



# The Return on Investment (ROI) on PBM Services

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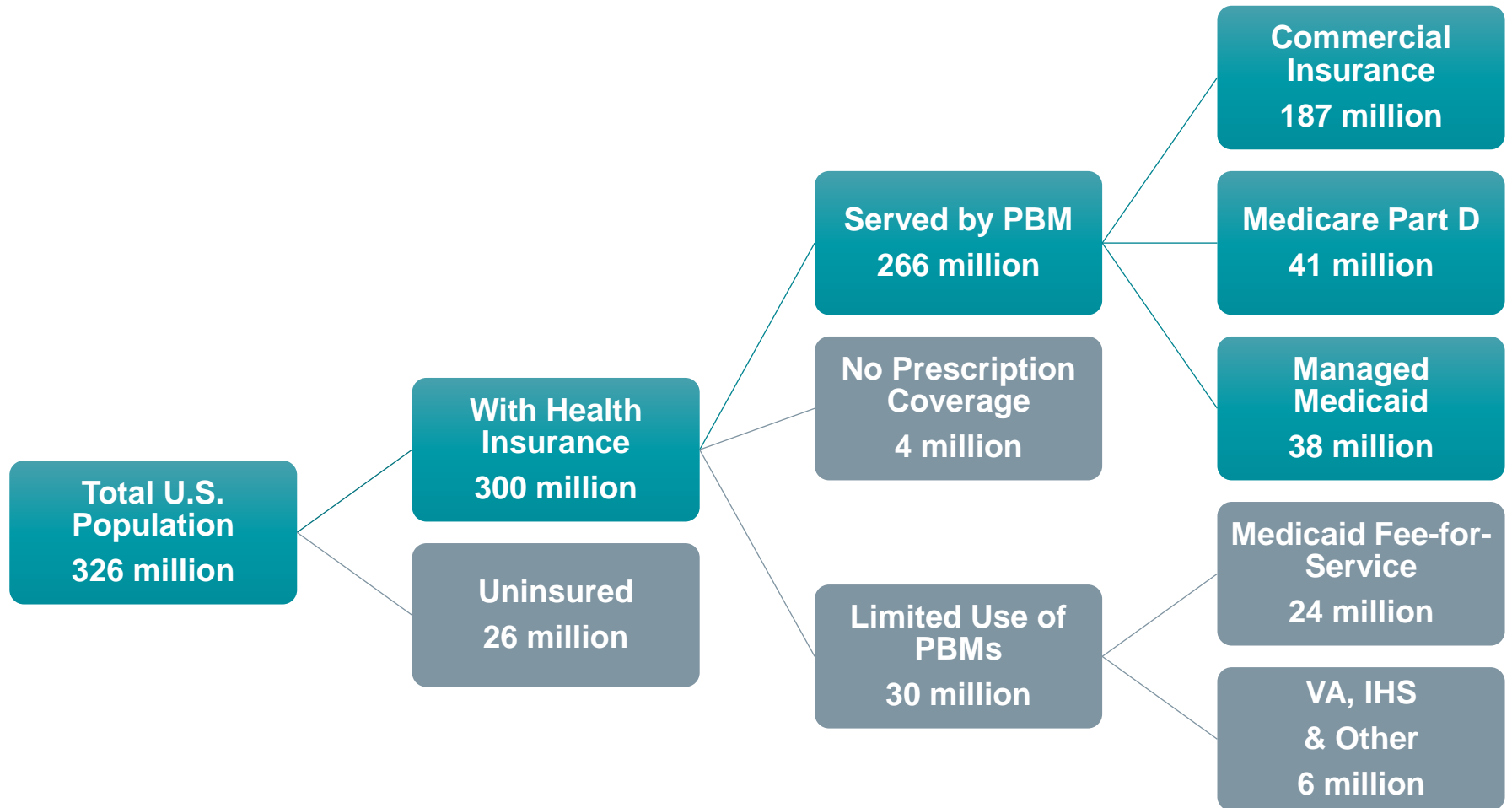
Prepared by Visante on behalf of PCMA

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# Major Findings

- Pharmacy benefit managers (PBMs) will help reduce prescription drug costs for more than 266 million Americans in 2017.
- PBMs save payers and patients 40-50% on their annual prescription drug and related medical costs compared to what they would have spent without PBMs.
- PBMs save payers and patients an average of \$941 per person per year.
- For every \$1 spent on their services, PBMs reduce costs by \$6.
- PBMs account for just 4% of the net cost of a brand name prescription, while manufacturers account for 88%.
- Over the next 10 years, PBMs will help prevent 1 billion medication errors.
- 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 improve drug therapy and patient 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.

# PBMs Will Lower Prescription Drug Costs for 266 Million Americans in 2017



Source: Visante estimates based data from US Census, CMS, CDC, Kaiser Family Foundation, and AHRQ Medical Expenditure Panel Survey

# PBMs Save 40-50% on Prescription Drug Costs

Pharmacy benefit managers (PBMs) 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:  
31-36%  
Savings**

## **Manufacturer Rebates & Pharmacy Discounts**

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

**Drug Mix:  
11-15%  
Savings**

## **Encourage Generics and Preferred Brands**

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

**Utilization:  
Up to 2%  
Savings**

## **Reduce Inappropriate Use and Improve Patient Adherence**

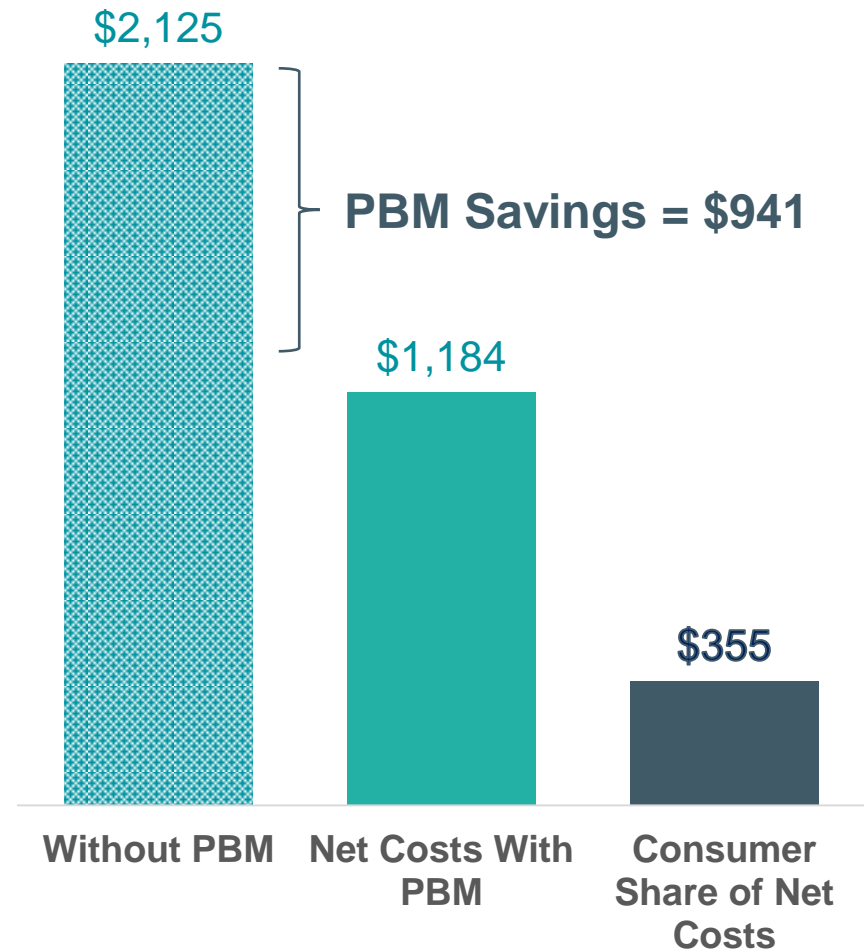
- Refill Too Soon
- Quantity Limits
- Prior Authorization
- Patient Adherence
- Specialty Pharmacy Care Management Programs

# PBM Savings of \$941 Per Person Per Year

## Annual Savings per Patient

- 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 \$1,200 per person per year.
- Without PBMs and the savings they generate costs would be more than \$2,100 per person per year.
- PBM savings equals \$941 per person per year.
- Of the \$1,184 net cost per year, consumers pay \$355, or less than one-third of the total.

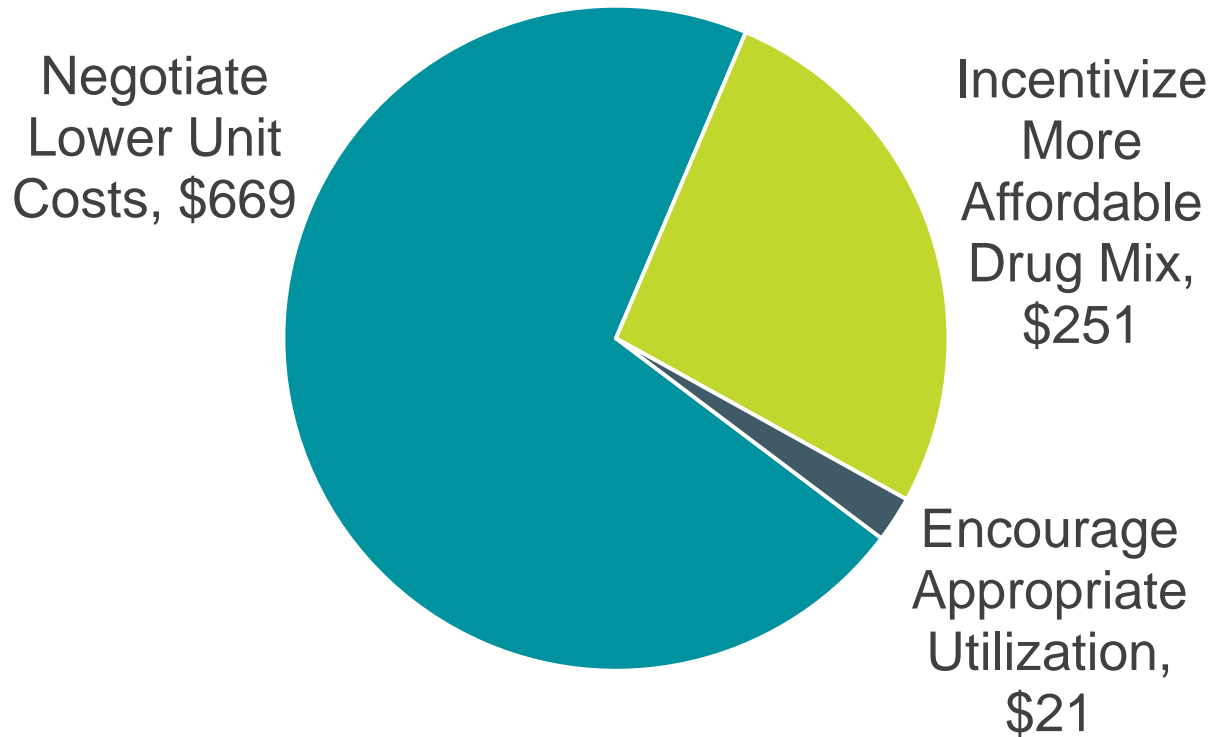
Annual Drug Expenditures Per Person



Source: Visante estimates based data from CMS National Health Expenditures, IMS Health, Kaiser HRET 2016 Employer Health Benefits Survey

# How PBMs Save \$941 Per Patient Per Year

Total Annual PBM Savings Per Patient =  
\$941



Source: Visante estimates

# Annual PBM Savings Per Person by Payer Type



Payer Type	2017 Enrollees (millions)	Annual Number of Prescriptions Per Person	PBM Savings Per Person Per Year
Private/Commercial Insurance	187	11	\$737
Medicare Part D	41	26	\$2,341
Medicaid MCO	38	10	\$449
<b>All Payers*</b>	<b>266</b>	<b>13</b>	<b>\$941</b>

\* All payers include private/commercial insurance, Medicare Part D, and Medicaid Managed Care Organizations (MCOs)  
Source: Visante estimates

# PBM Return On Investment (ROI) = 6:1

*Payers and Patients Spend \$1 on PBMs to Save \$6*

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

**PBMs Gross Margin  
6-8% or \$7**

**Costs Would be  
\$45 Higher  
Without PBMs**

**The ROI on  
PBM Services  
Equals More  
Than 6:1**

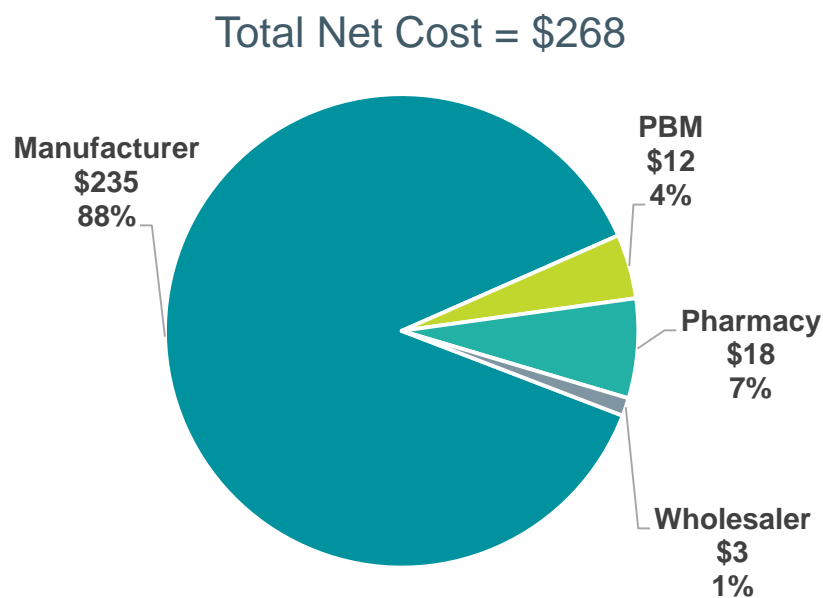
*Source: Visante estimates based on range of PBM gross margin data as reported in SEC filings for publicly-traded PBMs*



# PBMs Account for 4% of Brand Drug Costs

- By negotiating price concessions from manufacturers, PBMs reduce the average cost of a brand prescription\* from \$350 to \$268
- Of the \$268 net cost, PBMs get an average \$12 or 4% for their services.
- Manufacturers receive 88% of the net cost, which amounts to \$235.
- Pharmacies receive 7% of the net cost or \$18.
- Wholesalers account for 1% of the net cost.

## Breakdown of the Average Net Cost of a Brand Prescription\*



\* "Brand prescription" includes traditional brand drugs, and excludes specialty brand drugs

Source: Visante estimates based on data from IMS Health, Pembroke Consulting, Deutsch Bank, Kaiser HRET 2016 Employer Health Benefits Survey

# Reducing Medication Errors Part of the ROI on PBMs

- Over the next 10 years, PBMs will help prevent 1 billion medication errors (approximately 100 million per year).<sup>1</sup>
- These averted medication errors are most prevalent in the Medicare population, since the elderly take more prescription drugs and are more likely to have drug duplications or drug interactions.
- Each time a patient uses their insurance for a new prescription, PBMs perform drug utilization review (DUR) to alert pharmacies and doctors if the newly prescribed drug might interact with other drugs being taken by the patient.
- Since many patients have several doctors, and more than 40% use more than one pharmacy,<sup>2</sup> only PBMs have the most comprehensive records to check for drug-drug interactions.

<sup>1</sup> Visante estimate based on more than 4 billion Rx per year (IMS Health), 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.

<sup>2</sup> Look K and Mott D, [Multiple pharmacy use and types of pharmacies used to obtain prescriptions](#). JAPhA 2013;53(6):601–610.

# PBMs Improve Patient Outcomes: Diabetes

- Diabetes is the most prevalent chronic disease in the US, affecting 30 million Americans.
- PBMs help improve drug therapy and patient adherence in diabetic patients, resulting annually in:
  - ▶ Kidney disease being prevented in 230,000 patients;
  - ▶ Heart failure being prevented in 480,000 patients;
  - ▶ Stroke being prevented in 180,000 patients; and
  - ▶ Amputations being prevented in 8,000 patients.

*Source: Visante estimates based on CDC's National Diabetes Statistics Report 2014, and studies demonstrating improved adherence by 10+ percentage points*

# PBMs Improve Patient Outcomes: Multiple Sclerosis and Rheumatoid Arthritis

- Specialty pharmacy management offered by PBMs will add more than 1 million quality-adjusted life years (QALYs) for patients with multiple sclerosis and rheumatoid arthritis over ten years (2017-26).
  - More than 300,000 QALYs added in patients with multiple sclerosis.
  - More than 700,000 QALYs added in patients with rheumatoid arthritis.
- A quality-adjusted life year (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*

