

# Real World Analysis of the Economic Impact of Infliximab Utilization by Site of Care and Medical Diagnosis within Two Regional Health Plans

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#### BACKGROUND

- Infusion management has ascended to the forefront of payer concerns in recent years, largely due to the high percentage of total drug spend. 1,3
- Excessive cost associated with certain sites of care (SOC) for medical infusions has emerged as a significant issue due to misaligned incentives from pharmacy benefit design, expansion of 340b covered entities, decreased drug reimbursement to office-based physicians, and lack of awareness by providers of alternative options. 1,2
- Past research has demonstrated consistently higher costs per claim of medical benefit specialty drugs at hospital outpatient facilities (HOP) compared to alternative SOC.<sup>3</sup>
- Infliximab, in particular, is used to treat a large variety of disease states and has been demonstrated to represent the largest overall spend among such drugs.<sup>3</sup>
- Currently, there is limited understanding of the economic impact that medical diagnosis has on medical pharmacy utilization within various SOC.

#### OBJECTIVE

• To identify how utilization of infliximab differs by SOC and disease categories, and how it impacts financial expenditures within two regional health plans.

#### METHODS

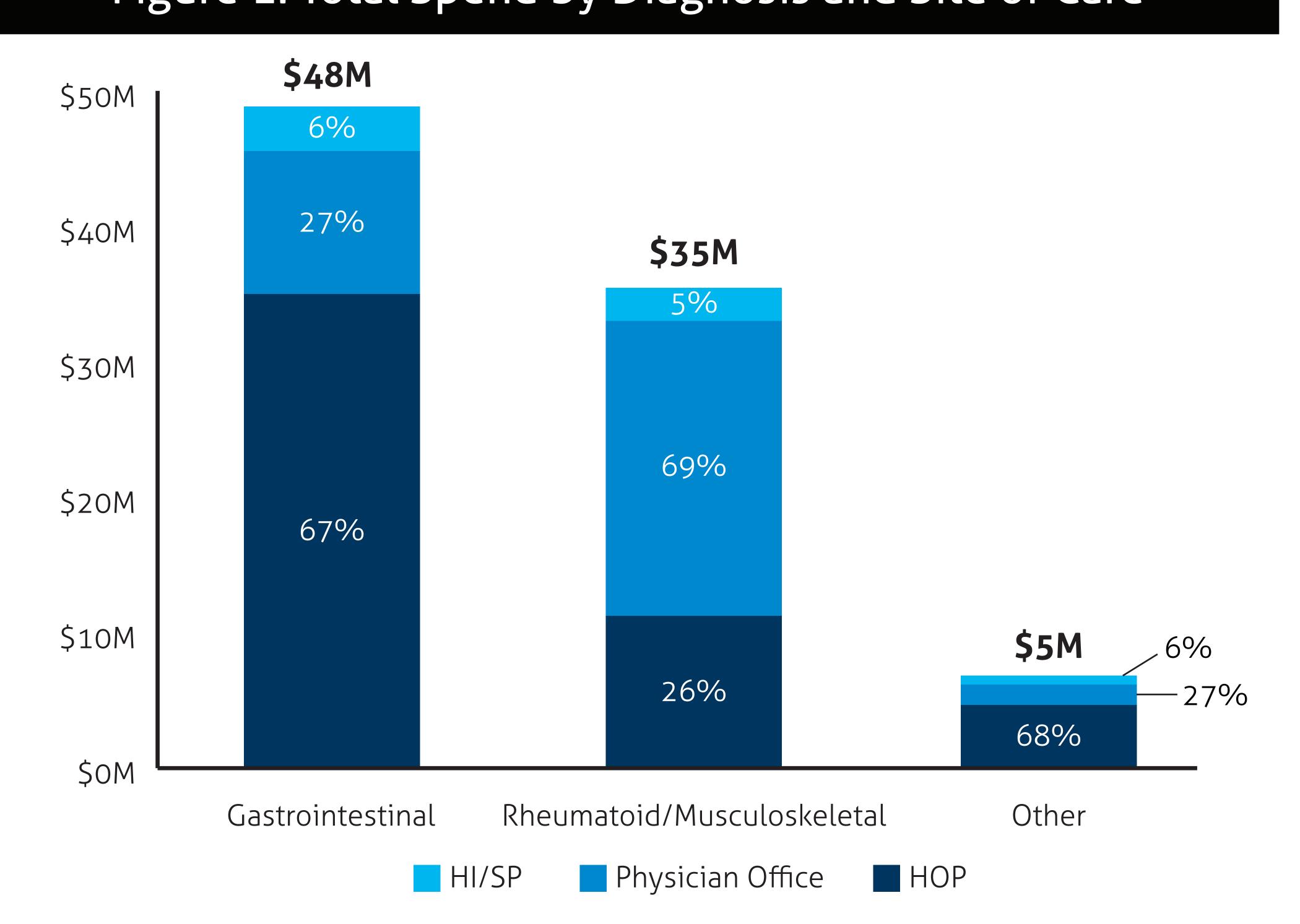
- In this retrospective analysis, patients of two large regional health plans' medical database (approximately 4 million total covered lives) were used.
- Inclusion criteria: Continuously enrolled patients who were administered infliximab between January 1 and December 31, 2013.
- The following medical claims data were collected for infliximab claims:
  - Medical diagnosis, SOC location, and utilization data, which included the number of infliximab units billed, number of claims, average units per claim, allowed amount, and average allowed amount per claim.
  - Allowed amount is defined as the maximum reimbursement for a specific service or procedure that includes both the amount paid by an insurer and patient out-of-pocket costs.
- Infliximab utilization data was stratified according to both SOC location and medical diagnosis.
- Diagnoses were grouped into the following categories: rheumatoid/musculoskeletal; gastrointestinal (GI); and other (includes any disease states unable to be categorized as either GI or rheumatoid/musculoskeletal) based on ICD 9 codes. Only the primary diagnosis code was used.
- Results were analyzed using descriptive statistics.

#### RESULTS Table 1. Medical Claims Breakdown by Site of Service Average Allowed Allowed Number % Reimbursed Number Number Average SOC Amount/Claim of Claims of Members Units/Claim of Units **Above ASP** Amount Home Infusion/Specialty Pharmacy (HI/SP) \$5,027,543 \$4,293 60,793 1,171 231 25.03% 51.9 Hospital Outpatient (HOP) \$7,302 \$44,792,669 253,727 6,134 166.91% 1,222 41.4 Physician Office \$38,181,910 10,588 \$3,606 526,057 49.7 9.74% 1,924 **Grand Total** \$88,032,179 \$4,917 841,105 17,903 3,381 58.24% 47.0

Table 2. Medical Claims Breakdown by Diagnosis Group					
Disease Group	SOC	Allowed Amount	Number of Claims	Average Units/Claim	Average Allowed Amount/Claim
Gastrointestinal Conditions	HOP	\$32,515,633	4,252	40.09	\$7,647
	Physician	\$12,821,810	3,488	50.55	\$3,676
	HI/SP	\$2,995,893	729	48.93	\$4,110
	Total	\$48,360,142	8,475	45.15	\$5,706
Rheumatoid/Musculoskeletal Conditions	HOP	\$9,177,723	1,490	43.54	\$6,160
	Physician	\$24,140,500	6,811	48.96	\$3,544
	HI/SP	\$1,778,664	398	55.48	\$4,469
	Total	\$35,096,887	8,699	48.33	\$4,035
Other*	HOP	\$3,099,312	392	46.96	\$7,906
	Physician	\$1,219,599	289	56.16	\$4,220
	HI/SP	\$252,986	44	69.18	\$5,750
	Total	\$4,575,149	729	52.09	\$6,276
	Grand Total	\$88,032,179†	17,903	46.98	\$4,917

<sup>\*</sup>Includes all disease states other than gastrointestinal or rheumatoid/musculoskeletal conditions. The most common disease states in this group were identified to be either dermatologic, ocular, or oncology/hematology conditions. † Approximately \$30,000 of total spend was associated with an unidentifiable SOC.

# Figure 1. Total Spend by Diagnosis and Site of Care



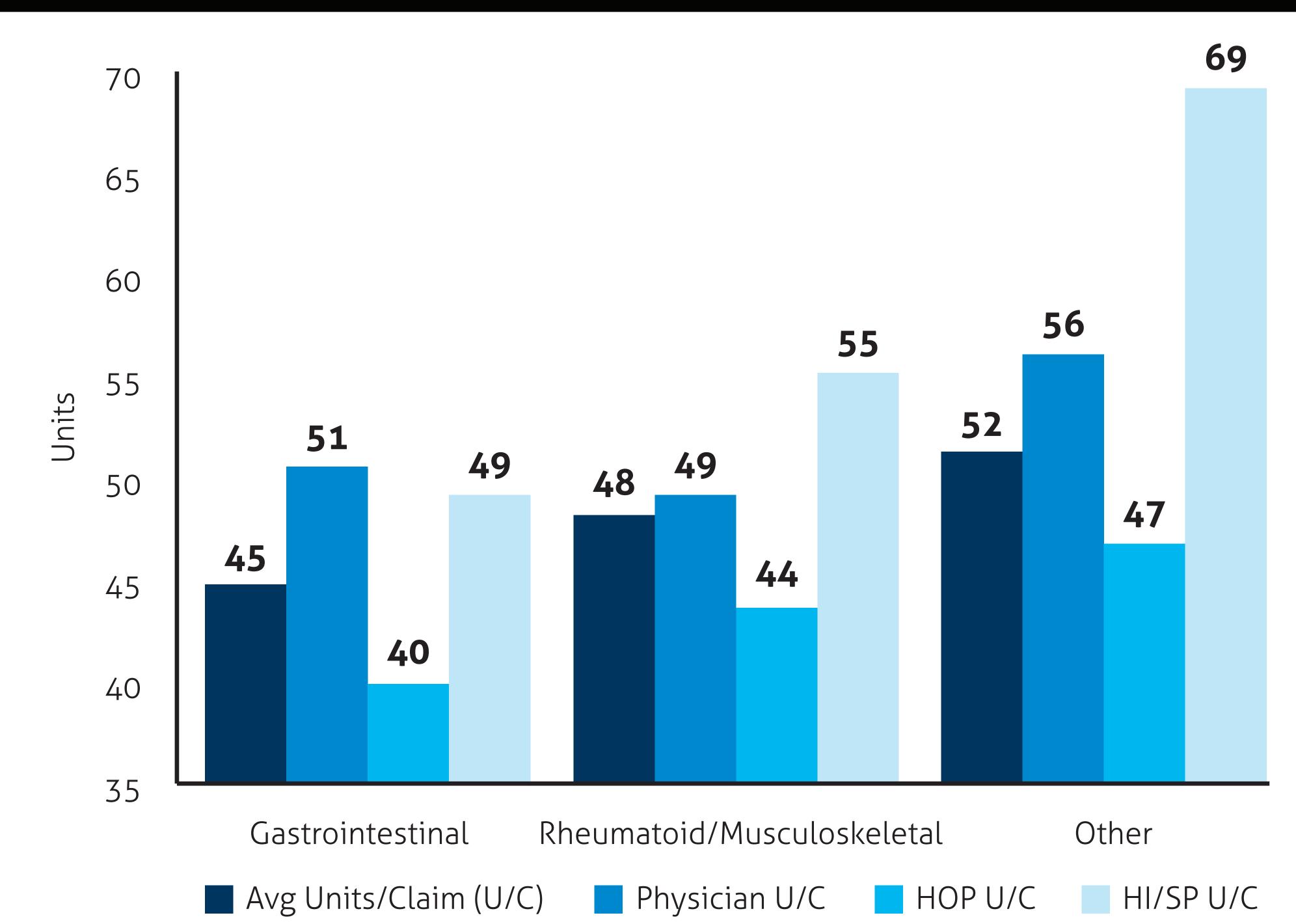
# DISCUSSION

- A total of 3,161 unique members were administered infliximab therapy representing 17,903 total claims and \$88,032,179 in allowed amount.
  - The average allowed amount per claim in HI/SP was \$4,293.
  - The average allowed amount per claim in a HOP was \$7,302.
  - The average allowed amount per claim in a physician office was \$3,606.
- The average allowed amount for a claim from a HOP was 102% higher than the average allowed amount for a claim from a physician office even though the average units billed per claim in the physician offices was 20% higher.
- SOC utilization differed dramatically according to diagnosis group; 67% of all infliximab spend for GI conditions was billed from HOPs compared to just 26% for rheumatoid/musculoskeletal conditions.
- The total spend for "other" diagnoses was less than \$5 million total.

# LIMITATIONS

- Utilization of specific SOC may differ by a particular diagnosis within disease groups. Grouping diagnoses may have resulted in generalized results that are not specific to unique disease states.
- Patient history and progress notes were not available to identify reason(s) for administration of infliximab therapy at a specific SOC.
- Economic impact of medical diagnosis within various SOC was only evaluated for one medical benefit injectable drug.

# Figure 2. Units per Claim by Diagnosis and Site of Care



# CONCLUSION

- Regardless of diagnosis, the allowed amount per claim in a HOP was consistently higher than in physician offices.
- SOC utilization breakdown and units billed per infliximab claim differed
  according to medical diagnosis. Patients with a GI condition were much more
  likely to use a HOP compared to those with a rheumatoid/musculoskeletal
  condition.
- Identifying and targeting disease categories with a high percentage of HOP utilization is one opportunity for managed care organizations to contain SOC costs while ensuring access to medical benefit injectables.

# REFERENCES

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# DISCLOSURES

• This research was conducted by Magellan Rx Management, Newport, RI, without external funding.