Complete Research

Finding the Uncommon:

a *first of its kind, joint venture* white paper revealing disparities in Common Conditions for Health Action Council members







in • value • able

Find the

White Paper including the Employer Call to **Action:** 7 Tips for Employers

in the **Breakout Slides** section of the conference platform.

White Paper Finding the uncommon: Revealing disparities in care and prescribing for common conditions Common conditions can have a costly toll on a person's well-being and an employer's bottom line. In a first-of-its-kind joint venture, Health Action Council and UnitedHealth Group have brought together data from UnitedHealthcare, UMR and OptumRx®. The purpose: to create insights into Conclusion variances on common conditions that affect Health Action Council. Actionable insights The insured population with these common conditions drives to help bend the trend Health Action Council's per member per month (PMPM) trend Mental health/ Substance use Back disorders As noted earlier, without these common conditions, Health Action Council's PMPM trend would be negative. of Health Action Council's Without these conditions, Health Action Council's covered lives have 1 or more The uncommon findings may spark possible opportunities PMPM trend would be negative of these common conditions to help improve employee well-being and your bottom line. Consider these 7 tips to help jump-start your strategy. Total paid PMPM trend for members with common conditions' S Create and implement education and targeted wellness programs to help address the common conditions prevalent in your employee population 6.4 6.4% 6.3 \$2.5B Institute an exercise, stretch or meditation program at the beginning of a work. shift to help improve safety and decrease injuries. These types of practices are preventive and may decrease the severity of an injury if one occurs. is the estimated medical and 3.4% pharmacy spend for these 8 Evaluate your current benefit plan design for opportunities to implement 2.7% conditions, making them the 0.8% continuum-of-care protocols-for example, making chiropractic care or top employer cost drivers physical therapy mandatory for back disorders before moving to more aggressive treatments HAC overall Asthma Back Diabetes Hypertension MHSA O Cover medications for specific common, chronic conditions as preventive care or promote the use of patient assistance programs for specific types of -3.1% medications, which may require the exclusion of some medications from the Many of these conditions may be preventable or treatable plan design with lifestyle modifications that employers may encourage and support. For example, programs may improve well-being and S Create targeted communications for specific regions and demographics. satisfaction, which may decrease employer health care costs. United Healthcare and reflect on cultural differences when developing each communication continue O Promote virtual care for specific conditions-for example, mental health support in rural areas

Work with your third-party administrator or medical professional(s) to help identify opportunities for provider outreach and education on practice management protocols

The influence of COVID-19 This study did not focus on the implications of COVID-19; however, the timeframe of the pandemic (4 of 24 months). Specifically, beginning with March 2020, Health Action

study does partially overlap the Council health care data was influenced to some extent by COVID-19 claims, Many studies have linked common conditions like the ones explored here to the severity of COVID-19 cases.

- Select photography that represents your targeted audience and consider having a success story or program champion from the targeted audience. Understand

continued

See complete study sourcing in the research deck.





Our Purpose:

Review 24 months of UHC, UMR, and OptumRx claims for Health Action Council members with chronic Common Conditions to highlight differences in care and prescribing in the health system nationally.

Conditions Assessed:

- Asthma
- Back Disorders
- Diabetes
- Hypertension (*High Blood Pressure*)
- Mental Health and Substance Abuse (*MHSA*)

Variances Explored:

- Age and Gender
- Gaps in Care
- Geographic
- Medication Adherence
- Prescription Drugs
- Race / Ethnicity
- Socioeconomic



Why Common Conditions?

- **63%** of Health Action Council members have one or more of these diagnoses
- Top employer cost drivers with estimated medical and pharmacy for these members of **\$2.5B**
- Many are preventable or treatable with lifestyle modifications that employers can encourage
- Programs can improve employee wellbeing and satisfaction and employer health care costs

Health Action Council Demographics

Overall: 57 Employers

122

51% Male; 49% Females

Members in all **50 states**

74% Caucasian, 10% Black/African American,
6% Hispanic, 3% Asian, 6% Other¹

Members in all socioeconomic income brackets²

Population Affected: 10K with Asthma 46K with Back Disorders 25K with Diabetes 38K with Hypertension 59K with Mental Health Substance Abuse

Trend Analysis

If not for members with these conditions, *trend would be negative*.



UHC Period 1 compared to Period 2

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A Word About COVID-19

This white paper does not specifically address COVID-19; however, the timeframe of the study does partially overlap the pandemic (4 of 24 months).

Beginning with March 2020, Health Action Council health care data was influenced to some extent by COVID-19 claims.

Many studies have linked common conditions like the ones explored here to severity of COVID-19 cases.







Asthma – Age and Gender Findings

- **31.9** average age of HAC members with asthma, **2 years younger** than the overall membership average age of 33.9
- 28.5 average age of male HAC members with asthma – over 5 years younger than the overall membership average age of 33.9
- **31%** higher prevalence of Asthma for females



Average Age by Gender

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Asthma – External Race and Ethnicity Findings

The Asthma and Allergy Foundation of

America reports disparities in asthma from:

Structural determinants

systemic racism, discriminatory policies

Social determinants

education, environment, employment, support, access to care

Biological determinants

genes, ancestry

Behavioral determinants

tobacco use, adherence to medicines

Social and structural determinants **largely drive** disparities.

Genetics and behaviors **contribute less** to disparities.³

Compared to Caucasians:³



Does this hold true for Health Action Council's Black/African American members?

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Asthma – Race and Ethnicity Findings

- Black/African
 American Health
 Action Council
 members have 20%
 higher Asthma
 prevalence than
 other members.
- Black/African Americans make up 10% of Health Action Council membership.

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Claimants/1000 Members by Race/Ethnicity

Asthma – Socioeconomic and Geographic Factors

Asthma prevalence is distributed among all income bands for Health Action Council members. However, the highest rates are at opposite ends of the income scale.



Asthma Rate/1000 Members by Income Band

Health Action Council's highest Asthma rates are in:

- Suburban Maryland
- Philadelphia and Northeast, Pennsylvania
- San Antonio and Dallas, Texas
- Phoenix, Arizona
- Cities in Ohio
- Denver, Colorado
- CDC data suggests these are not areas with the highest percentages of asthmatics in the United States.⁴
- Just 3.6% of Health Action Council's members have Asthma. In the US, that number is 7.7%. HAC has fewer asthmatics than the nation.⁵

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Asthma – Care and Treatment Gaps Identified

Which HAC members are having **flare ups requiring hospitalization**, **ER visit**, **or Office visit** in the last three reported months?

Significant variances exist in Race/Ethnicity and Income levels.



- Black/African American = **71%**
- Caucasian = 56%

Black/African American members have greater incidence of treatment for a flare up. • Income < \$50K = **56%**

• Income > \$200K = 33%

Lower income members have greater incidence of treatment for a flare up.

Asthma – Prescription Variability

Variances exist in prescriptions based upon race, age, gender, and socioeconomic factors.⁶

Health Action Council Asthmatics Prescribed Inhaled Steroids

Race/Ethnicity

Adult

• Black/African American = **87%**

• Caucasian = 92%

Pediatric

• Black/African American = **86%**

• Caucasian = 93%

Black/African American members are prescribed an inhaled steroid **less often**.

Income

Adult

- Income < \$50K = **87%**
- Income > \$200K = 90%

Pediatric*

- Income < \$50K = 93%
- Income > \$200K = 93%

Higher income adults are prescribed an inhaled steroid <u>more often</u>.

*Subscriber's Salary

Asthma - Medication Adherence

Three metrics indicate whether Health Action Council members are on track with their medications:



Back Disorders



Back Disorders – Age and Gender Findings

- **43.3** average age of HAC members with back disorders, almost **10 years older** than the overall membership average age of 33.9
- **55%** of members with back disorders are female, with female **employees** being the largest group
- **27%** higher prevalence of back disorders for females







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Back Disorders – Race and Ethnicity Findings

- Caucasians make up 74% of Health Action Council membership and have the highest rate of back disorder claims.
- Caucasian members have 14% higher back disorder prevalence than other members.

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Claimants/1000 Members by Race/Ethnicity

Back Disorders - Socioeconomic and Geographic Factors

Back disorder prevalence appears to have a **direct correlation** to income bands for Health Action Council members, with the highest rates affecting those earning least. Of note, there is a rate spike at \$75-99, which is the most common salary range for Health Action Council members.



Back Disorder Rate/1000 Members by Income Band

Health Action Council's highest Back Disorder rates are in:

- Northeast, Tennessee
- Little Rock, Arkansas
- Cities in Ohio
- Eastern, Kentucky
- Jefferson City, Missouri
- These are all areas with a significant **Manufacturing** presence.
- Factory work is one of the top jobs for causing back pain.⁹

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Back Disorders – External Care and Treatment Findings

The American Journal of Managed Care reports **70%** of Americans experience back pain at least once in their lifetime.

- **High prevalence** translates into high costs for treatment and lost productivity.
- **Conservative guidelines for treating** include noninvasive management, avoiding aggressive or costly options initially.
- **Patterns of care**, like provider and timing of treatment, affect the cost.
- **Physical therapy** may yield lower health care utilization and costs.
- **Chiropractic** care is cost-effective for treatment of chronic back pain.¹⁰



Can the same be said for Health Action Council members with Back Disorders who seek non-invasive treatments?

Back Disorders – Care and Treatment Gaps Identified

Hospital Admissions

- Members with back disorders are admitted **twice as often** as others.
- Those who sought PT or chiropractic care have **fewer admissions and are** less like to get readmitted.

Health Action Council Average: 42.3 Back Disorders – PT or Chiro: 78.7 Back Disorders – No PT or Chiro: 84.4

Admissions/1000 Members

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Back Disorders – Care and Treatment Gaps Identified

- Treated at the **Emergency Room** twice as often and use **Urgent Care** significantly more than average.
- Those who have sought PT or chiropractic care more apt to seek another less aggressive, less costly outpatient option, **Virtual Visits**.



Outpatient Rates /1000 for Members with Back Disorders

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Back Disorders – Care and Treatment Gaps Identified

The Obesity Link

- Obesity and Back Disorders create significant **lost productivity**.
- NIH studies find a large abdomen can cause degeneration of discs and tear and wear on joints, muscles, and ligaments.¹¹
- Most obese Health Action Council members with Back Disorders **do not** receive Physical Therapy or Chiropractic care (59%), slightly more than non-Obese members who do not receive it (55%).
- Is this **member avoidance** of possibly physically challenging treatment or **provider bias** against prescribing less aggressive treatment for overweight members?



Back Pain Treatment for

Back Disorders – Prescription Variability

Variances exist in prescriptions based upon race, age, gender, and socioeconomic factors.⁶

Many drugs used for back pain are OTC, therefore, total utilization of medications cannot be assessed.

Health Action Council members use **fewer Prescription NSAIDs and Muscle Relaxants** if they **try Physical Therapy and Chiropractic Care**.

Members Using Prescription Drugs for Back Disorders



Back Disorders - Medication Adherence

- Many drugs used for back pain are OTC, therefore, total utilization of medications cannot be assessed.
- Additionally, back pain may be episodic rather than ongoing like some common conditions, which makes adherence difficult to calculate.
- However, one metric indicates whether Health Action Council members are on track with their prescription back medications:









Diabetes- Age and Gender Findings

- **52.0** average age of HAC members with diabetes, **18 years older** than the overall membership average age of 33.9
- **55%** of members with diabetes are male, with male **employees** being the largest group
- **19%** higher prevalence of Diabetes for males

Average Age by Gender 60 40 50.9 53.0 20 33.9 33.9 33.8 0 Females Males • Avg Age Members - Diabetes • Avg Age Members - HAC

Claimants/1000 by Gender



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Diabetes- External Race and Ethnicity Findings

Harvard and National University of Singapore study showed Asians:

- At higher risk of developing type 2 diabetes
- More likely to develop diabetes even at a lower BMI
- Make up 60% of the world's diabetic population, this is not a disproportionate share based on world population
- Have less muscle and more abdominal fat around organs, increasing insulin resistance.¹²

Why?

- Diet high in carbohydrates and trans fat oils
 - High smoking rates
 - Urban living

All are known Diabetes risks.¹²

How are Health Action Council's Asian members affected by Diabetes?

This study focused on people living in Asia, but many facts are true of Asian Americans.

Diabetes- Race and Ethnicity Findings

- Asians make up a small portion of Health Action Council membership (3%) but have the highest rate of Diabetes claims.
- Asian members have 43% higher Diabetes prevalence than other members.

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Claimants/1000 Members by Race/Ethnicity

Diabetes - Socioeconomic and Geographic Factors

Diabetes prevalence appears to have a **direct correlation** to income bands for Health Action Council members, with the highest rates affecting those earning least.



Diabetes Rate/1000 Members by Income Band

Health Action Council's highest Diabetes rates are in:

- Eastern Kentucky
- Cities in Ohio
- Cities in North Carolina
- Greenville and Columbia, South Carolina
- Little Rock, Arkansas
- These are areas known for high Diabetes prevalence.¹³

Diabetes - Care and Treatment Gaps Identified

Asian members have the **best** rates of diabetic testing and screening.

This could be a true difference in provider ordering or culturally or educationally driven compliance.

Test or Screening	Highest Performance	Lowest Performance
A1C*	Asian	Hispanic
Serum Creatinine*	Asian	Caucasian
Retinopathy	Asian	Hispanic
Neuropathy	Asian	Hispanic/Other
LDL Cholesterol	Asian	Caucasian



Diabetes - Prescription Variability

Variances exist in prescriptions based upon race, age, gender, and socioeconomic factors.⁶

Who is going to the doctor and being prescribed drugs to lower blood sugar or promote insulin?



Diabetes - Medication Adherence

Three metrics indicate whether Health Action Council members are on track with their medications:



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Hypertension



Hypertension – Age and Gender Findings

- **53.1** average age of HAC members with hypertension, **19 years older** than the overall membership average age of 33.9
- **56%** of members with hypertension are male, with male **employees** being the largest group
- **23%** higher prevalence of hypertension for males









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Hypertension – Race and Ethnicity Findings

- Black/African Americans make up 10% of Health Action Council membership but 14% of those with hypertension, a disproportionate share.
- Black/African American members have 63% higher Hypertension prevalence than other members.



Claimants/1000 Members by Race/Ethnicity

Hypertension - Socioeconomic and Geographic Factors

Hypertension prevalence appears to have a **direct correlation** to income bands for Health Action Council members, with the highest rates affecting those earning least.



Hypertension Rate/1000 Members by Income Band

Health Action Council's highest Hypertension rates are in:

- Greenville, South Carolina
- Cities in Ohio
- Charlotte, North Carolina
- Little Rock, Arkansas
- Dallas, Texas
- Jefferson City, Missouri

By current **American Heart Association** guidelines (130/80 mm HG), **45%** of adults in the United States have hypertension.

Rates are significantly higher with age and may vary with other social determinants.¹⁴

Only **13%** of Health Action Council members have Hypertension.

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Hypertension – External Care and Treatment Gaps Identified

Females¹⁵

Males¹⁵



Hypertension – Prescription Variability

Variances exist in prescriptions based upon race, age, gender, and socioeconomic factors.⁶

Measure	Females < 60 %	Males < 60 %	% Points Variance < 60	Females > 60 %	Males > 60 %	% Points Variance > 60
Taking Ace-Inhibitor / ARB	64	73	+9 Male	72	77	+5 Male
Taking Statin	81	83	+ 2 Male	73	87	+ 14 Male
Taking Beta-Blocker After Heart Attack	79	74	+5 Female	59	82	+23 Male

Cardiologist Medical Directors react:

- **"Women** are less often treated with evidence-based drugs and are **sub-optimally treated** across all ages...Even though these differences and issues are well known, and despite the copious literature on the subject, the exact reasons these differences persist is not clearly known, and most agree that better and more individualized therapeutic strategies are needed to close gaps."¹⁶ Dr. Michael J. Menen, Optum Population Health Solutions Senior Medical Director
- "There certainly could be some provider selection preference, too, seeing men at a higher risk... Harder to prove." ¹⁶ Dr. Stuart Biliack, UHC Appeals and Grievances Medical Director

Hypertension - Medication Adherence

Three metrics indicate whether Health Action Council members are on track with their medications:



Mental Health and Substance Abuse



MHSA – Age and Gender Findings

- **32.8** average age of HAC members with MHSA, **slightly younger** than the overall membership average age of 33.9
- **57%** of members with MHSA are female, with **female dependents** being the largest group
- **39%** higher prevalence of MHSA for females



Claimants/1000 by Gender



Average Age by Gender

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MHSA – Race and Ethnicity Findings

- Caucasian members have 20% higher prevalence than other members.
- There is documented cultural bias by both providers and the community in treatment for mental health or substance abuse issues which may affect actual rates.¹⁷

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Claimants/1000 Members by Race/Ethnicity

MHSA - Socioeconomic and Geographic Factors

MHSA prevalence appears to have a **direct correlation** to income bands for Health Action Council members, with the highest rates affecting those earning least. However, there is a spike in the \$250 - 499K range.



MHSA Rate/1000 Members by Income Band

Health Action Council's highest MHSA rates are in:

- Cities in Ohio
- Indianapolis, Indiana
- Asheville and Raleigh-Durham, North Carolina
- Jefferson City, Missouri
- Denver, Colorado

These are a mix of rural and urban areas.

MHSA – External Care and Treatment Findings

Prevalence is **similar between rural and urban** but services available are very different.

Mental health care needs are not met in many rural communities because adequate services are not present.¹⁸

Are mental health needs of HAC members in rural areas met?

MHSA – Care and Treatment Gaps Identified

Providers and services for Health Action Council members with MHSA are not equivalent depending on where they live.

Measure Rural		Urban	Findings	
MHSA - % of HAC Members	53%	47%	Total membership is roughly equal; disproportionate share of behavioral health in Rural areas	
Top Disorders	Anxiety, Depression	Anxiety, Depression	Very similar diagnoses	
ER Visits / 1000 Members*	350.9	302.9	16% higher for Rural	
Admissions / 1000 Members*	82.2	78.8	4% more for Rural	
Allied Health PMPM	\$26	\$31	15% lower Allied Health Professionals (<i>Therapists</i>) spend for Rural	
Referrals Offered 3,016		3,283	May be due to lack of available	
Qualified Members Touched by Nurse/Coach	52.8%	57.1%	services in Rural areas	

*all diagnoses

MHSA – Prescription Variability

Variances exist in prescriptions based upon race, age, gender, and socioeconomic factors.⁶

Prescription for Health Action Council members with MHSA are similar but not equivalent depending on where they live.

Measure	Rural	Urban	Findings
Total Prescriptions PMPY (all diagnoses)	17.1	16.4	Rural members are taking more prescription drugs overall
Psychotropic Prescriptions PMPY	6.4	6.5	Rural members are taking slightly fewer MHSA drugs
Top Drug Categories	Anti-depressants, ADHD	ADHD, Anti-depressants	Very similar but differing top category
Pharmacy Paid per Claimant – Psychotropic Drugs	\$537	\$608	13% lower spend for Rural
Paid PMPM – Psychotropic Drugs	\$37	\$40	8% lower spend for Rural

MHSA- Medication Adherence

Three metrics indicate whether Health Action Council members are on track with their medications:



Future Considerations



7 Tips for Employers

- Create and implement simple education and targeted wellness programs to address the common conditions prevalent in your employee population.
- Institute an exercise, stretch or meditation program at the beginning of a work shift to improve safety and decrease injuries. These types of practices are preventive and may decrease the severity of an injury if one occurs.
- Evaluate your current benefit plan design for opportunities to implement continuum-of-care protocols. Example, making chiropractic care or physical therapy mandatory for back disorders before moving to more aggressive treatments.
- Cover medications for specific common chronic conditions as preventive care or promote the use of patient assistance programs for specific types of medications which may require the exclusion of some medications from the plan design.
- Create targeted communications for specific regions and demographics. Select photography that represents your targeted audience and consider having a success story or program champion from the targeted audience. Understand and reflect on cultural differences when developing a communication.
- Promote virtual care for specific conditions, for example, mental health support in rural areas.
- Work with your third-party administrator or medical expert(s) to identify opportunities for provider outreach and education on best-in-class practice management protocols.





Parameters and References

- This work contains UnitedHealth Group internal data based on a comparison of medical and pharmacy plan data of HAC members from July 2018 through June 2020, paid thru July 2020.
- Employer data was included based upon multiple but not mutually exclusive factors such as: effective date with medical carrier, pharmacy benefit manager, and availability of data in carrier analytic systems. Every effort has been made to include data to the greatest extent possible.
- Medical Norm: All accounts including HRA, Norm represents 12 months of data; Pharmacy Norm: Optum Rx Book of Business
- Catastrophic case threshold: \$100,000 (Medical)
- Excludes Medicare membership

Footnotes:

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- 1. Race data is available within Health Plan Manager for UHC customers. 'Other' includes Caribbean Non-Hispanic, Jewish, Mediterranean, Middle Eastern, Native American, and Polynesian
- 2. Income Band data is available within Health Plan Manager for UHC customers.
- 3. https://www.aafa.org/asthma-disparities-burden-on-minorities.aspx
- 4. https://www.cdc.gov/asthma/most_recent_data_states.htm
- 5. https://www.cdc.gov/nchs/fastats/asthma.htm
- 6. Prescription Variability data is available within Health Plan Manager for UHC customers based on actual claims; data for free drug samples provided not known. Sourced to Optum through the application but not directly provided by Optum Rx.
- 7. https://www.pqaalliance.org/pqa-measures; 80 is considered Clinically Adherent PDC
- 8. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5944464/#:~:text=Primary%20medication%20nonadherence%20was%20higher,%3A%207.1%25 %E2%80%939.9%25 and https://pubmed.ncbi.nlm.nih.gov/30941854/
- 9. https://www.spineuniverse.com/conditions/back-pain/top-10-worst-jobs-back-pain?page=2#top
- 10. https://www.ajmc.com/view/health-insurance-design-and-conservative-therapy-for-low-back-pain
- 11. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5151134/
- 12. http://www.asiandiabetesprevention.org/what-is-diabetes/why-are-asians-higher-risk
- 13. https://dlife.com/diabetes-rankings-in-the-united-states/
- 14. https://www.uab.edu/news/health/item/10140-nearly-half-of-u-s-adults-have-high-blood-pressure
- 15. https://ihealthlabs.com/blogs/education/find-hypertension-differs-males-females/
- 16. Used with permission from comments by cardiologists Dr. Michael J. Menen, Optum Population Health Solutions Senior Medical Director, and Dr. Stuart Biliack, UHC Appeals and Grievances Medical Director, 11/4/2020
- 17. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447723/
- 18. https://www.ruralhealthinfo.org/topics/mental-health

Included Groups American Greetings American Showa Apex August Mack Austin Powder Company Bane Welker Equipment Blue Horseshoe Solutions **Boone County Government** Boulder Valley School District Ceres City of Columbus City of Dublin Clermont County Columbia Public Schools Columbus State Community College Current Lighting Eaton Corporation Ernst Enterprises Ferro Corporation First Financial Fontbonne Univ Franklin County Board of Commissioners Gardner Denver GEHA (Government Employees Health Association) HKP Corp. (Herman and Kittle Properties) Honda Hunter Engineering Huse, Inc. Irwin R. Rose Kirby Risk Marion City Schools Mitsubishi Electric Morgan County Nationwide NESCO, LLC Nippon Paint Northern Buckeye Health Plan (OHI) Ohio Farmers Ins Co (Westfield) Online Computer Library Center (OCLC) **Otolaryngology Associates** PNC Bank Red Spot Paint **RPM** International Inc. Ruoff Home Mortgage School Employee Benefit Trust (SEBT OHI) Signet Soprema Squire Patton Boggs Step 2 Swagelok Templeton Coal Company, Inc. The Lubrizol Corporation Wabash Center Wayne Township Wiese USA

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