
• Gout is a serious and progressive disease that is associated with multiple metabolic comorbidities.


and cardiovascular disease (possible post complications of metabolic syndrome) are utilized more often in employees with gout versus those without.

• Medical services related to hyperlipidemia and hypertension (disease states that are associated with metabolic syndrome), and the conditions of diabetes

Wallace KL, et al. Increasing prevalence of gout and hyperuricemia over 10 years among older adults in a managed care

REFERENCES

P-values less than 0.05 are considered statistically significant

be the 15th highest of the 261 AHRQ categories.

P = 0.0959), and services related to this category were found to

non-significantly higher among employees with gout (8th and 10th highest respectively,

• Medical services associated with "coronary atherosclerosis," another possible sequelae of metabolic syndrome were

more common among employees with gout versus those without gout (8th and 10th highest respectively,

• Services related to the AHRQ specific diagnostic conditions of "hyperlipidemia" and "hypertension" were found commonly

• Data were available for 1,171 employees with gout and a matched control of 58,550 employees without gout.

RESULTS

Diabetes mellitus without complications 1.14 8 0.42 10 < 0.0001

Other connective tissue diseases 1.74 4 0.83 4 < 0.0001

Other non-traumatic joint disease 1.67 5 0.47 7 < 0.0001

Sprains and strains 1.46 6 0.71 6 0.0278

Chronic renal failure 1.44 7 0.07 72 0.071 1

Hyperlipidemia 2.21 2 0.95 2 < 0.0001

Essential hypertension 1.97 3 0.75 5 < 0.0001

Intervertebral disc disorders 3.03 1 2.07 1 0.1 147

AHRQ DIAGNOSTIC CATEGORY MEAN SERVICES OVERALL RANK MEAN SERVICES OVERALL RANK

METABOLIC SYNDROME FOUND IN EMPLOYEES WITH GOUT VERSUS THOSE WITHOUT GOUT

A COMPARISON OF AVERAGE ANNUAL MEDICAL SERVICES FOR COMORBID CONDITIONS ASSOCIATED WITH

BACKGROUND

Hyperuricemia and gout are complexly associated with the clustering of conditions defined as the metabolic syndrome,

• Gout is associated with hyperuricemia. This latter condition is defined by current laboratory reference levels as

> 7.0 mg/dL in men and postmenopausal women and > 6.0 mg/dL in premenopausal women

• Gout is characterized as an inflammatory arthritis caused by urate crystal deposition in joints and soft tissue.

• Gout ultimately develops in approximately one-third of patients with asymptomatic hyperuricemia, and is thought to

affect approximately 5.1 million U.S. adults

• Using logistic regression and a propensity score matching algorithm, a control group of employees without gout was

DATA ANALYSIS

EMPLOYEES WITH GOUT (N=1,171) WITHOUT GOUT (N=58,550)2

• A medical service was counted for each unique procedure, and several medical services could occur per visit.

categories were determined for employees with gout versus those without gout using services related to associated ICD-9 codes. Mean service utilization was calculated during the year following the index date.

• Mean annual utilization of services for the 261 specific Agency for Healthcare Research and Quality (AHRQ) diagnostic

(IPD-9) code of 274.xx. For the control, non-diseased group, an average index date was derived from that found for the gout cohort.

1For employees with gout, the index date is the date of the first gout diagnosis (ICD-9 274.xx) in the study period.

Areas in bold represent metabolic syndrome-like categories

EMPLOYEES WITH GOUT (N=1,171) WITHOUT GOUT (N=58,550)2

• Mean annual utilization of services for the 261 specific Agency for Healthcare Research and Quality (AHRQ) diagnostic

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TABLE 1: DEMOGRAPHICS FOR THE MATCHED SAMPLE

VARIABLE N MEAN N MEAN

Annual Salary 1,171 $61,361 58,550 $60,292 1069 No

Exempt (%) 1,171 36.0% 58,550 35.9% 0.001 No

Full-time/part-time status (%) 1,171 94.4% 58,550 94.2% 0.002 No

White 736 71.7% 37,022 71.8% -0.001 No

Black 736 15.5% 37,022 15.4% 0.001 No

Hispanic 736 5.8% 37,022 5.9% -0.001 No

Male (%) 1,171 85.0% 58,550 85.4% 0.004 No

Married (%) 1,087 66.1% 54,326 66.2% -0.002 No

Race (%)