

Assessment of WI ETF VBID Programs: 2019 – 2021 Update

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Background

Assessment of 2 VBID pilot programs focused on diabetes management by reducing/eliminating costs to members. These are managed by:

1. Navitus/WebMD(StayWell):
 - Reduces cost sharing for diabetes prescription drugs
2. Dean Health Plan – Living Healthy Plus (LHP) Program:
 - Eliminates cost sharing for diabetes related medical visits and tests

Assessment of VBID programs based on:

- Member engagement in diabetes and general preventive care
- Adherence to recommended care
- Cost of care trends
- Diabetes disease stage transition trends



Summary Assessment

There is some evidence that subsidized cost of prescription drugs and medical care related to diabetes results in:

- better engagement among members participating in VBID programs, this is indicated by a higher rate of preventive visits related to the evaluation and management of the condition
- improved adherence to recommended diabetes medication
- reduction in unplanned utilization of services such as emergency room and hospitalizations

The best opportunities for intervention are:

- reduction of the transitions from the very early onset of diabetes to later stages through lifestyle changes
- minimization of the transitions into the most critical stages of diabetes e.g., through improved complex care coordination

Note the impact of the relatively small statistics utilized for the analysis on the strength of insights and conclusions



Navitus/WebMD (StayWell) Review

Navitus – Analytic Parameters

Time Periods:

- Baseline year : 2019
- Evaluated through 2021

Eligible

- Continuously enrolled in GHIP as:
 - Relationship: Employee, Spouse
 - Non-HDHP members
- Filled diabetes prescription with Navitus
- Exclude members in other VBID program (Dean LHP participants)

Active (Study Group)

- Eligible Requirements +
- In VBID program for reduced cost diabetes drugs for **each** of 2019, 2020 and 2021

Not Participating (Control Group)

- Eligible Requirements +
- Did not enroll in reduced diabetes drugs program in **any** of years 2019, 2020 and 2021



Population Selection

Constraints imposed on eligible members in both the study and control groups include:

- must be enrolled in GHIP all through the evaluation period
- must have at least 1 episode of diabetes in each of the years of evaluation
 - filling Rx alone does not trigger start of an episode
- exclude members also participating in other VBID programs (Dean) in the same period
- select subset of control group with relevant attributes similar to study group

Criteria	Study Group	Control Group
Listed as (Non) Participant in <u>any of</u> 2019 – 2021	997	17,702
Listed as (Non) Participant in <u>each of</u> 2019 – 2021	329	10,961
Meets Inclusion Criteria : Continuously enrolled, Non-HDHP, Member/Spouse, Episodes of Diabetes	200	5,020
Exclude members in other VBID (Dean LHP) program	180	5,020
Matched by Age, Gender, Risk Category and Diabetes Disease Stage	180	540

Population Selection - Matching

Selection of subset of control group matching relevant attributes of the study group resulted in:

- similar plan types and age/gender mixes
- the same risk categories* distributions
- the same distribution of patients into the 3 diabetes episode disease stages**

*indication of the expected relative cost risk of a patient, ordered from low to high as follows:

{*Healthy, Stable, At Risk, Struggling, In Crisis*}

**Merative's disease staging methodology groups conditions from early onset (stages 0-1) to later stages where the condition is advanced and typically accompanied by multiple complications (stage 3)

Distribution of Plan Types and Ages (2019)

		Study Group			Control Group		
		Members	Average Age (Years)	% Membership	Members	Average Age (Years)	% Membership
Non-Medicare	Female	37	55.5	20.6%	113	56.5	20.9%
	Male	52	53.8	28.9%	158	53.8	29.3%
Medicare	Female	40	73.1	22.2%	115	72.7	21.3%
	Male	51	71.9	28.3%	154	71.9	28.5%
Aggregate		180	63.6		540	63.6	

Distribution of Risk Categories (2019)

	Study Group		Control Group	
	Patients	% Patients	Patients	% Patients
Healthy	2	1.1%	6	1.1%
Stable	8	4.4%	24	4.4%
At Risk	37	20.6%	111	20.6%
Struggling	95	52.8%	285	52.8%
In Crisis	38	21.1%	114	21.1%

Distribution of Diabetes Disease Stages (2019)

	Study Group		Control Group	
	Patients	% Patients	Patients	% Patients
Stage 1	53	29.4%	159	29.4%
Stage 2	119	66.1%	357	66.1%
Stage 3	8	4.4%	24	4.4%

Patient Engagement – Preventive Care

The reported measures show better engagement by the study group members in general:

- consistently higher rate of comprehensive preventive visits for the study group
- comparable rates between the study and control groups for diabetes related office visits in general but higher rate for the evaluation and management specific visits for study group
- the general drop in these indicators of engagement for 2020 is a result of the disruption in services due to the COVID 19 pandemic

	Study Group			Control Group		
	2019	2020	2021	2019	2020	2021
Diabetes Patients	180			540		
Preventive Adult Care Visit Per Patient*	0.49	0.43	0.45	0.40	0.31	0.36
Office Visits for Diabetes Per Patient**	3.63	3.42	3.41	3.49	3.09	3.39
Diabetes Preventive Care Visit Per Patient***	2.85	2.67	2.98	2.70	2.50	2.69

* Initial or periodic comprehensive preventive medicine visits e.g., annual physical

** Office visits with a principal diagnosis of diabetes

*** Any outpatient evaluation and management primary care visit included in a diabetes episode of care

Patient Engagement – HEDIS Measures

Based on HEDIS certified diabetes related measures, the study group is performing comparably or better than the control group in most cases:

- HbA1c values greater than 9% high for both groups, slight drops in rates indicating better management of the indicator in 2021
- adherence to recommendation for prescribed statin medication is higher among the study group, this may be a result of the Rx cost subsidy
- the eye exam rates are comparable for both groups but dropped in 2021 for the study group

	Study Group		Control Group	
	2020	2021	2020	2021
Diabetes Patients	180		540	
HEDIS CDC Diabetes HbA1c > 9%*	99%	98%	100%	99%
HEDIS CDC Diabetes Eye Exam Rate**	68%	65%	65%	70%
HEDIS SPD Statin Adherence With Diabetes Rate***	95%	86%	87%	84%

* % of patients with HbA1c > 9%, lower is better

** % of patients with recommended eye exam to monitor and manage diabetes related retinopathy, higher is better

*** % of patients adhering to recommended use of prescribed statin medication, higher is better

Only HEDIS measures for 2020 and 2021 available in DAISI

Patient Engagement – Unplanned Utilization

Higher utilization of ER and Inpatient services are usually indications of opportunities for improved condition management:

- diabetes related ER visits and admissions were comparable for both groups in 2019 but have dropped consistently for the study group while remaining at the higher rates for the control group in 2021
- the episodes of care for diabetes complications were comparable for both groups in 2019 but higher for the study group in 2021

	Study Group			Control Group		
	2019	2020	2021	2019	2020	2021
Diabetes Patients	180			540		
Diabetes Related ER Visits Per Patient*	0.03	0.01	-	0.03	0.01	0.03
Diabetes Related Admits Per Patient**	0.03	0.02	0.01	0.03	0.02	0.03
% of Diabetes Episodes due to Flare Ups***	4.4%	4.4%	5.6%	4.6%	4.1%	4.6%

* Average number of ER visits with principal diagnosis of diabetes

** Average number of acute admissions for diabetes

*** Average number of patients with acute complications episode of care

Please note that these average rates should be interpreted in the context of the limited statistics in the study and control groups, for example, the 0.03 ER visits per patient rate is equivalent to 6 and 14 visits for the study and control groups respectively

Diabetic Cost Trends

Costs paid by members and overall cost of treatment for diabetes are generally inline with expectations:

- marked drop (37.9%) in out of pocket costs for diabetic prescription drugs for the study group is a result of the subsidy provided to program participants to support adherence, there is an 8.1% increase in costs for the non-participating control group
- higher trend in per patient medical costs for study group but there is some indication that this is a consequence of more use of preventive services compared to the control group

	Study Group				Control Group			
	2019	2020	2021	% Change 2019-2021	2019	2020	2021	% Change 2019-2021
Diabetes Patients	180				540			
Rx Out of Pocket Amount Per Patient	\$254	\$150	\$158	-37.9%	\$270	\$277	\$292	8.1%
Med. Out of Pocket Amount Per Patient	\$125	\$121	\$126	0.8%	\$131	\$119	\$133	1.6%
Rx Allowed Amount Cost Per Patient	\$6,137	\$6,356	\$6,869	11.9%	\$5,859	\$6,514	\$6,553	11.9%
Med. Allowed Amount Cost Per Patient	\$2,149	\$2,284	\$2,804	30.5%	\$2,631	\$2,142	\$2,710	3.0%
Med.+Rx Allowed Amount Cost Per Patient	\$8,286	\$8,640	\$9,673	16.7%	\$8,490	\$8,656	\$9,264	9.1%

Diabetes Disease Stage Transitions

The diabetes disease stage transitions from 2019 to 2021 indicate better management of the study compared to the control group:

- the combination of improved or maintained disease stages for the study group (87.2%) is about 7% higher than for the control group (80.4%)
- wellness programs are most effective for preventing decline from the earlier stage 1 – only 10% declined from stage 1 to later stages for the study group, compared to 14.6% for the control
- the biggest concern is for patients transitioning from stages 1 & 2 to the most critical stage 3, this was 3.3% of all patients in the study group and 5.5% for the control group

Study Group Transitions

	2019	2021
Stage 1	53	35
Stage 2		17
Stage 3		1

	2019	2021
Stage 1		6
Stage 2	119	108
Stage 3		5

	2019	2021
Stage 1		1
Stage 2		5
Stage 3	8	2

	Summary Study Group
Maintain	80.5%
Improve	6.7%
Decline	12.8%

Control Group Transitions

	2019	2021
Stage 1	159	80
Stage 2		76
Stage 3		3

	2019	2021
Stage 1		41
Stage 2	357	289
Stage 3		27

	2019	2021
Stage 1		
Stage 2		14
Stage 3	24	10

	Summary Control Group
Maintain	70.2%
Improve	10.2%
Decline	19.6%

Cost of Diabetes by Disease Stages

The primary cost drivers for managing diabetes vary by disease stages:

- Rx are higher than medical costs in the earlier stages and increase the most from stage 1 -> 2 (87.5%), an indication of higher utilization of drugs to manage the condition
- medical costs increase by a marked (700%) when a patient transitions from stage 2 -> 3, this is a result of the complications typically associated with stage 3 of diabetes e.g., renal failure

The best opportunities for intervention are:

- minimize transitions from stages 1 -> 2 e.g., through lifestyle changes
- reduce the transition from stages 2 -> 3 using e.g., through complex care coordination

Average Cost Per Episode of Care of Diabetes by Disease Stages – 2021 Incurred Data

	Rx		Medical		Medical + Rx	
	Cost/Episode	% Change by Stage	Cost/Episode	% Change by Stage	Cost/Episode	% Change by Stage
Stage 1	\$2,830		\$1,430		\$4,260	
Stage 2	\$5,305	87.5%	\$2,088	46.0%	\$7,393	73.6%
Stage 3	\$2,495	-53.0%	\$16,720	700.8%	\$19,215	159.9%
Aggregate	\$4,141		\$2,612		\$6,753	

Dean Health Plan Program Review

Dean LHP Program – Analytic Parameters

Time Periods:

- Baseline year : 2019
- Evaluated through 2021

Eligible

- Continuously enrolled in GHIP
- Relationship: Employee, Spouse
- Non-HDHP members

Active (Study Group)

- Eligible Requirements +
- Enrolled in Dean LHP program for **each** of 2019, 2020 and 2021



Population Selection

100 members participated in the Dean LHP VBID at some time or the other between 2019 – 2021

- 48 of those were consistently enrolled in the program for the whole 3-year evaluation period
 - 20 of those also participated in the Navitus/WebMD VBID program but were not excluded from this assessment because of limited statistics
- the analysis makes a distinction between the overlapping and non-overlapping subsets with the other VBID program
- a before (2019) and after (2021) evaluation is performed for the the selected population

Criteria		Participants
Listed as Participant in <u>any of</u> 2019 – 2021		100
Meets Inclusion Criteria : Continuously enrolled, Episodes of Diabetes	<u>Not In Navitus/WebMD Program (NINW)</u>	28
	<u>Also In Navitus/WebMD Program (AINW)</u>	20
	All Participants	48

Participant - Profiles

Distribution of Gender and Average Ages (2019)

	Participants (NINW)			Participants (AINW)			All Participants		
	Members	Average Age (Years)	% Mem.	Members	Average Age (Years)	% Mem.	Members	Average Age (Years)	% Mem.
Female	17	58.9	60.7%	11	63.8	55.0%	28	60.8	58.3%
Male	11	61.9	39.3%	9	68.3	45.0%	20	64.8	41.7%
Aggregate	28	60.1		20	65.9		48	62.5	

Distribution by Plan Types (2019)

	Participants (NINW)		Participants (AINW)		All Participants	
	Members	% Mem.	Members	% Mem.	Members	% Mem.
Medicare	9	32.1%	12	60.0%	21	43.7%
Non-Medicare	19	67.9%	8	40.0%	27	56.3%
Aggregate	28		20		48	

- The average age of the Dean VBID participants who were **Also In Navitus/WebMD Program (AINW)** is a little higher (65.9 years) than for the participants that were **Not In Navitus/WebMD Program (NINW)** (60.1 years)
- the **AINW** group has about twice the percentage of Medicare members (60%) compared to **NINW** (32.1%)
- The gender mixes for both groups are comparable
- Note that analysis and insights should be interpreted in the context of [the very limited statistics from a group of 48 members](#) overall

Participant- Profiles

- The **AINW** group have a higher risk with 75% of them in the “Struggling” or “In Crisis” risk categories*, compared to 67.8% for the **NINW** group
- The distribution of the participants by diabetes disease stages** in 2019 is similar for both the **AINW** and **NINW** subgroups:
 - both have about 1/3 of the participants in stage 1 and the rest in stage 2
 - no member in the most advanced stage 3 of the disease

*indication of the expected relative cost risk of a patient, ordered from low to high as follows: {Healthy, Stable, At Risk, Struggling, In Crisis}

**Merative’s disease staging methodology groups conditions from early onset (stages 0-1) to later stages where the condition is advanced and typically accompanied by multiple complications (stage 3)

Distribution of Risk Categories (2019)

	Participants (NINW)		Participants (AINW)		All Participants	
	Members	% Mem.	Members	% Mem.	Members	% Mem.
Healthy			1	5.0%	1	2.1%
Stable						
At Risk	9	32.1%	4	20.0%	13	27.1%
Struggling	16	57.1%	7	35.0%	23	47.9%
In Crisis	3	10.7%	8	40.0%	11	22.9%

Distribution of Diabetes Disease Stages (2019)

	Participants (NINW)		Participants (AINW)		All Participants	
	Members	% Mem.	Members	% Mem.	Members	% Mem.
Stage 1	9	32.1%	7	35%	16	33.3%
Stage 2	19	67.9%	13	65%	32	66.7%
Stage 3						

Patient Engagement – Preventive Care

- The general preventive visit and diabetes related office visits are higher for the **AINW** group than the **NINW** group in most cases
- The evaluation and management specific visit rates are much higher for the **AINW** group compared to the **NINW** group
 - this rate for the **NINW** group participating in both the WebMD/Navitus and Dean VBID program is also much higher than for those only participating in the WebMD/Navitus program, an indication of the medical benefits only available in the Dean VBID program

	Participants (NINW)			Participants (AINW)		
	2019	2020	2021	2019	2020	2021
Diabetes Patients	28			20		
Preventive Adult Care Visit Per Patient*	0.43	0.54	0.50	0.40	0.40	0.70
Office Visits for Diabetes Per Patient**	4.50	4.04	4.43	5.95	4.50	4.65
Diabetes Preventive Care Visit Per Patient***	2.82	2.57	2.57	3.70	3.35	3.20

* Initial or periodic comprehensive preventive medicine visits e.g., annual physical

** Office visits with a principal diagnosis of diabetes

*** Any outpatient evaluation and management primary care visit included in a diabetes episode of care

Patient Engagement – HEDIS Measures

- In more cases, the reported HEDIS measures are better for the **AINW** group participating in both the Dean and WebMD/Navitus programs compared to the **NINW** group that are only enrolled in the Dean program.
- the recommended eye exam rate dropped for the AINW group in 2021 (885) but it is still higher than that for the **NINW** group (84%)
- the most recent statin adherence rate of both groups is higher than the rate for the participants in only the WebMD/Navitus program

	Participants (NINW)		Participants (AINW)	
	2020	2021	2020	2021
Diabetes Patients	28		20	
HEDIS CDC Diabetes HbA1c > 9%*	100%	100%	100%	100%
HEDIS CDC Diabetes Eye Exam Rate**	80%	84%	100%	88%
HEDIS SPD Statin Adherence With Diabetes Rate***	100%	88%	83%	100%

* % of patients with HbA1c > 9%, lower is better

** % of patients with recommended eye exam to monitor and manage diabetes related retinopathy, higher is better

*** % of patients adhering to recommended use of prescribed statin medication, higher is better

Only HEDIS measures for 2020 and 2021 available in DAISI

Patient Engagement – Unplanned Utilization

- The very limited data shows very few incidents of the utilization of ER and Inpatient services:
 - these are comparable for both the **AINW** and **NINW** groups in most cases, but slightly higher rates for the **AINW** group, probably because of the older population
 - the higher rate of flare ups in the **AINW** group may also be explained by the relatively older population

	Participants (NINW)			Participants (AINW)		
	2019	2020	2021	2019	2020	2021
Diabetes Patients	28			20		
Diabetes Related ER Visits Per Patient*	0.04	-	-	-	-	0.1
Diabetes Related Admits Per Patient**	-	-	-	-	-	0.05
% of Diabetes Episodes due to Flare Ups***	0.0%	0.0%	3.6%	0.0%	5.0%	10.0%

* Average number of ER visits with principal diagnosis of diabetes

** Average number of acute admissions for diabetes

*** Average number of patients with acute complications episode of care

Please note that these average rates should be interpreted in the context of the limited statistics in the participating groups, for example, the 0.04 and 0.1 ER visits per patient rate are equivalent to 1 and 2 visits for the **NINW** and **AINW** participating groups respectively

Diabetic Cost Trends

- Both the out of pocket amounts and reduction trends are greater for the **NINW** participants, this is due to the larger Medicare population (different benefit design) in the **AINW** group. Both groups show a general negative trend
- The total cost of care of diabetes is also higher for the older **AINW**
 - the overall positive trend in cost is comparable for both groups (52.0% vs 49.3%), but driven by different factors – primarily by the Rx costs for the **NINW** group and Med. costs for the **AINW** group

	Participants (NINW)				Participants (AINW)			
	2019	2020	2021	% Change 2019-2021	2019	2020	2021	% Change 2019-2021
Diabetes Patients	28				20			
Rx Out of Pocket Amount Per Patient	\$271	\$199	\$151	-44.3%	\$154	\$102	\$134	-13.2%
Med. Out of Pocket Amount Per Patient	\$170	\$165	\$144	-15.5%	\$83	\$123	\$95	13.6%
Rx Allowed Amount Cost Per Patient	\$3,081	\$4,517	\$5,330	73.0%	\$4,816	\$6,123	\$6,484	34.6%
Med. Allowed Amount Cost Per Patient	\$1,987	\$1,739	\$2,376	19.6%	\$2,177	\$4,546	\$3,959	81.9%
Med.+Rx Allowed Amount Cost Per Patient	\$5,068	\$6,256	\$7,706	52.0%	\$6,993	\$10,669	\$10,444	49.3%

Diabetes Disease Stage Transitions

- The combination of improved or maintained disease stages for the **NINW** group (89.3%) is about 14% higher than for the older **AINW** group (75.0%)
- The combination of improved or maintained disease stages for all participants in the Dean LHP program (83.3%) is slightly lower than for participants in the WebMD/Navitus program (87.2%) and higher than the non-participants used as a control group (80.4%)

Participants (NINW)

	2019	2021
Stage 1	9	7
Stage 2		2
Stage 3		

	2019	2021
Stage 1		4
Stage 2	19	14
Stage 3		1

	2019	2021
Stage 1		
Stage 2		
Stage 3		

	Summary Participants (NINW)
Maintain	75.0%
Improve	14.3%
Decline	10.7%

Participants (AINW)

	2019	2021
Stage 1	7	4
Stage 2		3
Stage 3		

	2019	2021
Stage 1		2
Stage 2	13	9
Stage 3		2

	2019	2021
Stage 1		
Stage 2		
Stage 3		

	Summary Participants (AINW)
Maintain	65.0%
Improve	10.0%
Decline	25.0%

All Participants

	2019	2021
Stage 1	16	11
Stage 2		5
Stage 3		

	2019	2021
Stage 1		6
Stage 2	32	23
Stage 3		3

	2019	2021
Stage 1		
Stage 2		
Stage 3		

	Summary All Participants
Maintain	70.8%
Improve	12.5%
Decline	16.7%

Forward Looking Statement

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