RWD20

ENHANCING ONCOLOGY MODEL:
DISCORDANCE AMONG PATIENTS USING INTRAVENOUS IRON IN THE US

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BACKGROUND

The Enhancing Oncology Model (EOM) is a 5-year voluntary model aimed at driving transformation and improving care coordination in oncology care through payment incentives and required participant redesign activities[1]

EOM focuses on beneficiaries for seven cancer types:[2]

- Breast cancer
- Chronic leukemia
- Small intestine/colorectal cancer
- Lung cancer
- Lymphoma
- Multiple myeloma
- Prostate cancer

Anemia is a common hematological manifestation of cancer. Iron deficiency anemia (IDA) is often a main contributor or can be caused by a variety of factors, such as:

- Chemotherapy
- Blood loss after surgery
- Malnutrition
- Malabsorption

Intravenous iron (IVI) is used to treat IDA when oral iron is not effective or not tolerated

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) recommend IVI ranging from 1 to 10 infusions per treatment course, totaling about 1,000 mg for most IVI products[3]

Some policies restrict the use of newer generation products and justify this decision based on IVI drug cost alone, ignoring other aspects that can contribute toward overall patient cost

OBJECTIVE

To evaluate the prevalence of incomplete treatment with IVI products in patients with IDA and EOM tumor types

ABBREVIATIONS

EOM: Enhancing Oncology Model
FDA: US Food and Drug Administration
IDA: Iron deficiency anemia
IV: intravenous
IVI: intravenous iron
NCCN: National Comprehensive Cancer Network
US: United States

REFERENCES

1. Centers for Medicare & Medicaid Services. Enhancing Oncology Model. Accessed March 27, 2024, https://www.cms.gov/priorities/innovation/innovation-models/enhancing-oncology-model
2. Centers for Medicare & Medicaid Services. Update: Enhancing Oncology Model Factsheet. Published June 27, 2023. Accessed March 27, 2024, https://www.cms.gov/newsroom/fact-sheets/update-enhancing-oncology-model-factsheet#:~:text=EOM%20focuses%20on%20beneficiaries%20receiving,multiple%20myeloma%2C%20and%20prostate%20cancer
3. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Hematopoietic Growth Factors V.3.2024. © National Comprehensive Cancer Network, Inc. 2024. All rights reserved. Accessed April 26, 2024. To view the most recent and complete version of the guideline, go online to NCCN.org
4. LaVallee C, Bansal I, Kamdar S, et al. Relationship between initial parenteral iron therapy dosing and treatment effectiveness: a real-world retrospective analysis. J Blood Med. 2022 Mar 8:13:133-142

SPONSORSHIP

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NOTE

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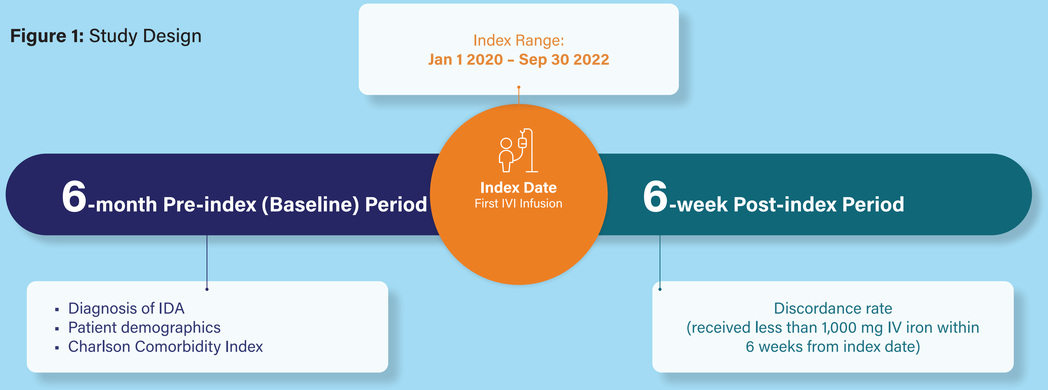
METHODS

This retrospective study utilized Komodo's health administrative claims from patients enrolled in Medicare health plans

- Patients with a diagnosis of IDA and one of the 7 EOM tumor types who received a US approved IVI product during the identification period (01/01/2020 – 09/30/2022) were included
- Patients on hemodialysis, with an IVI claim during baseline period, or utilizing hospice services were excluded
- Continuous enrollment (both medical and pharmacy coverage) for the baseline and follow-up periods was required
- Date of first IVI infusion was the index date
- Discordance, a surrogate marker for nonadherence, was defined as having received less than 1,000 mg of iron (commonly targeted clinical dose for a course of treatment for IDA) over 6 weeks
- IVI products evaluated include: iron dextran, iron sucrose, sodium ferric glucose, ferric carboxymaltose, ferric derisomaltose, ferumoxytol

Figure 1: Study Design



RESULTS

n=6,450 patients were included in this study

The average age was **73.3** years old
Average Charlson Comorbidity index was **6.0**

Figure 2: Patient Demographics

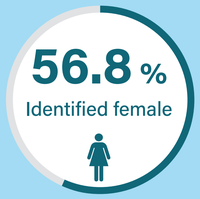
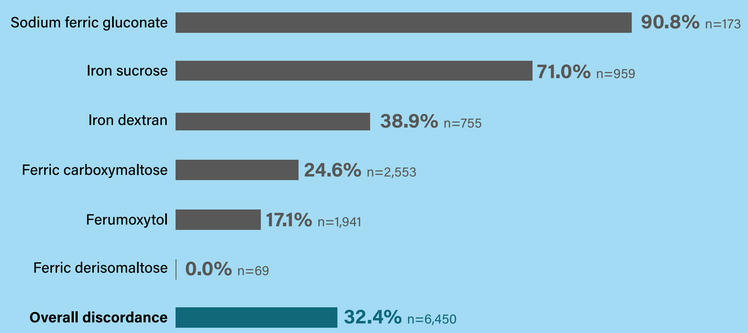


Figure 3: Discordance Rate (overall and by IVI product)



LIMITATIONS

- A 6-week timeframe was used for the definition of discordance, which covers the course of treatment per label for all products except for sodium ferric gluconate, which may take up to 8 weeks
- Most patients require 1,000 mg of iron for repletion[4], however, recommended doses for individual patient need varies
- It is possible that some products were not administered according to FDA-approved labeling, rather this analysis represents real-world use of IVI products
- This analysis includes only data from Medicare insured patients from Komodo Healthcare Map, which may not be generalizable to a wider patient population
- This analysis excluded patients undergoing hemodialysis or hospice care

CONCLUSIONS

EOM aims to generate cost savings and improve quality of care for cancer patients undergoing chemotherapy based on 6-month episodes of care across 7 specific tumor types

- Greater discordance rates to IVI occurred in treatment courses with multiple infusions
- Approximately 17-25% of patients on IVI treatments that require only 2 infusions (ferumoxytol and ferric carboxymaltose) were discordant
- If oncology practices are being held accountable for quality of care, then restricting IVI selection solely on drug cost is counterproductive to supporting EOM
- Potential undertreatment of IDA (<1,000 mg received) could be mitigated with unrestricted access to a single-dose IVI option

IVI product selection should ensure that discordance, patient preference, health-related social needs, and outcomes are not ignored in EOM practices