AMERICAN COLLEGE OF RHEUMATOLOGY
POSITION STATEMENT

SUBJECT: The Clinical and Economic Value of Rheumatology

PRESENTED BY: Committee on Rheumatologic Care

PRESENTED TO: Members of the American College of Rheumatology
Hospital Administrators
State Insurance Commissioners
Pharmacy Benefit Management Companies
Managed Care Entities and Insurance Companies
Pharmaceutical Companies
Members of the US Congress
Centers for Medicare Services

POSITIONS:

1. Rheumatologists significantly improve the quality of life and decrease healthcare costs for rheumatic disease patients.

2. A sufficient supply of rheumatologists and rheumatology professionals is crucial to optimize patient outcomes and to fully realize the economic benefits of rheumatologic care within healthcare systems.

3. Rheumatologists have a significant economic impact, contributing to job creation, wages, benefits, and tax revenue at the local and national levels.

4. Care of rheumatic disease by a rheumatologist improves patient function, shortens time away from work, and reduces long-term disability, allowing more patients to remain productive workforce members.

BACKGROUND:

Quantitation of Clinical Value

Rheumatologists provide quality care for patients with acute and chronic, complex inflammatory and musculoskeletal conditions.

The quality of care received is quantifiable and shown to improve under a rheumatologist's care. Electronic registries, such as the Rheumatology Informatics System for Effectiveness (RISE), are used to track and improve the quality of care administered by rheumatologists nationwide. This registry provides timely feedback on the performance of 24 quality metrics, including functional status and receipt of disease-modifying anti-rheumatic drug (DMARD) prescriptions for rheumatoid arthritis (RA) patients. Rheumatologists have consistently performed so well (>90%)

on the former that it has been retired from the Merit-Based Incentive Payment System program [1]. Another way healthcare systems demonstrate the quality of care is by joining accountable care organizations, where payment is tied to quality outcomes such as hospital readmissions, adverse events, and population health. The benefits that rheumatologists bring by providing specialized care, such as reduced emergency room visits, reduced hospital readmissions, and modified morbidity and mortality, significantly add value to patient care and increase quality within hospital systems.

Clinical Value- Cases in point

Drawing from the record of treatment of RA and gout, patients treated by rheumatologists benefit from better health outcomes, prevention of comorbid disease, and a reduced need for care in higher-cost settings.

RA is the most common chronic, autoimmune inflammatory arthritis. Appropriate medical therapy with DMARDS or biologics provided by rheumatologists can significantly decrease disease activity, modify comorbidities, and improve quality of life [2,3,4]. RA is associated with significant comorbidities, including cardiovascular disease [5,6]. Aggressive RA treatments reduce clinically significant vascular inflammation and reduce cardiovascular events [7,8]. Reducing cardiovascular events in RA patients significantly improves the overall quality of life and decreases health care costs.

Patients with gout managed by a rheumatologist also have better outcomes. Compared to patients managed by a primary care physician, patients managed by a rheumatologist have fewer emergency room visits, which results in considerable cost savings [9,10]. Rheumatologists are three times more likely to confirm the diagnosis of gout. They are more likely to follow published gout guidelines. As a result, patients are more likely to receive appropriate urate-lowering therapy, receive prophylaxis to avoid flares associated with urate-lowering treatment, and require less acute care for gout flares.

A final but essential case of rheumatology clinical value can be exemplified during the recent COVID-19 public health crisis. Rheumatologists' experience treating systemic inflammation and skills in prescribing immune-modulating therapy was called on to assist in caring for the most critically ill patients with COVID-19 [11].

During the pandemic, task forces of rheumatologists and infectious disease specialists from North America were convened by the American College of Rheumatology (ACR) to promote guidance for optimal care for rheumatic disease patients [12,13]. Once COVID-19 vaccines were available in 2021, the task force provided timely vaccination guidance for adult rheumatic disease patients. A global rheumatology alliance rapidly shared characteristics of rheumatic disease patients hospitalized with COVID-19 to optimally treat these infected patients [14].

Quantitation of Economic Value

Parallel to these healthcare benefits, rheumatology is an economically valuable specialty. Having an appropriate supply of rheumatologists is crucial for optimizing patient outcomes and

increasing the economic benefits within healthcare systems. These benefits are further explored within "The Clinical and Economic Value of Rheumatology: An Analysis of Market Supply and Utilization in the United States," which has been adapted into this position statement [15].

The analysis was based on adjusted insurance claims data and focused on two aspects of economic value: **preventive value** and **direct value**. The study compared markets with high and low rheumatologist supply and found that markets with an increased supply of rheumatologists had lower costs per patient.

Preventive value was defined as the cost savings resulting from reduced care in emergency rooms (ER) and inpatient admissions for patients under the care of rheumatologists. ECG Management Consultants (ECG) analyzed the care provided in different geographic markets by compiling lists of patients seen by rheumatologists and tracking their subsequent ER visits and hospitalizations. ECG calculated the per-patient preventive value by multiplying the total ER and inpatient stays per patient by average cost data. Analysis revealed that markets with a high supply of rheumatologists had lower average costs per patient for ER visits and hospitalizations than those with a low supply. The preventive value of rheumatology care was estimated to be $2,762 per patient per year, representing the cost savings associated with a high supply of rheumatologists. The need for expensive and invasive joint replacement surgery due to rheumatoid arthritis has fallen substantially in recent years because of medications that only rheumatologists have the experience and expertise to administer [16]. For example, the rates of total hip replacement due to RA have decreased by almost 40% since the introduction of more effective medical treatment of RA [17].

Another critical part of the indirect cost of delayed or missed care by a rheumatologist is lost productivity, work absenteeism, and disability. This burden on the economy is significant when care is not rendered appropriately and timely. A look at the cost of RA shows a consequential economic loss [18]. Care with a rheumatologist blunts these effects, preventing permanent disability and allowing patients to continue contributing to the workforce.

Direct value was calculated by summing the revenue generated from encounters with rheumatologists, including evaluation and management codes, office-based procedures, infusions, and additional contacts with the health system resulting from rheumatology care. This included lab testing, radiology services, therapy referrals, and consultations. Direct billings attributable to rheumatologists varied across markets, with higher values in markets with low rheumatologist supply and lower values in markets with increased supply. The average annual direct and downstream billings associated with a rheumatologist full-time equivalent (FTE) was $3.5 million.

Within the local and national economy, rheumatologists have a critical impact. The national economic impact of physicians at state and federal levels have been quantified with metrics on output, the creation of jobs, wages, and benefits to society, and the large-scale support for state and federal tax revenue. In 2018, the total number of US physicians providing patient care generated 12.6 million total jobs (an average of 17.1 direct and indirect jobs per physician), $1 trillion in total wages and benefits, and $92.9 billion in total state and tax revenue [19]. Independent university rheumatology practices have also analyzed and justified the local

economic impact through data points, such as job creation and downstream revenue benefits [20]. Therefore, the healthcare system, specifically rheumatologic care, should not be perceived simply as ‘billing for fees and services’ but should be appreciated as providing significant ‘revenue enhancement’ for society.

SUMMARY:

Having an appropriate number of rheumatologists to support the patient population is crucial for optimizing patient outcomes and increasing the economic benefits within healthcare systems. The importance and economic value of rheumatologists in the healthcare system are underscored by the "The Clinical and Economic Value of Rheumatology: An Analysis of Market Supply and Utilization in the United States" white paper written by the American College of Rheumatology in partnership with ECG Management Consultants.

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