From Value to Patient Care: Innovative Practices within the Managed Care Pharmacy Research Agenda

April 1, 2021

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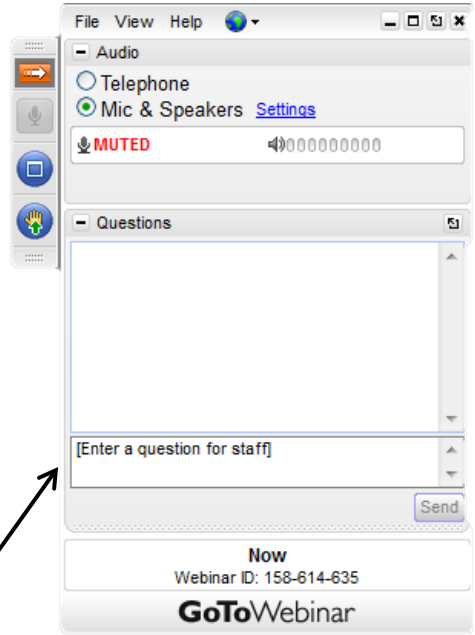

Type your question in the ‘Questions’ area

Webinar Agenda

- Managed Care Pharmacy Research Agenda Overview
- Case Studies
- Panel Q&A

Co-Moderators:
Vyishali Dharbhamalla, PharmD
Manager, Professional Affairs, AMCP

Paula J. Eichenbrenner, MBA, CAE
Executive Director, AMCP Foundation

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Research Agenda Overview

- Managed care pharmacy research agenda
- Developed by Joint Research Committee, endorsed by AMCP & AMCP Foundation, published in JMCP[i]
- Four research pillars identified:
  1. Real-world evidence to inform managed care pharmacy decision making
  2. Value-based models in managed care pharmacy to address total cost of care
  3. Impact of benefit design or utilization management strategies on patient outcomes
  4. Impact of direct patient care services provided by managed care pharmacy on patient outcomes

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Poll Question

Which pillar of the managed care pharmacy research agenda represents the most critical evidence gap?

A. Real-world evidence to inform managed care pharmacy decision-making
B. Value-based models in managed care pharmacy to address total cost of care
C. Impact of benefit design or utilization management strategies on patient outcomes
D. Impact of direct patient care services provided by managed care pharmacy on patient outcomes

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Case Studies

- Impact of Short-Acting Insulin Non-Medical Switching and Utilization Among Commercially Insured Members with Diabetes
- Sacubitril-Valsartan Real World Assessment of Total Cost of Care and Resource Utilization Pre/Post Initiation Among Commercially Insured Members with Reduced Ejection Fraction Heart Failure
- Impact of Motivational Interviewing Intervention in Texas Medicare Advantage Patients with Hypertension
- A Retrospective Analysis of the Clinical and Financial Outcomes of Converting Patients from Originator Remicade to an Infliximab Biosimilar

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Impact of Short-Acting Insulin Non-Medical Switching and Utilization Among Commercially Insured Members with Diabetes

Kaylin Braekevelt, PharmD; Marissa Bober, PharmD; Michelle Fox, PharmD, CSP; Mindy Prasad, PharmD; Valerie Shelest, RPh; Alexandra Tungol Lin, PharmD; Trish Stievater, PharmD

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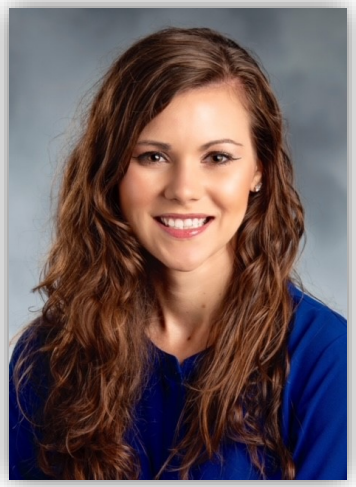
Speaker



Kaylin R. Braekevelt, PharmD

Clinical Pharmacist

BCBS Michigan

“Impact of Short-Acting Insulin Non-Medical Switching and Utilization Among Commercially Insured Members with Diabetes”

JMCP Journal of Managed Care + Specialty Pharmacy

POSTER AWARD BRONZE

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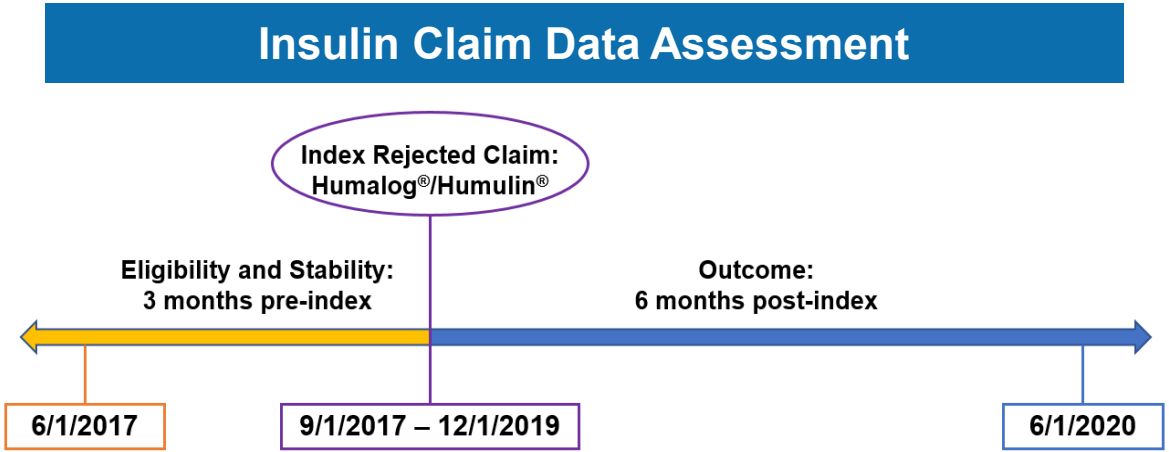
Background

- Insulin prices have increased by 200% since 2002[1]
- Health plans and pharmacy benefit managers leverage formulary and utilization management strategies to control pharmacy spending
- Blue Cross Blue Shield of Michigan provides prescription drug coverage to 2.4 million members
- Effective January 2018, BCBSM exclusively covered short-acting insulins, NovoLog® and Novolin® and implemented a comprehensive communications campaign
- **Objective**: To evaluate the impact of exclusive coverage of select insulin products on the utilization of short-acting insulin

1. Centers for Disease Control and Prevention. National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2020. Atlanta, GA; 2020

Methods

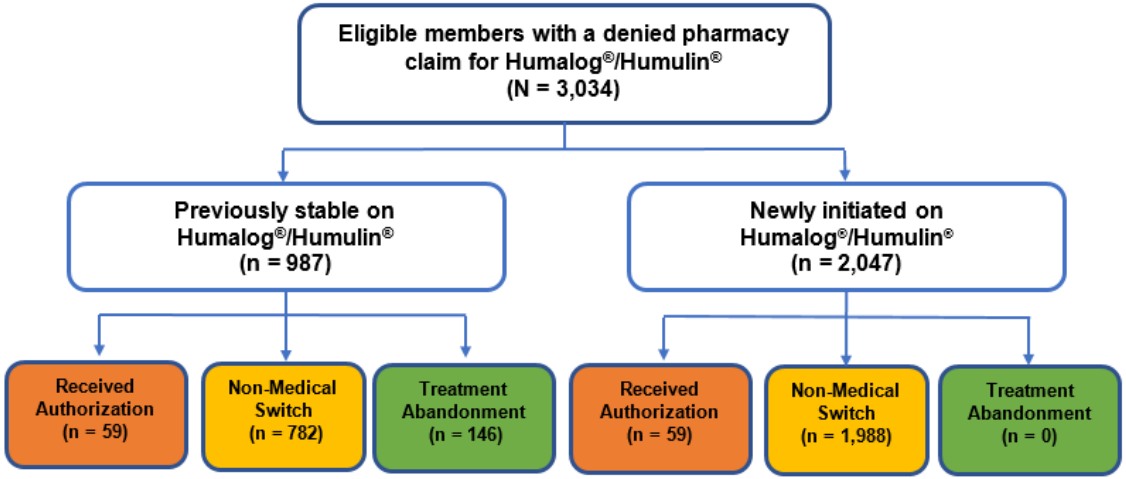
- **Study Design**: Retrospective observational cohort-based claims analysis
- **Primary Endpoint**: To examine the rates of short-acting insulin treatment abandonment and non-medical switching
- **Statistical Analysis**: Data is reported as means ± standard deviation for continuous variables and as percentages for categorical variables



Methods cont.

Claim Identification		
Cohort 1	**Received Authorization**	A subsequent paid pharmacy claim for Humalog®/Humulin® within 180 days of the index denied claim
Cohort 2	**Non-Medical Switch**	A subsequent paid pharmacy claim for Novolog®/Novolin® within 180 days of the index denied claim
Cohort 3	**Treatment Abandonment**	No subsequent paid pharmacy claim for Humalog®/Humulin® or Novolog®/Novolin® within 180 days of the index denied claim

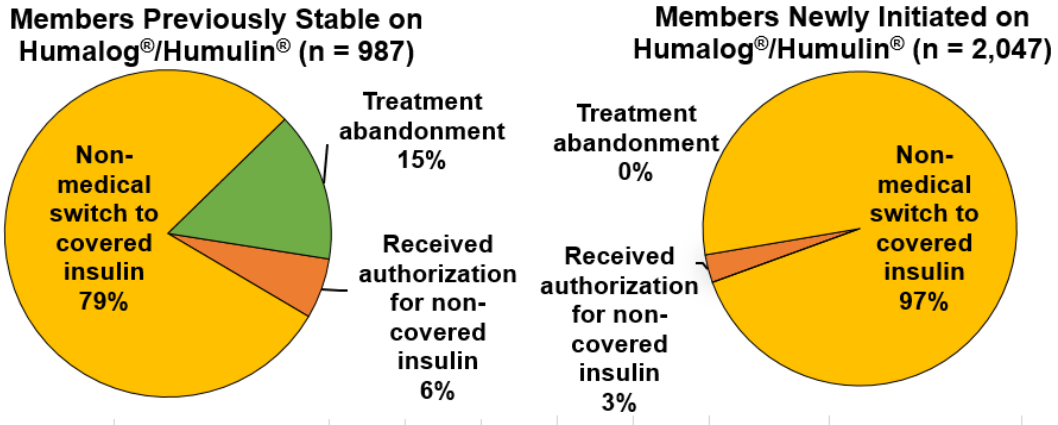
Member Identification and Outcomes



Member Demographics (N = 3,034)	
Male, n (%)	1,743 (57.4)
Age, mean ± SD	50 ± 13.7
Out-of-State, n (%)	591 (19.5)

Results cont.

Comparison of Outcomes



- Total rate of insulin non-medical switching: 91.3% (2,770 of 3,034)
- Overall abandonment rate: 4.8% (146 of 3,034)
- Members remaining on Humalog®/Humulin® with approved PA for medical necessity: 4% (118 of 3,034)

Study Limitations, Discussion, and Conclusion

- Limitations: Pharmacy claims, does not account for samples and coupons
- Implementing exclusive coverage of select insulin products resulted in decreased utilization of non-formulary insulin products with minimal incidence of short-acting insulin treatment abandonment
- Members newly initiating insulin therapy were more likely to switch to the covered product and less likely to abandon treatment
- Proactive and clear communication is necessary for successful non-medical switching
- Future work will examine the association of outcomes with total plan paid costs

Which of the following strategies was thought to be helpful in the success of non-medical switching in this study?

A. Members were grandfathered under the exclusive coverage policies
B. Members continued to receive Humalog® after implementing exclusive coverage of Novolog®
C. Members were not notified via clear and direct communication strategies
D. Members were notified via clear and direct communication strategies

Which of the following strategies was thought to be helpful in the success of non-medical switching in this study?

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D. Members were notified via clear and direct communication strategies

Sacubitril-Valsartan Real-World Assessment of Total Cost of Care and Resource Utilization Pre/Post Initiation Among Commercially Insured Members with Reduced Ejection Fraction Heart Failure

James P. Burke PhD, MS, Brett Sahli, PharmD, Pat P. Gleason, PharmD

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Speaker

Brett Sahli, PharmD

Senior Director, Value and Outcomes

Prime Therapeutics

“Sacubitril-Valsartan Real World Assessment of Total Cost of Care and Resource Utilization Pre/Post Initiation Among Commercially Insured Members with Reduced Ejection Fraction Heart Failure”

JMCP Journal of Managed Care + Specialty Pharmacy

Poster Award Platinum

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Poll Question

How frequently do you use real-world evidence in determining the level of utilization management to apply?

A. Frequently
B. Sometimes
C. Rarely
D. Not applicable to my role or organization

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Background - basis for sacubitril-valsartan RWE evaluation

Scenario

- Sacubitril-Valsartan was new brand drug when standard drug therapy was generic medication
- Prior authorization was the common utilization management tool for appropriate coverage
- At face value, there was a concern of drug cost increases on the pharmacy benefit, and total cost of care impact was unknown

Fair coverage and pricing, ICER, value-based benchmarks

Cornerstones of “Fair” Drug Coverage: Appropriate Cost-Sharing and Utilization Management Policies for Pharmaceuticals
September 28, 2020

“In seeking to meet the ethical goals for fair access, we believe the answer to this question should hinge, in part, on whether the drug is fairly priced.”

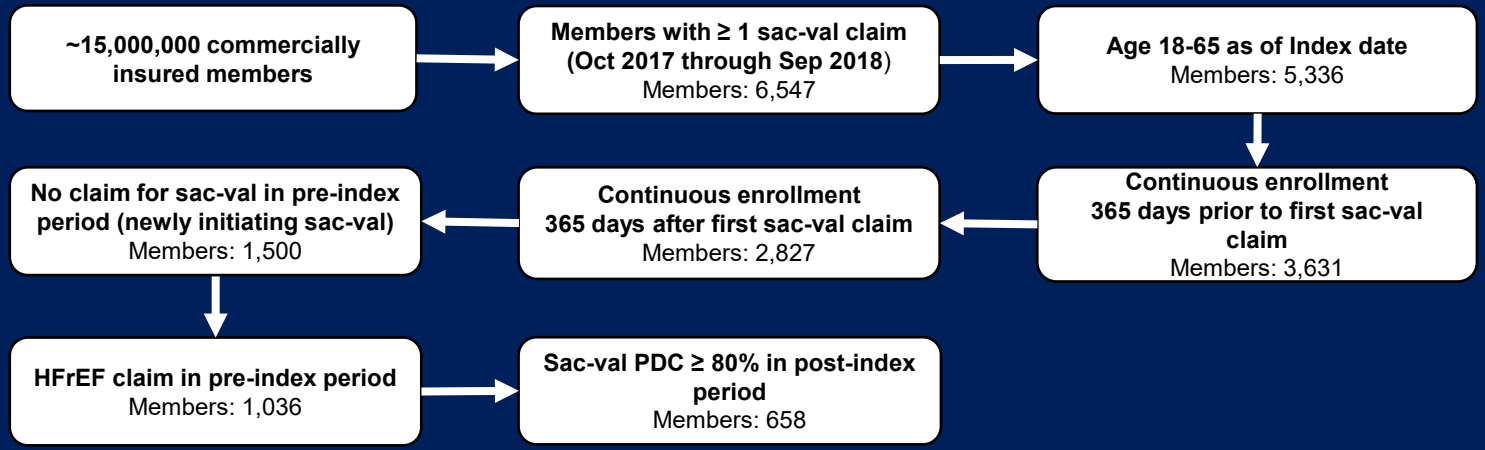
CardioMEMS™ HF System (St. Jude Medical, Inc.) and Sacubitril/Valsartan (Entresto™, Novartis AG) for Management of Congestive Heart Failure: Effectiveness, Value, and Value-Based Price Benchmarks
December 1, 2015

Table 7. Threshold Analyses: Annual Drug Cost at which Entresto Would Be Cost-Effective under varying Willingness-to-Pay Thresholds

	Willingness-to-Pay Threshold		
	$50,000/QALY	$100,000/QALY	$150,000/QALY
ALL SUBPOPULATIONS	$4,464/year	$9,480/year	$14,472/year

Methods

Identification of Members Newly Starting Sacubitril-Valsartan (sac-val) Therapy Using Integrated Medical and Pharmacy Claims



Outcomes

Total cost of care (TCC) – pre/post
- sac-val discounts applied
- CPI-adjusted for inflation
- 2-month wash out periods pre/post
- hospital/ER/office visits costs
- sac-val costs

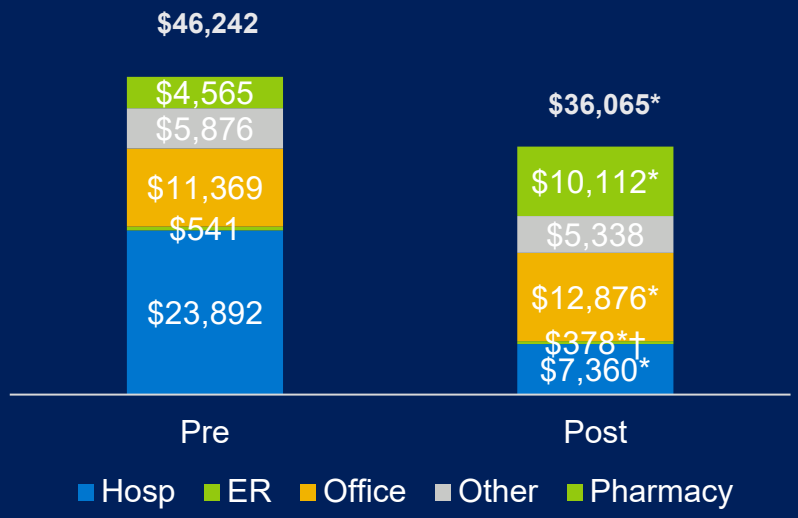
% Hospital/ER/office visit – pre/post

Statistical Analyses

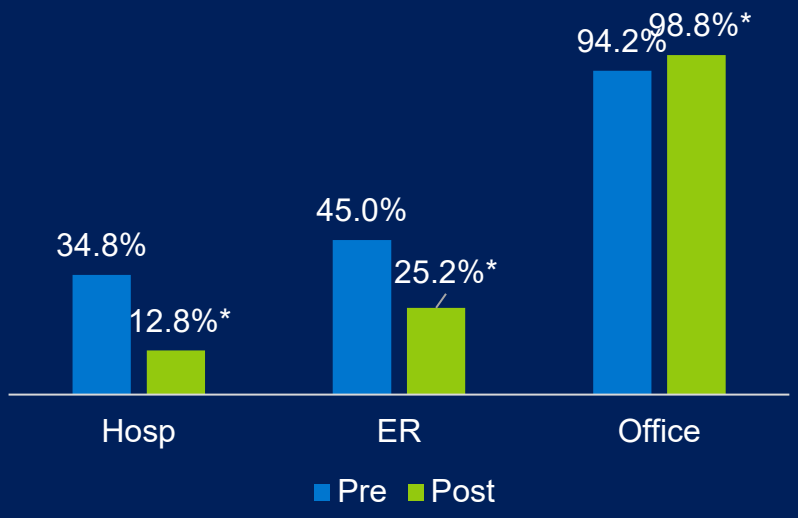
Paired T-test – used to compare costs in the pre-index and post-index periods.
McNemar test – used to compare the percentage change of members with a hospitalization/ER/office visit from the pre-index to post-index period.
Also examined members regardless of their post-index adherence to sac-val

Results – Sac-Val HFrEF Adherent Utilizers

Mean Total Cost of Care§ n=658



Hospital/ER/Office Visit % n=658



Commercial members, age 18-65, with evidence of HFrEF, newly initiating sav-val, with 365 days pre and post continuous enrollment, and adherent on sac-val
2-month wash-out pre and post index date (pre=10 months prior to (days -61 to -365) and post=10 months after (days 61 to 365) index date)
*p<0.05
§Healthcare consumer price index (CPI) adjusted costs
†sac-val costs after adjustment for formulary access rebate and administrative fees; all other pharmacy costs unadjusted

Conclusions/Recommendation

- **Conclusions:**
  - **22% reduction in TCC** (cumulative $6.7 million savings) and a **63% hospitalization decrease**, in this real-world study.
  - A secondary analysis of all members initiating sacubitril-valsartan, both those adherent and non-adherent during the year follow-up, demonstrated **cost neutrality**.
  - These significant real-world findings along with a pharmaceutical manufacturer value-based contract, clinical trial data, and clinical guidelines resulted in the **removal of the sacubitril-valsartan prior authorization**.

- Recommendations:
  - For our population, sac-val clinical and economic value warranted its unrestricted use in appropriate patients and consideration should be given by others to removing sac-val use barriers.
  - Consider this VBC model for other drug therapies where there is potential value in improving patient outcomes and reducing overall costs.

Impact of Motivational Interviewing Intervention in Texas Medicare Advantage Patients with Hypertension

A Mohan, A Vadhariya, Z Majd, TW Esse, O Serna, SM Abughosh

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Speaker

Anjana Mohan, MPharm

PhD Candidate

University of Houston

“Impact of Motivational Interviewing Intervention in Texas Medicare Advantage Patients with Hypertension”

JMCP JOURNAL OF Managed Care + Specialty Pharmacy

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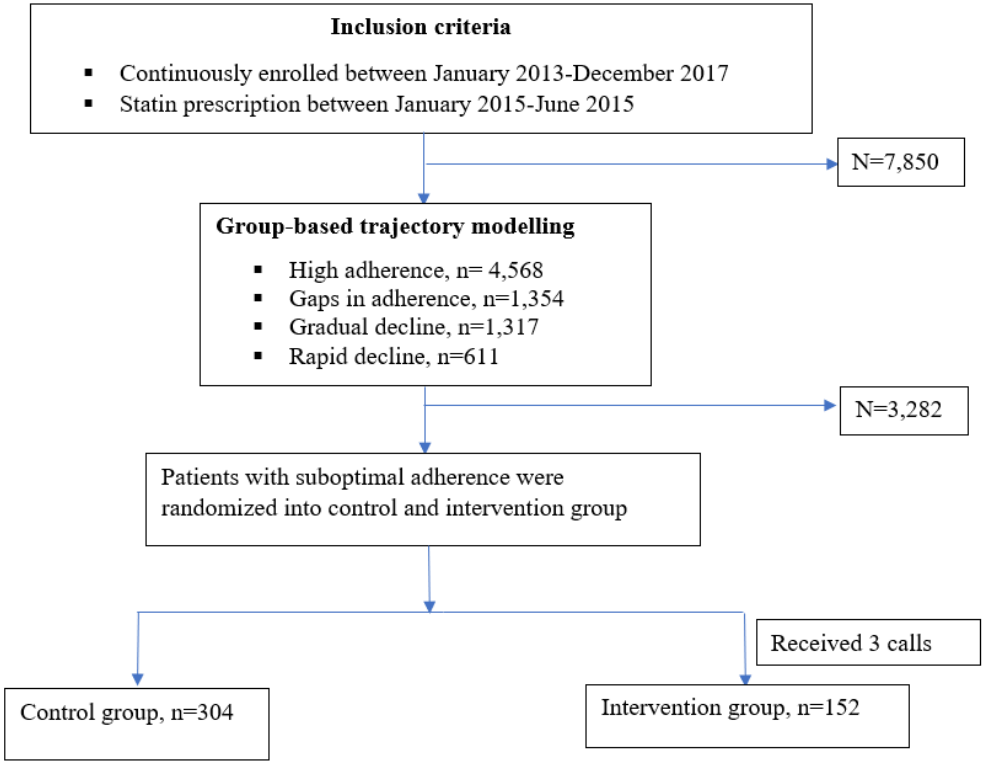
BACKGROUND

- Chronic illnesses are the leading cause of mortality in the United States (US).
- Approximately 33% of the US population are living with multiple comorbidities.
- In 2017, the prevalence of hyperlipidemia and hypertension were estimated to be 12% and 45.6%, respectively.
- Medication adherence is central for the effective management of chronic conditions.
- Patients with multiple comorbidities are less likely to be adherent to medications as compared to patients with a single chronic condition.

PRELIMINARY STUDY

Group-Based Trajectory Models to Identify Sociodemographic and Clinical Predictors of Adherence Patterns to Statin Therapy Among Older Adults. Vadhariya A, Fleming ML, Johnson ML, et al. Am Health Drug Benefits. 2019;12(4):202-11



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OBJECTIVE

- To evaluate whether the prior motivational interviewing (MI) intervention focused on statin adherence, and tailored by patients' previous statin adherence patterns, also enhanced the adherence to antihypertensive medications concurrently prescribed to patients enrolled in the study

METHODOLOGY

Study design & data source	Inclusion Criteria	Outcome assessment	Statistical Analysis
• Retrospective cohort design using Texas Medicare Advantage from January 2013 - December 2017	• Patients continuously enrolled between Jan 2013-Dec 2017 • Concurrent prescription refill for statin and antihypertensive agents	• Primary outcome was adherence to antihypertensive medications • Adherence was measured using proportion of days covered (PDC) for six months post-MI among both the intervention and control group	• Group differences in post intervention adherence were evaluated using chi-square tests and t-tests • Logistic regression models were performed to evaluate the effect of intervention on antihypertensive adherence

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BASELINE DEMOGRAPHICS OF PATIENTS TAKING ANTIHYPERTENSIVE AGENTS

Variables	Intervention (N=80) n (%)	Control(N=159) n (%)	P value
Mean Pre-PDC (SD)	0.87 (0.2)	0.89 (0.1)	0.480
Gender			
Female	27 (33.7)	69 (43.4)	0.150
Male	53 (66.2)	90 (56.6)	
Language			
English	79 (98.7)	108 (67.9)	**<0.0001***
Others	1 (1.2)	51 (32.0)	
Physician Specialty			
Primary care provider	58 (72.5)	129 (81.6)	0.100
Specialist	22 (27.5)	29 (18.3)	
Age group (years)			
< 70 years	49 (61.2)	86 (54.0)	
≥70 years	31 (38.7)	73 (45.9)	0.290
Subsidy			
No	46 (57.5)	75 (47.1)	
Yes	34 (42.5)	84 (52.8)	0.130
CHF			
No	72 (90.0)	145 (91.1)	0.760
Yes	8 (10.0)	14 (8.8)	
Mean CCI (SD)	0.21 (0.5)	0.24 (0.8)	0.780
Mean risk score (SD)	1.22 (0.9)	1.26 (0.8)	0.710

The intervention and control groups were significantly different with respect to preferred language ($p<0.0001$).

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TO EXAMINE THE EFFECT OF INTERVENTION ON ADHERENCE TO ANTIHYPERTENSIVE MEDICATION

Variables	OR (95% CI)	P value
Intervention vs control	0.855 (0.427-1.713)	0.658
Pre PDC ≥0.80 vs Pre PDC <0.80	4.198 (2.103-8.755)	**0.0001***
Gender		
Male vs Female	1.386(0.731-2.627)	0.317
Language		
Others vs English	0.7 (0.295-1.666)	0.420
Physician Specialty		
Primary care provider vs Specialist	0.834 (0.397-1.752)	0.652
Age group (years)		
≥70 years vs < 70 years	2.148 (1.097-4.208)	**0.025***
Subsidy		
Yes vs No	0.866 (0.445-1.684)	0.671
CHF		
Yes vs No	2.241 (0.619-8.123)	0.219
Mean CCI	1.072 (0.682-1.685)	0.750
Mean risk score	0.927 (0.618-1.389)	0.712

- Patients with Pre-PDC ≥ 0.80 for antihypertensive medications and patients over 70 years were significantly more likely to be adherent to antihypertensive medications.

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Poll Question

The motivational interviewing intervention targeting statin adherence significantly improves adherence to antihypertensive medications.

A. True
B. False

Poll Question

The motivational interviewing intervention targeting statin adherence significantly improves adherence to antihypertensive medications.

A. True
B. False

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CONCLUSION

- The MI intervention designed to enhance statin adherence did not significantly improve adherence to concomitant antihypertensive medications at time of intervention
- Highly customized interventions may be needed to improve adherence of patients with concurrent therapy
- Future research designing and testing interventions among patients with multiple medications is greatly needed

A Retrospective Analysis of the Clinical and Financial Outcomes of Converting Patients from Originator Remicade to an Infliximab Biosimilar

Tavan Parker, Laura Britton, Connor Willis, Robert Nohavec, Shannon Gilreath, Matthew Call, Diana Brixner

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Speaker

Tavan Parker, PharmD

Clinical Pharmacist

Prominence Health Plan

“A Retrospective Analysis of the Clinical and Financial Outcomes of Converting Patients from Originator Remicade to an Infliximab Biosimilar”

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Poll Question

How Many Times has Remicade Changed its Manufacturing for the Active Substance?

A. No Changes
B. 1-10 Times
C. 11-24 Times
D. 25+ Times

Source: European Medicines Agency. Remicade. Procedural steps taken and scientific information after the authorization. https://www.ema.europa.eu/en/documents/procedural-steps-after/remicade-epar-procedural-steps-taken-scientific-information-after-authorisation_en.pdf

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Poll Question

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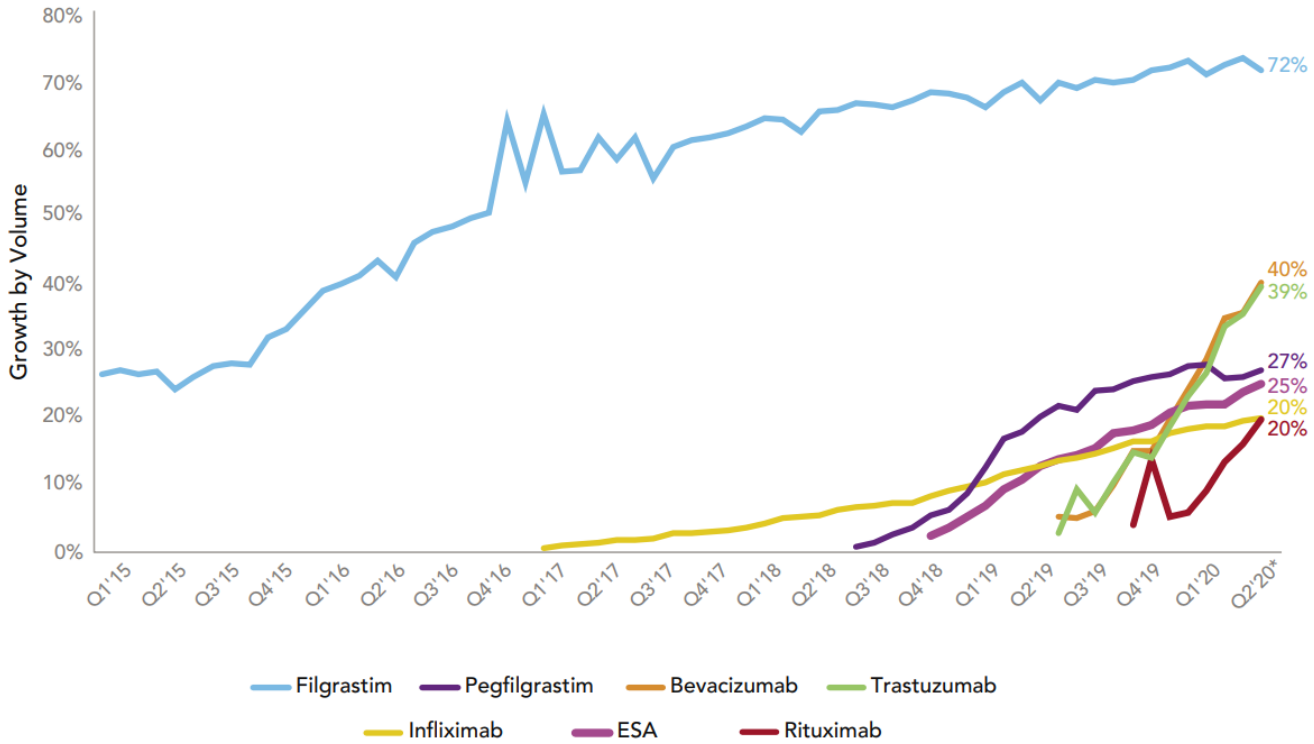
Background

Figure 7. Biosimilars Growth Uptake Curve[29]



- Infliximab was the first *autoimmune* biosimilar made available in Nov. 2016.
- 29 total biosimilars have been approved and 18 products have been launched
- Biosimilar uptake in the US has been slow, but continued to grow through 2020.

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Amgen Biosimilar Trends Report 2020 https://www.amgenbiosimilars.com/-/media/Themes/Amgen/amgenbiosimilars-com/Amgenbiosimilars-com/pdf/USA-CBU-80723-2020-Amgen-Biosimilar-Trends-Report.pdf

Objectives

- To switch members within University of Utah Health Plans (UUHP) from Remicade originator to a biosimilar starting in Feb. 2019.
- To describe the financial and clinical outcomes of patients switched from Remicade to a biosimilar.

Methods

- UUHP claims data, prior authorization requests, and chart notes from Feb. 2019 to Apr. 2020 for 63 patients ages 13 to 63 were accessed to determine the demographics and clinical history of members switched from Remicade to a biosimilar.
- To calculate savings, the cost per unit (100mg) of the most recent Remicade infusion was compared to subsequent biosimilar claims for the same patient.

Results

Clinical History	
Diagnosis	Count (%)
Crohn's Disease	30 (47.6%)
Ulcerative Colitis	11 (17.5%)
Rheumatoid Arthritis	8 (12.7%)
Psoriatic Arthritis	4 (6.3%)
Other	10 (15.9%)
Age at Diagnosis (avg)	Age at Diagnosis (range)
28.6	7-51
Years since diagnosis (avg)	Years since Diagnosis (range)
9.7	1-35
Months on Remicade (avg)	Months on Remicade (range)
45.24	3-179
Months on Biosimilar (avg)	Months on Biosimilar (range)
8	2-21

Clinical History	
Previous Oral Therapy	Count (%)
Azathioprine	29 (47.5%)
Methotrexate	26 (42.6%)
Mesalamine	24 (39.3%)
Sulfasalazine	11 (18%)
Hydroxychloroquine	5 (8.2%)
Previous Biologic Therapy	Count (%)
At least one Biologic	17 (27.9%)
Multiple Biologics	10 (16.4%)

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Results

Clinical and Financial Outcomes	
Follow Up Time (median)	Follow Up Time (range)
6.2 months	0-14 months
Infliximab Treatment Stability	Count (%)
Same or Improved Dose	44 (70%)
Dose or Frequency Increase	9 (14.3%)
Switched back to Originator	4 (6.3%)
Switched Medication Classes	3 (4.8%)
Lost to Follow Up	3 (4.8%)
Financial Savings to the Health Plan	
$725,000	

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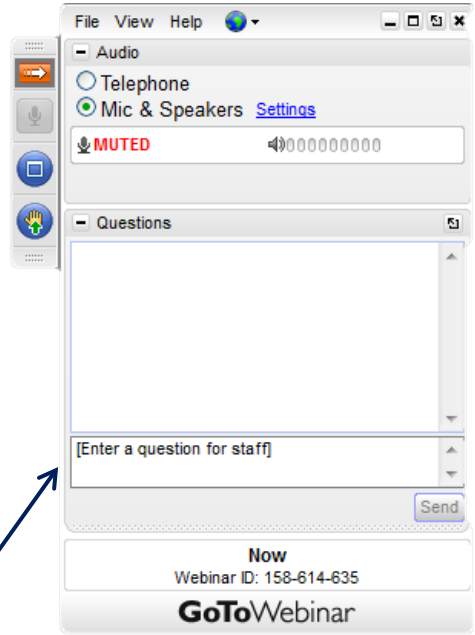
Conclusions

- This study demonstrates the real-world savings and low clinical risk of switching Remicade patients to a biosimilar from a health plan perspective.
- The results suggest that more health plans could implement similar programs and switch patients from the originator to a biosimilar.

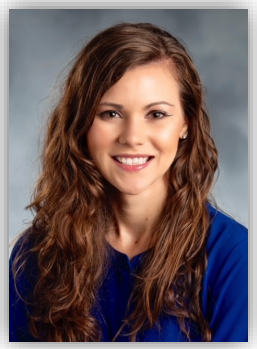
Questions?

How to Ask a Question



Type your question in the ‘Questions’ area

Panel Q&A



Kaylin Braekevelt

Brett Sahli

Anjana Mohan

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Future Directions for Our Research Agenda

- Announcing two new priorities centered on:
  - Health disparities
  - COVID-19
- Introducing specific research questions within RWE pillar
  - Health disparities
  - Expedited approvals
- AMCP Foundation research grants

Learn More!

"Advancing the Managed Care Pharmacy Research Agenda via Mapping of Research Pillars and Priorities"
Poster U23 at AMCP 2021 Virtual[ii]

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References and Acknowledgments

References

i. Managed Care Pharmacy Research Agenda: *J Manag Care Spec Pharm*, 2020 Apr;26(4):375-381. Link.

ii. D Brixner, A Reinert, R Panchal, P Eichenbrenner, K Worley, J Couto, V Dharbhamalla. Advancing the Managed Care Pharmacy Research Agenda via Mapping of Research Pillars and Priorities. Poster presented at: AMCP 2021; April 12-16, 2021; Virtual.

iii. Abstracts from our speakers' posters: Nexus 2020 Abstracts: *J Manag Care Spec Pharm*, 2020 Oct;26(10-a Suppl):S1-S101. Link.

Acknowledgments

- JMCP
  - Editorial Advisory Board and Editor-in-Chief, Laura Happe
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- AMCP Scholar-in-Residence, Diana Brixner
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See You at AMCP 2021 Virtual!

E-Posters on View:

Wednesday, April 14, 1:00-2:30 PM US ET
Thursday, April 15, 1:00-2:30 PM US ET

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