Drug Adherence

PRESENTED BY
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What Adherence Important?

SS1 Not sure what you are trying to say here. Why Adherence is Imoprtant; What adherence is important? Either way, you are missing a word.
Sarah Shonk, 11/19/2020

DL1 I agree with Sarah.
Dinah Langsjoen, 11/19/2020

Impact of Poor Adherence

Poor adherence causes

125,000

deaths a year

50%

of patients with chronic conditions
do not take their medications as prescribed

1/3 to 2/3

of medication-related hospitalizations in the US
are the result of poor medication adherence

$100+ Billion

Excess costs are attributable to poor medication
adherence in the US

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Revenue Impact

Medication-related
adherence behavior influences

50%

of achievable points in
Star Ratings performance

Increasing from 3 to 4 stars
provides plans with an

8-12%

enrollment increase

70%

of plans that achieve 4+ Stars
also earn 4+ Stars on all three
medication adherence measures

Increasing from 3 to 4 stars
provides plans with up to a

5%

boost to revenue

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DL3   I broke up the long sentence as it visually filled too much of the square IMO

Dinah Langsjoen, 11/19/2020

Star Rating Measures

Star Rating Measures

Number of measures	Star Rating Measures	Points/Total Estimated Points	Percentage of Estimated Points
8	**Explicit Medication Related Measurements**	14 of 75 points	18.7%
	Process Measures		
	• C09-Care for Older Adults—Medication Review	1 point	
	• C20-Medication Reconciliation Post Discharge	1 point	
	• C22-Statin Therapy for Patients with Cardiovascular Disease	1 point	
	• D13-MTM Program Completion Rate for CMR	1 point	
	Intermediate Outcome Measures		
	• D10-Medication Adherence for Diabetes Medications	3 points	
	• D11-Medication Adherence for Hypertension (RAS Antagonists)	3 points	
	• D12-Medication Adherence for Cholesterol (Statins)	3 points	
	• D14-Statin Use in Persons with Diabetes (SUPD)	1 point	
6	**Health Impact Measurements**	10.5 of 75 points	14%
	Process Measures		
	• C03-Annual Flu Vaccine[a]	1 point	
	• C12-Osteoporosis Management in Women Who Had a Fracture[a]	1 point	
	• C17-Rheumatoid Arthritis Management[a]	1 point	
	Intermediate Outcome Measures		
	• C15-Diabetes Care—Blood Sugar Controlled[b]	3 points	
	Outcome Measure		
	• C21-Plan All-Cause Readmissions[c]	3 points	
	Patient Experience and Complaints Measures		
	• C28-Care Coordination[d]	1.5 points	
2	**Patient Experience Measurements**	3 of 75 points	4%
	Patient Experience and Complaints Measures		
	• D07-Rating of [Prescription] Drug Plan[e]	1.5 points	
	• D08-Getting Needed Prescription Drugs	1.5 points	
2	**Plan Improvement Measurements**	10 of 75	13.3%
	Improvement Measures		
	• C31-Health Plan Quality Improvement[f]	5 points	
	• D06-Drug Plan Quality Improvement[f]	5 points	
18	**TOTAL**	37.5 of 75 points	50%

Medicare Advantage Star Ratings Measures (Part C and D) for 2019 Reporting Year Related to Medication Behavior

Diabetes Medications

- Weight = 3

- 2019 MY National Average = 83%, 3.9 stars

- Examples include Metformin and Sitagliptin

- Insulin patients are excluded from the measure

- Excludes drug combinations used for dietary purposes

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Table BG: Biguanides[a,b]

Biguanide Medications and Combinations
metformin (+/- alogliptin, canagliflozin, dapagliloflozin, empagliflozin, ertugliflozin, glipizide, glyburide, linagliptin, pioglitazone, repaglinide, rosiglitazone, saxagliptin, sitagliptin)

a Active ingredients are limited to oral formulations only.

b Excludes nutritional supplement/dietary management combination products.

Table SFU: Sulfonylureas[a]

Sulfonylurea Medications and Combinations		
chlorpropamide	glipizide (+/- metformin)	tolazamide
glimepiride (+/- pioglitazone)	glyburide (+/- metformin)	tolbutamide

a Active ingredients are limited to oral formulations only.

Table TZD: Thiazolidinediones[a]

Thiazolidinedione Medications and Combinations	
pioglitazone (+/- alogliptin, glimepiride, metformin)	rosiglitazone (+/- metformin)

a Active ingredients are limited to oral formulations only.

Table DPP4: DPP-4 Inhibitors[a]

DPP-4 Medications and Combinations		
alogliptin (+/- metformin, pioglitazone)	saxagliptin (+/- metformin, dapagliflozin)	sitagliptin (+/- metformin, ertugliflozin)
linagliptin (+/- empagliflozin, metformin)		

a Active ingredients are limited to oral formulations only.

Hypertension Medications (RASA)

- Enforcement of blood pressure medication

- Weight = 3

- 2019 MY National Average = 85%, 3.3 stars

- Examples include Lisinopril and Losartan

- Excludes drug combinations used for dietary purposes

Table RASA: Renin Angiotensin System (RAS) Antagonists [a,b]

Direct Renin Inhibitor Medications and Combinations	
aliskiren (+/- hydrochlorothiazide)	

ARB Medications and Combinations	
azilsartan (+/- chlorthalidone)	irbesartan (+/- hydrochlorothiazide)
candesartan (+/- hydrochlorothiazide)	losartan (+/- hydrochlorothiazide)
eprosartan (+/- hydrochlorothiazide)	olmesartan (+/- amlodipine, hydrochlorothiazide)
telmisartan (+/- amlopdipine, hydrochlorothiazide)	valsartan (+/- amlodipine, hydrochlorothiazide nebivolol)

ACE Inhibitor Medications and Combination Products	
benazepril (+/- amlodipine, hydrochlorothiazide)	lisinopril (+/- hydrochlorothiazide)
captopril (+/- hydrochlorothiazide)	moexipril (+/- hydrochlorothiazide)
enalapril (+/- hydrochlorothiazide)	perindopril (+/- amlodipine)
fosinopril (+/- hydrochlorothiazide)	quinapril (+/- hydrochlorothiazide)
ramipril	trandolapril (+/- verapamil)

a Active ingredients are limited to oral formulations only.

b Excludes nutritional supplement/dietary management combination

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Cholesterol Medications (Statin)

- Enforcement of cholesterol medication

- Weight = 3

- 2019 MY National Average = 82%, 3.4 stars

- Examples include Simvastatin and Pravastatin

Table STATINS: Statins[a]

Statin Medications		
fluvastatin	pitavastatin	rosuvastatin
atorvastatin (+/- amlodipine)		pravastatin
simvastatin (+/-ezetimibe, niacin)		lovastatin (+/- niacin)
a Active ingredients are limited to oral formulations only.		

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Adherence Methodology

Adherence Rates Methodology

Adherent: enough Rx refills to cover 80% of total prescribed days

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Adherent Member						Missed				Missed		
Non-Adherent Member										Missed		Missed
One-Fill Member												
Past Oct Member												
Lapse Member						Missed						Missed

Fill	
Second Fill	
Missed Fill	Missed
Enrolled	
Not Enrolled	

Adherent Member	83%
Non-Adherent Member	50%
One-Fill Member	N/A
Past Oct Member	N/A
Lapse Member	N/A

Adherence Adjustments - Overlapping Fills

2 drug names, no overlapping fills

Example 1: Non-Overlapping Fills of Two Different Drugs

	January		February		March	
	1/1/2012	1/16/2012	2/1/2012	2/16/2012	3/1/2012	3/16/2012
Benazepril	15	16	15	14		
Captopril					15	16

Calculation

Covered Days = 90

Measurement Period = 90

PDC = 100%

Adherence Adjustments - Overlapping Fills

Adjusting for Overlapping fills – only for the same drug name

Example 2: Overlapping Fills of the Same Drug

	January		February		March	
	1/1/2012	1/16/2012	2/1/2012	2/16/2012	3/1/2012	3/16/2012
Lisinopril	15	16				
Lisinopril		16	15			
Lisinopril			15	14		

Calculation

Covered Days = 91

Measurement Period = 90

PDC = 100% (PDC > 100% rounded to 100%)

Adherence Adjustments - Overlapping Fills

Adjusting for Overlapping fills – No adjustments for different drug name

Example 3: Overlapping Fills of the Same and Different Drugs

	January		February		March		April	
	1/1/2012	1/16/2012	2/1/2012	2/16/2012	3/1/2012	3/16/2012	4/1/2012	4/16/2012
Lisinopril	15	16						
Lisinopril		16	15					
Captopril					15	16		
Lisinopril						16	15	

Calculation

Covered Days = 108

Measurement Period = 120

PDC = 90%

Adherence Adjustments – IP Stays

Adjusting for Inpatient Stays – Assumes the patient fills their drug while admitted

Table L-10: Before Adjustment

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Drug Coverage	X	X	X			X	X	X	X			X	X	X	X
Inpatient Stay						+	+	+	+						

PDC Calculation:
Covered Days: 11
Measurement Period: 15
PDC: 11/15 = 73%

Table L-11: After Adjustment

Day	1	2	3	4	5	10	11	12	13	14	15
Drug Coverage	X	X	X			+	+	X	X	X	X
Inpatient Stay											

PDC Calculation:
Covered Days: 9
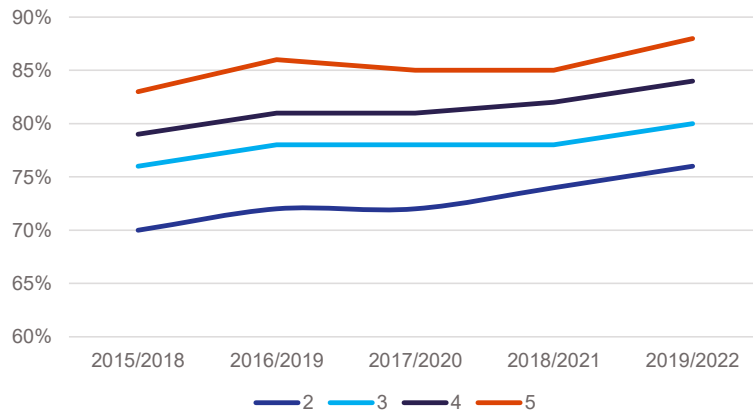Measurement Period: 11
PDC: 9/11 = 82%

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Aggregate Stars Measure Value

- Calculate member level Proportion of Days Covered (PDC)

- ESRD/Hospice members are excluded

- Adjusted for IP stays – negligible impact

- Members are adjusted for partial year enrollment

- Calculate contract level adherence value

  - $$\frac{112\ Adherent\ Members}{31\ Non-Adheren\ \ Members + 11\ \ Adherent\ Members} = Measure\ Score = .78$$

- Round the measure to nearest percentage point

- Compare to cut-points

- Add to overall Stars Calculation

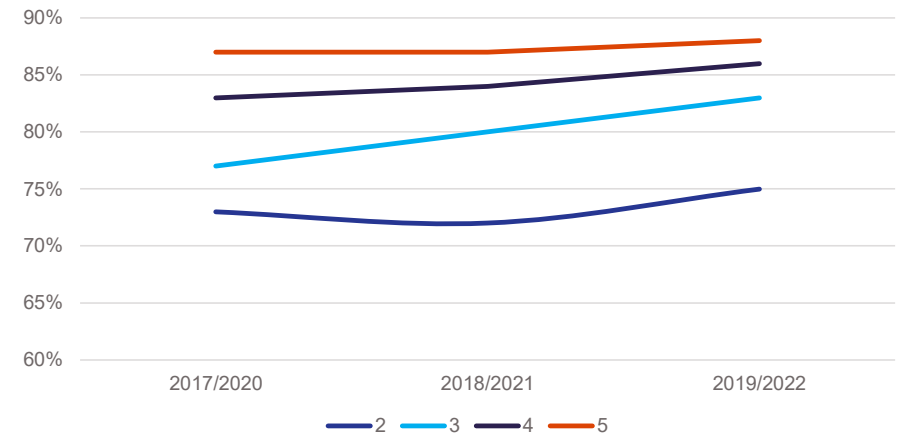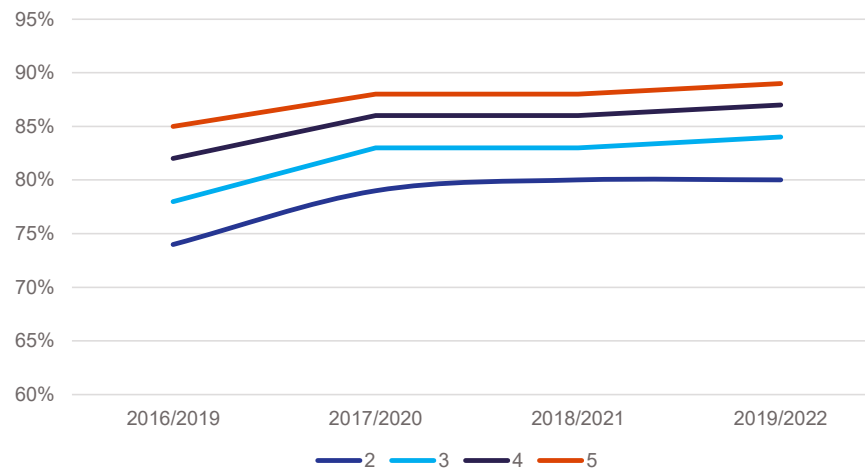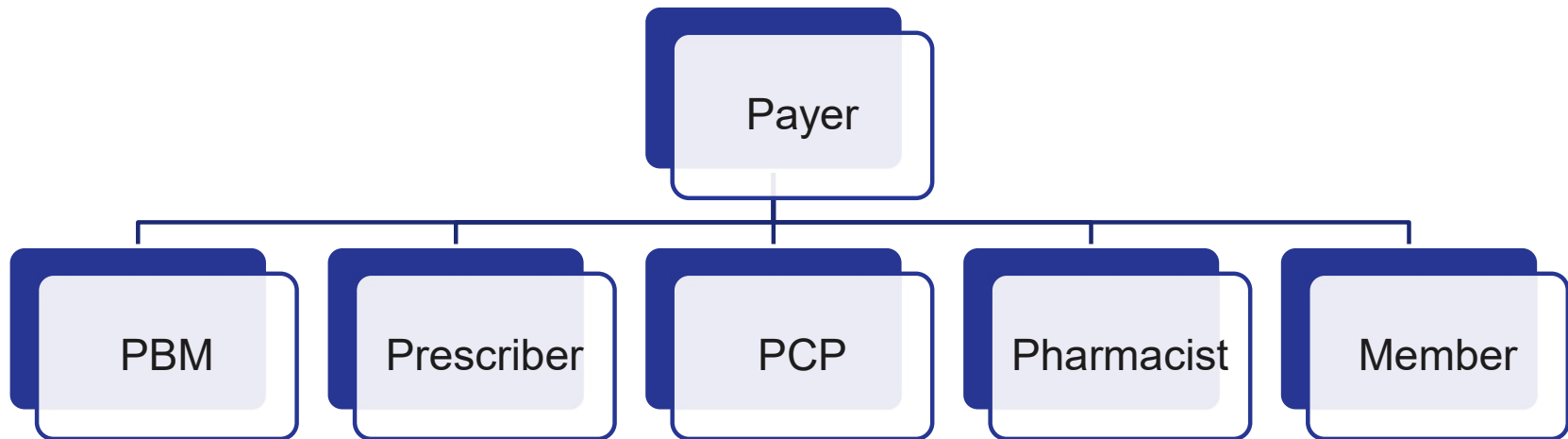# Adherence Cut Points

Diabetes Cut Points

Statin Cut Points

RASA Cut Points

Taking Analytics to Operations

Payer Interactions

Common Factors in Non-Adherence

Pharmacy
- Proximity
- Loyalty
- Ease

Demographics
- Age
- Ethnicity

Social Determinants
- Living Situation
- Income Status
- Household Size
- Urban/Rural
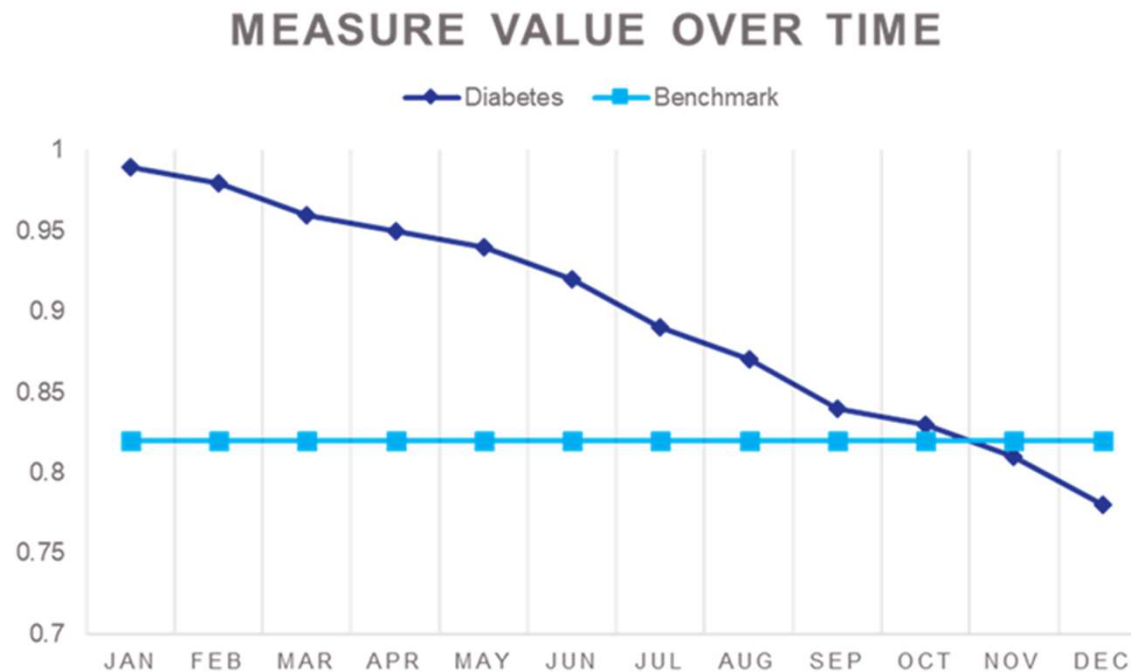
Medical
- History of non-adherence
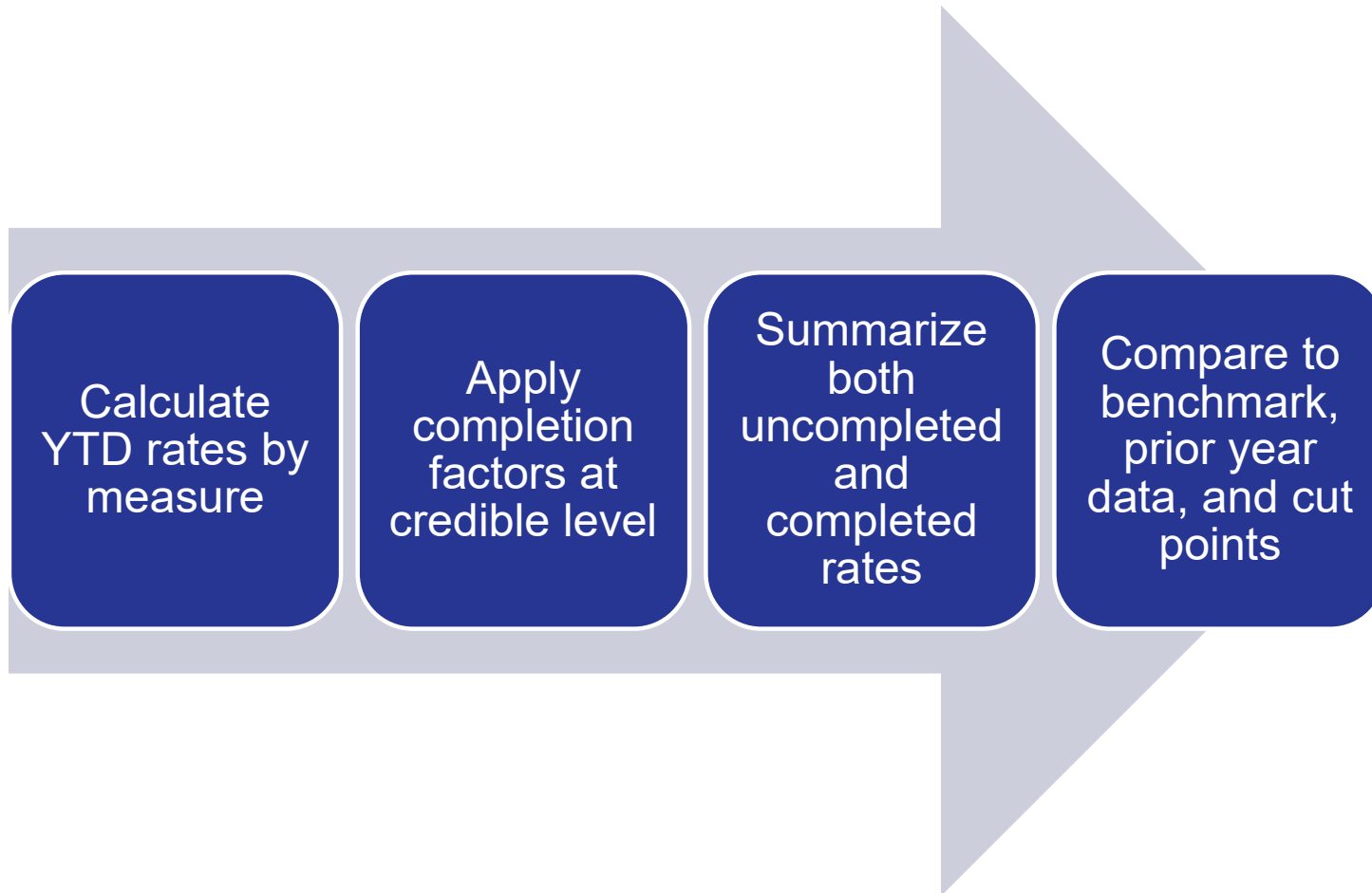- Number of chronic conditions
- Medical data

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Metrics

Current PDC Rate

Next Fill Date

Compliance Date

Point of No Return

Distance to Pharmacy

Prescriber vs. PCP

Fill Type (R30/R90/MO)

Adherence Rate Completion

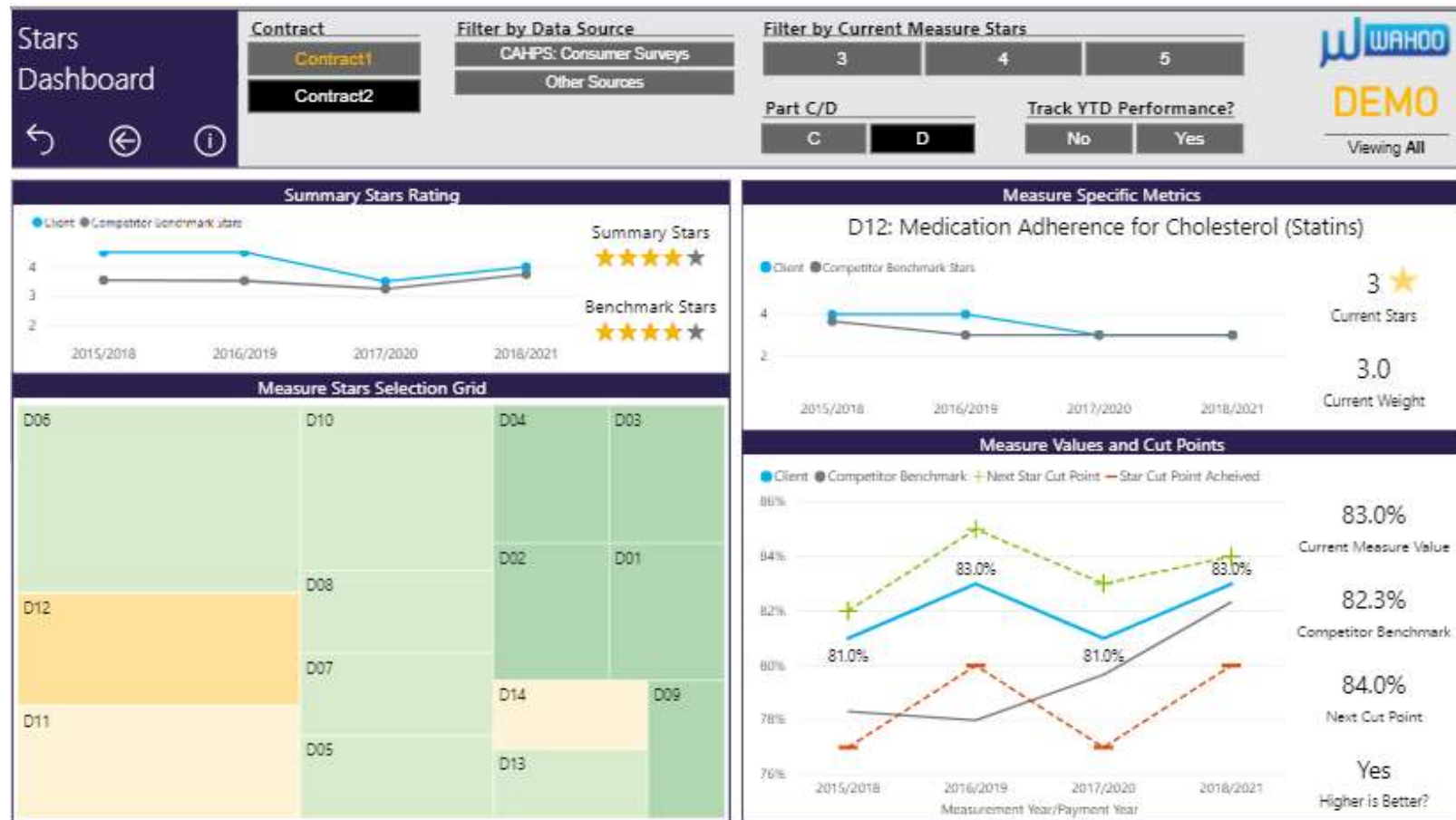- PDC values decline over time, leading to a false sense of security when calculated mid-year.

MEASURE VALUE OVER TIME

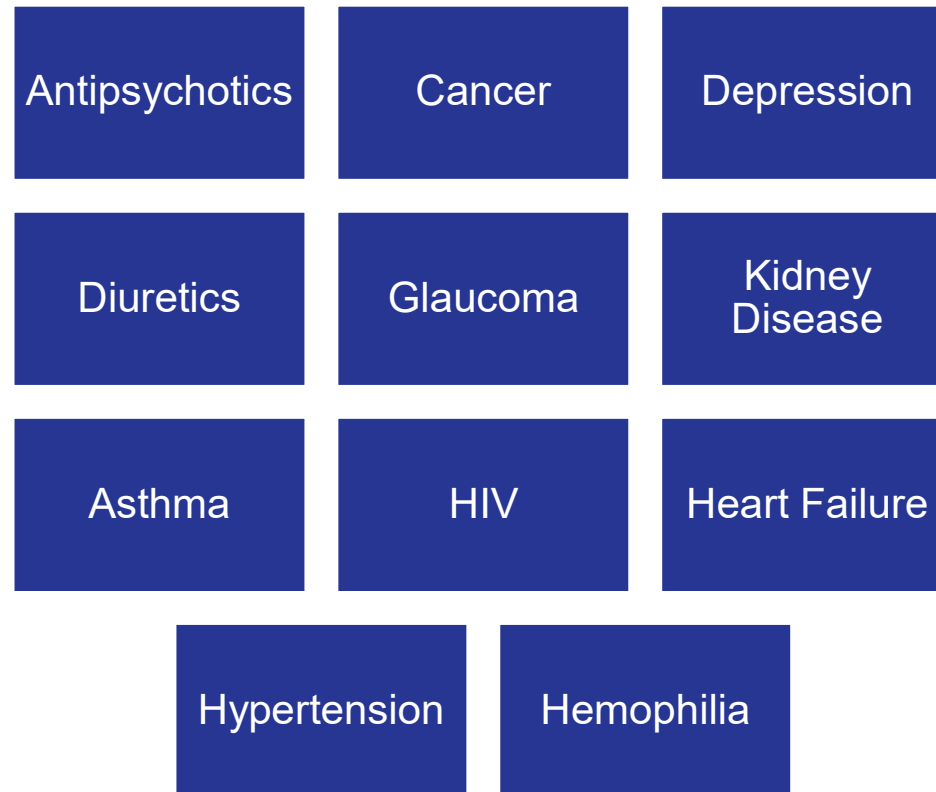→ Diabetes   → Benchmark

Aggregate Reporting

Aggregate Reporting Example

Strategies to Enhance Adherence

Pharmacy Benefits	Lower copays for Retail 90 and Mail Order
Transportation Benefit	Adding a transportation benefit to get patients to the Pharmacy
Text Message Service	Test messaging reminders to members
Mobile Pharmacy	More access to pharmacies
PCP incentives	Add incentives to PCPs for adherence follow-ups
PBM incentives	Add incentive in contract where PBM shares in benefit

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Other Considerations and Thoughts

Other Classes for Clinical Correlation Analytics

Antipsychotics	Cancer	Depression
Diuretics	Glaucoma	Kidney Disease
Asthma	HIV	Heart Failure
Hypertension	Hemophilia	

Adherence Limitations

PDC Rate Definition

- Limited clinical evidence that 80% is the right number

Quality measures don't capture the best conditions

- Asthma, depression, cancer, etc.

Low-Income plans are disproportionality impacted

- More difficult to reach out to Low-Income patients, but clustering methodology compares to all MAPD plans

Even if drug is filled, is the patient is taking?

- Where to put incentives for adherence

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COVID-19 Impacts

Pros

Greater fear leads to greater adherence in some cases (asthma)

Increased mail-order and extended fills

Statin adherence is correlated with a 30% drop in incidence of severe/fatal COVID-19

Cons

Supply chain interruptions
- Drugs
- Pharmacies

Less pharmacist interaction

Disproportionate impact to Low-Income patients

Depression, substance abuse, social isolation, and mental health issues are highly correlated with non-adherence

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Thank You!