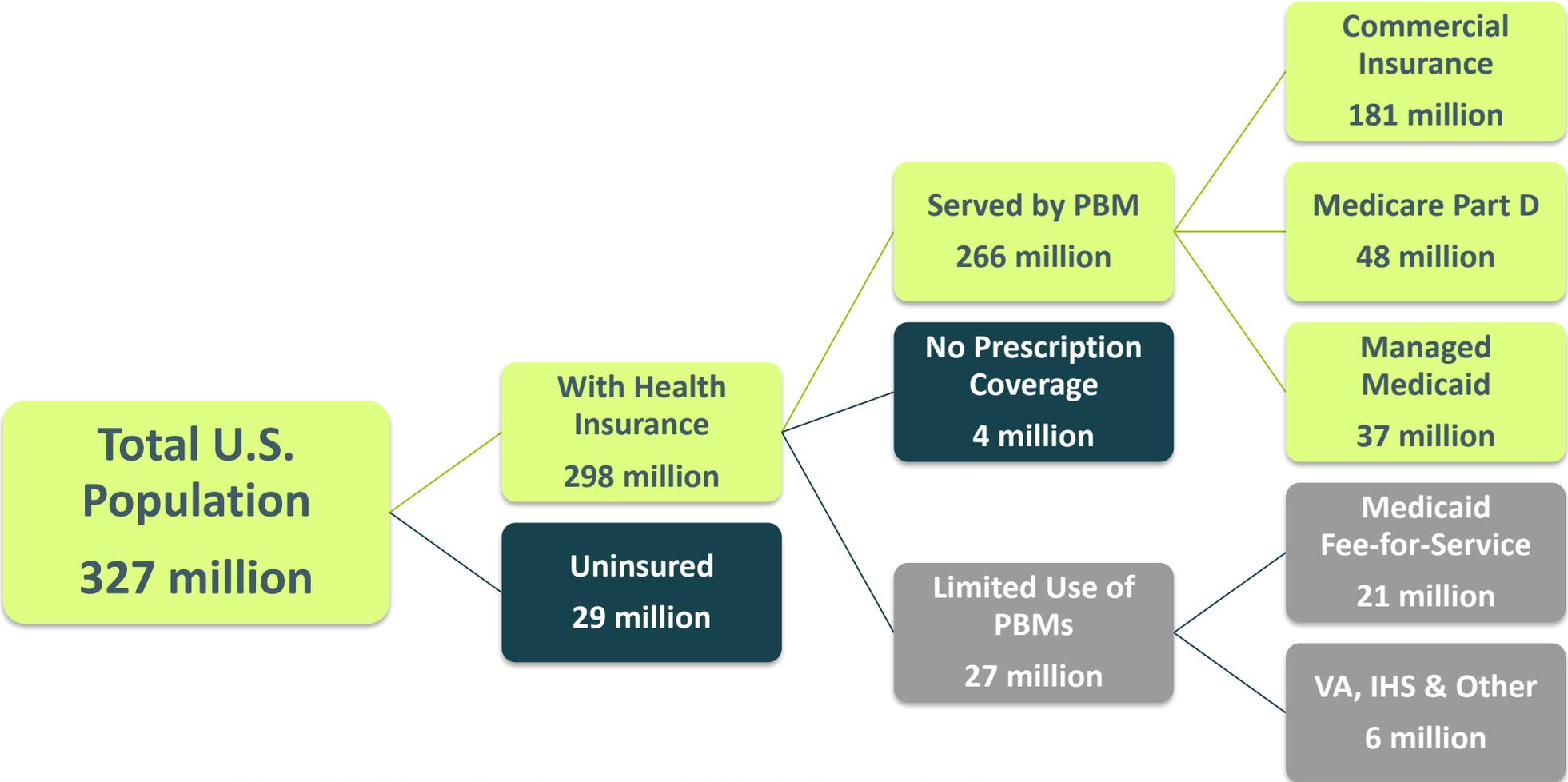
February 2020



Major Findings

- › Pharmacy Benefit Managers (PBMs) help reduce prescription drug costs for 266 million Americans.
- › PBMs save payers and patients 40-50% on their annual drug and related medical costs compared to what they would have spent without PBMs.
- › PBMs save payers and patients an average of \$962 per person per year.
- › For every \$1 spent on their services, PBMs reduce costs by \$10.
- › PBMs account for just 6% of the net cost of a prescription, while manufacturers account for 65%.
- › Over the next 10 years, PBMs will help prevent 1 billion medication errors.
- › PBMs improve drug therapy and prescription adherence in diabetes patients, helping to prevent some 480,000 heart failures, 230,000 incidents of kidney disease, 180,000 strokes, and 8,000 amputations annually.
- › Through specialty pharmacy services, PBMs will help extend and improve the quality of life for patients with multiple sclerosis and rheumatoid arthritis by approximately 1 million Quality Adjusted Life Years (QALYs) over 10 years.

PBMs Lower Prescription Drug Costs for 266 Million Americans



Source: Visante estimates based on data from US Census, CMS, CDC, Kaiser Family Foundation, and AHRQ Medical Expenditure Panel Survey.
All figures may not total due to rounding.

PBMs Save 40-50% on Prescription Drug Costs

Pharmacy benefit managers help payers and patients save 40-50% on their annual drug and related medical costs compared to what they would have spent without PBMs. PBMs use sophisticated tools and strategies to address the following areas:

**Unit Cost:
30-35% Savings**

Manufacturer Rebates & Pharmacy Discounts

- Pharmacy Network Discounts
- Mail Service Pharmacy
- Manufacturer Discounts and Rebates
- Specialty Pharmacy
- Specialty Channel Management

**Drug Mix:
5-10% Savings**

Encourage Generics and Preferred Brands

- Generic Substitution
- Formularies and Therapeutic Interchange
- Step Therapy
- Copay Tiers
- Consumer Education
- Specialty Pharmacy
- OTC

**Utilization:
5-10% Savings**

Reduce Inappropriate Use and Improve Patient Adherence

- Refill Too Soon
- Quantity Limits
- Prior Authorization
- Patient Adherence
- Specialty Pharmacy Care Management Programs

PBM Savings Per Person by Payer Type

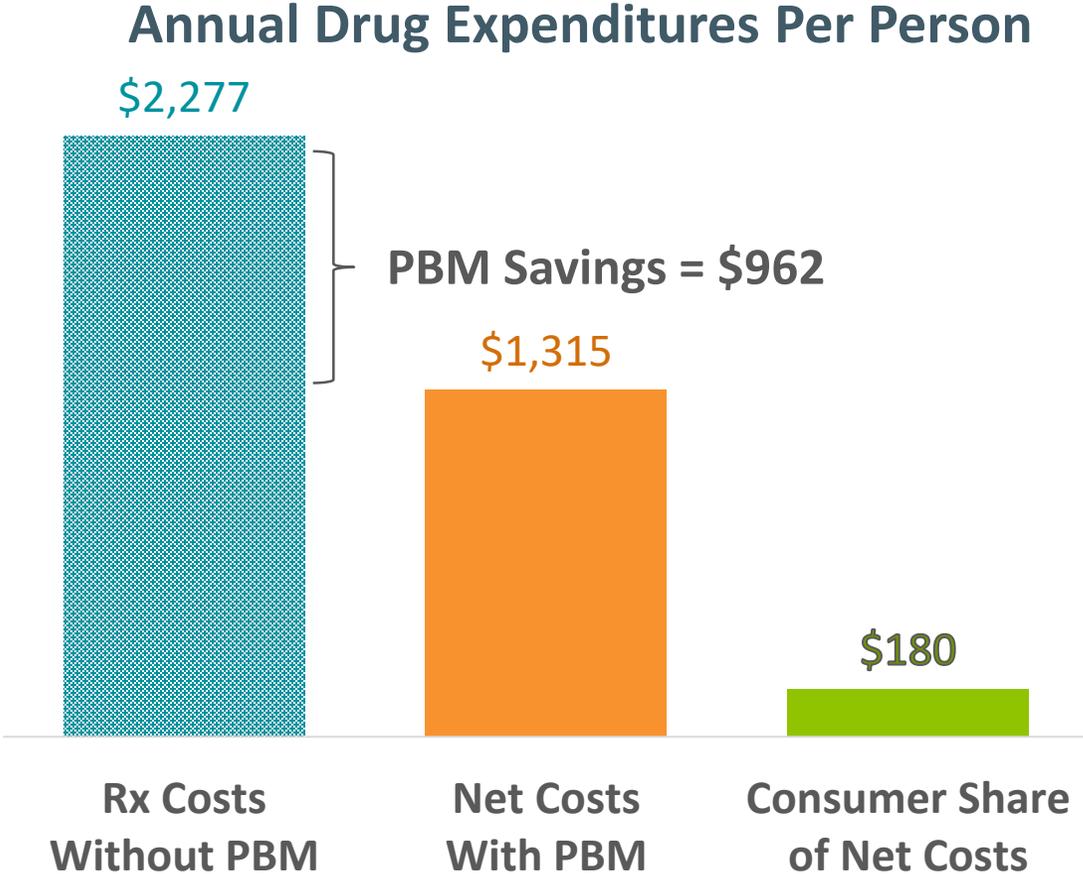
Payer Type	Enrollees (millions)	Annual Number of Prescriptions Per Person	PBM Savings Per Person Per Year
Private/Commercial Insurance	181	11	\$743
Medicare Part D	48	21	\$2,147
Medicaid Managed Care	37	11	\$490
TOTAL or WEIGHTED AVERAGE	266	13	\$962

Source: Visante estimates for 2020 based on data from multiple sources, including CMS National Health Expenditures and IQVIA.

PBMs Deliver Savings of \$962 Per Person Per Year

Annual Savings Per Person

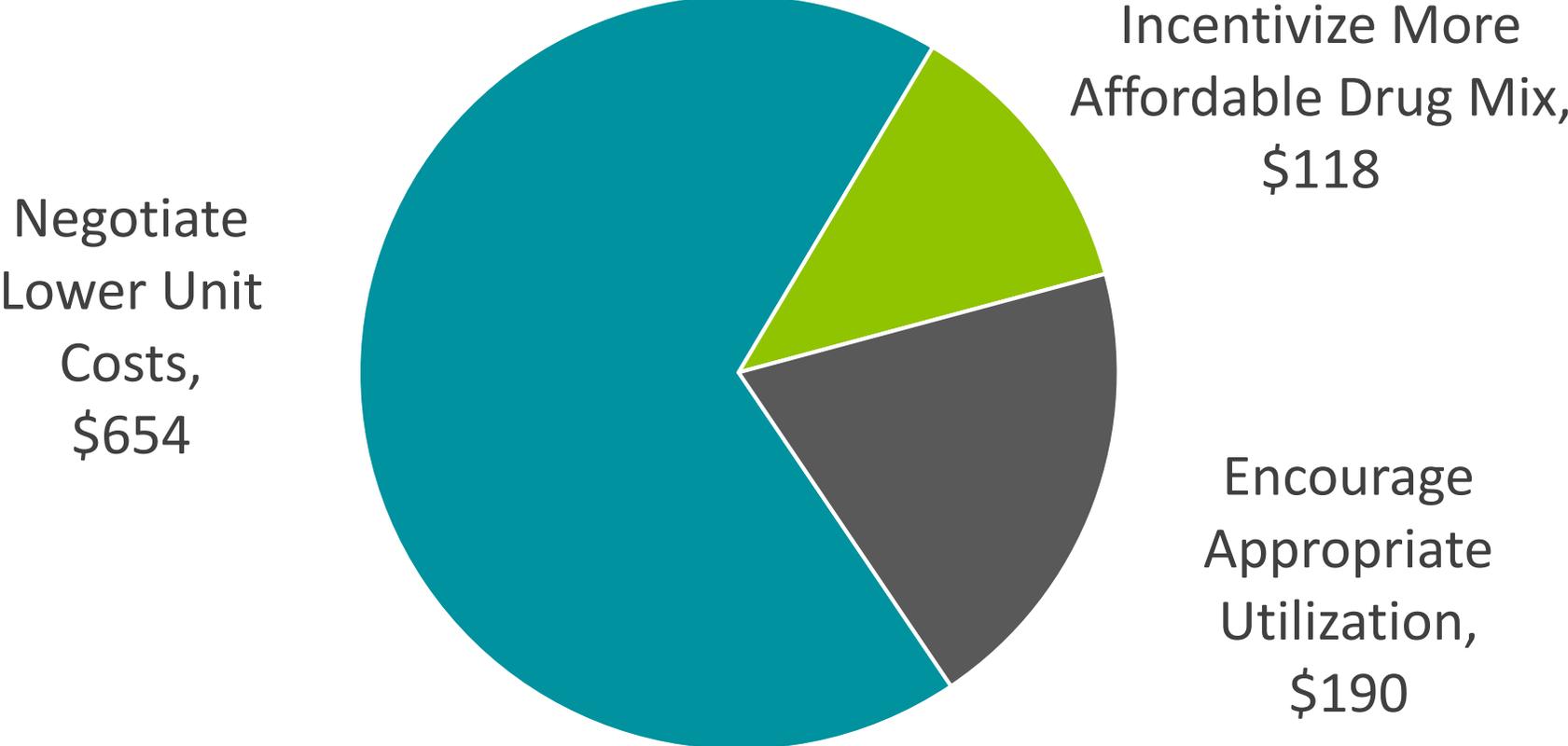
- On average, each American fills more than 12 prescriptions per year.
- On average, the overall health system (i.e., both payers and consumers) is currently paying approximately \$1,315 per person per year
- Without PBMs and the savings they generate, costs could be \$2,277 per person per year.
- PBM savings equals \$962 per person per year.
- Of the \$1,315 net cost per year, consumers pay \$180, or less than 14% of the total.



Source: Visante estimates for 2020 based on data from multiple sources, including CMS National Health Expenditures and IQVIA.

How PBMs Save \$962 Per Patient Per Year

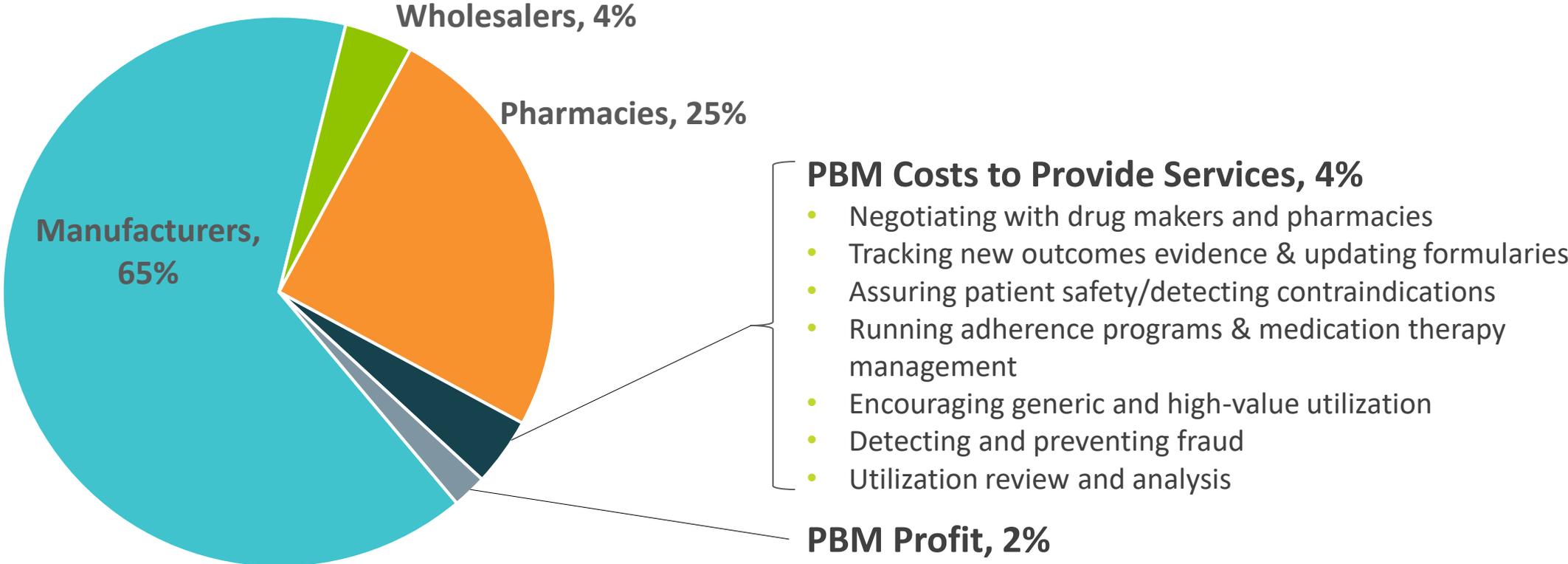
Total Annual PBM Savings Per Patient = \$962



Source: Visante estimates for 2020 based on data from multiple sources, including CMS National Health Expenditures and IQVIA.

PBM Take Only 6% Of Rx Drug Dollar: 4% Pays for PBM Services, 2% Profit

Share of Drug Dollar Retained by Drug Supply Chain Participants



Source: Visante estimates, based on data published by IQVIA, Pembroke, Altarum, USC Schaefer, and Health Affairs. Figure displays estimated total net expenditures (after rebates), both brands and generics. Includes only traditional PBM services, and excludes prescriptions filled by PBM-owned mail/specialty pharmacies, which cost less than retail but provide added margins to PBMs who own mail/specialty pharmacies.

PBM Return On Investment (ROI) = 10:1

Payers and Patients Spend \$1 on PBMs to Save \$10

For each \$100 in prescription drug expenditures...

PBMs Gross Margin
\$6 ¹

Costs Would Be More
Than \$60 Higher
Without PBMs ²

The ROI on PBM
Services Equals
More Than 10:1

1) Estimated gross margin of 6% on PBM services, excluding prescriptions filled in owned mail-service or specialty pharmacies.

2) If unmanaged costs were \$167, then 40% savings would yield actual drug expenditures of \$100, savings of \$67.

Sources: Visante estimated ROI of 10:1 is based on estimates from Pembroke Consulting, as well as 10-Q Reports for Express Scripts & CVS Caremark.

A [UHG study of PBM's in Managed Medicaid](#) (e.g., 2019 savings of \$8.5 billion, offset by PBM fees of only \$430 million) calculated an ROI of almost 20:1, double Visante's estimates.

PBMs Reduce Medication Errors for Patients

- Each time a patient uses their insurance for a prescription, PBMs perform drug utilization review (DUR) to alert pharmacies and doctors of potential errors, such as: drug interactions, incorrect dosages, drug-disease contraindications, drug duplications, and potential drug misuse.
- Since many patients have several doctors, and more than 40% use more than one pharmacy,¹ only PBMs bring together the necessary information and technology to check for errors.
- Over the next 10 years, PBMs will help prevent 1 billion medication errors (approximately 100 million per year).²
- These averted medication errors are most prevalent in the Medicare population, since the elderly take more prescriptions, and are more likely to have drug duplications or drug interactions.

¹ Look K and Mott D, Multiple pharmacy use and types of pharmacies used to obtain prescriptions. JAPhA 2013;53(6):601–610.

² Visante estimate based on more than 4 billion (retail and mail pharmacies) Rx per year (IQVIA), and 12% of Rx trigger DUR alert, 21% of alerts result in Rx change. (Fulda et al, Current Status of Prospective Drug Utilization Review. J Manag Care Pharm. 2004;10(5):433-41.

PBMs Improve Clinical Outcomes for Patients: Diabetes

- Diabetes is the most prevalent chronic disease in the U.S., affecting 30 million Americans.
- PBMs help improve drug therapy and prescription adherence in diabetic patients, resulting annually in the prevention of:
 - ▶ 400,000 heart attacks
 - ▶ 250,000 strokes
 - ▶ 100,000 amputations
 - ▶ 50,000 end stage kidney disease diagnoses
 - ▶ 450,000 emergency department visits related to hyper/hypoglycemia

Source: Visante estimates based on CDC's National Diabetes Statistics Report 2017, and studies demonstrating improved adherence by 10+ percentage points.

PBMs Improve Clinical Outcomes for Patients: Multiple Sclerosis and Rheumatoid Arthritis

- Specialty pharmacy management offered by PBMs (e.g., patient education and adherence programs; individual patient monitoring, care management and care coordination; physician consultation and care coordination; sophisticated data analytics) will add more than 1 million Quality Adjusted Life Years (QALY) for patients with multiple sclerosis and rheumatoid arthritis over ten years (2020-29).
 - More than 300,000 QALYs added in patients with multiple sclerosis
 - More than 700,000 QALYs added in patients with rheumatoid arthritis
- A QALY is a relative measure of the ability of alternative treatments to extend life and enable people to maintain normal daily activities when living with chronic illness.

Source: Visante estimates



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