



HIT Monitoring Report

February 2024

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Executive Summary

Under Fee-for-service (FFS) Medicare, home infusion therapy (HIT) involves the intravenous or subcutaneous administration of drugs or biologicals to an individual at home. The components needed to perform home infusion include the drug (for example, antivirals, immune globulin), equipment (for example, a pump), and supplies (for example, tubing and catheters). Likewise, nursing services are necessary to train and educate the patient and caregivers on the safe administration of infusion drugs in the home. Visiting nurses often play a large role in home infusion. Nurses typically train the patient or caregiver to self-administer the drug, educate on side effects and goals of therapy, and visit periodically to assess the infusion site and provide dressing changes. The home infusion process typically requires coordination among multiple entities, including patients, physicians, hospital discharge planners, health plans, home infusion pharmacies, and, if applicable, home health agencies.

This report summarizes utilization for the HIT service visits (Exhibits 1 through 4), characteristics of HIT recipients (Exhibits 5 through 7), and characteristics of DME/HIT supplier organizations (Exhibits 8 through 10). Data are presented through the end of the second quarter (Q2) of 2023.

From Q1 2021 to Q2 2023, the quarterly average of HIT service visits was about 7,500 visits. HIT service visits increased in 2021, decreased slightly in 2022, and continued to decrease in the first half of 2023.

For the past twelve months, utilization has been concentrated in the Mid-Atlantic states as well as Texas and Florida. That is partly reflected by the concentration of Medicare FFS enrollment in those locations. HIT service visit recipients tend to be white and between the ages of 65 and 85.

The HIT market is very concentrated with seven of the 82 HIT suppliers providing about 56 percent of the HIT service visits in the past twelve months. The quarterly number of HIT supplier organizations increased from 42 in Q1 2021 to a quarterly high of 74 in Q3 2022 before dropping to 60 in Q2 2023.

Overall Methodology

Data for analyses come from the CMS Chronic Conditions Warehouse Virtual Research Data Center (CCW VRDC), where 100% of HIT related Medicare Part B claims are extracted quarterly beginning with quarter 1 (Q1) of 2021. For this report, we examine the ten quarters of data that exist from Q1 2021 through Q2 2023. Each quarter of data is extracted seven months after the quarter's end to account for claims processing timelines.¹ These data are used to track HIT utilization among Medicare fee-for-service (FFS) beneficiaries with Part B coverage during the permanent benefit, which began January 1, 2021.

We identify HIT drug fills by identifying DME claim line-items that include the HCPCS code for one of the 37 drugs covered by the permanent benefit for claims on or after January 1, 2021.² Any beneficiary with a HIT drug fill is considered a "HIT drug recipient". All HIT drug recipients are potentially eligible to receive HIT professional service visits through the permanent HIT benefit.

Under the permanent HIT benefit, CMS pays HIT suppliers for professional services furnished for each infusion drug administration calendar day.³ Medicare covers the professional services for three payment categories of HIT drugs:

- **Category 1** for certain intravenous infusion drugs for therapy, prophylaxis, or diagnosis, including antifungals and antivirals; inotropic and pulmonary hypertension drugs; pain management drugs; and chelation drugs,
- **Category 2** for subcutaneous infusions for therapy or prophylaxis, including certain subcutaneous immunotherapy infusions, and
- **Category 3** for chemotherapy drugs or other highly complex infusion drugs or biologicals.

Because utilization patterns and beneficiary characteristics can vary by drug category, many of the tables and figures below present findings by drug category.

We identify HIT service visits when a HIT claim line-item includes one of the following payment category-specific HCPCS codes (G-codes): G0068, G0069, G0070, G0088, G0089, and G0090.⁴ Any beneficiary with a HIT service visit is considered a "HIT service visit recipient." Additional information on the HIT drug and service visit codes can be found in Appendix A.

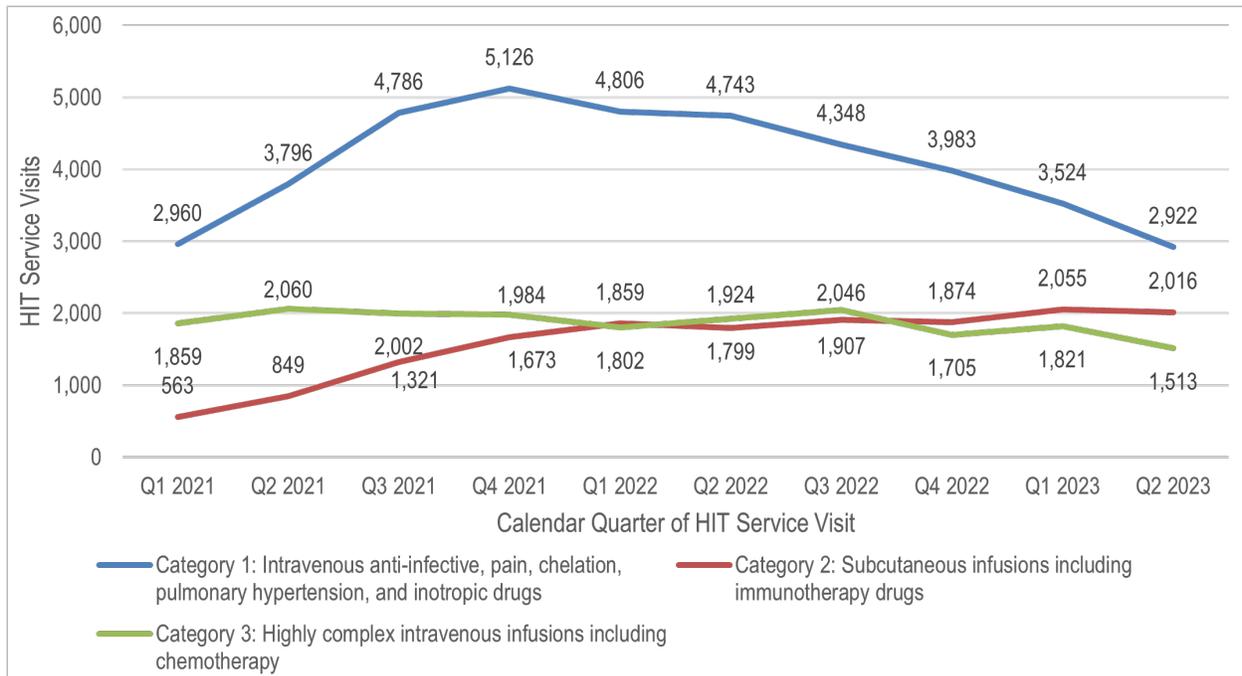
¹ Providers have up to a year from service date to submit claims (<https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c01.pdf>). Table 3 of the CCW White Paper: Medicare Claims Maturity indicates that over 95 percent of claims are final after six months (<https://www2.ccwdata.org/documents/10280/19002256/medicare-claims-maturity.pdf>).

² <https://www.cms.gov/files/document/mm11880.pdf>

³ For more details on Medicare reimbursement of HIT service visits, consult Pub 100-04 Medicare Claims Processing Transmittal 10547 (<https://www.cms.gov/files/document/r10547cp.pdf>).

⁴ <https://www.cms.gov/files/document/mm11880.pdf>

Exhibit 1. Number of HIT service visits by drug category (Q1 2021 – Q2 2023)



Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

The total number of visits increased in 2021, decreased slightly in 2022, and continued to decrease in the first half of 2023.

FEWEST VISITS Q1 2021

5,382 total visits

MOST VISITS Q4 2021

8,783 total visits

Comparing patterns by payment category:

CATEGORY 1

increased in 2021, decreased slightly in 2022, and continued to decrease in 2023.

CATEGORY 2

remained stable at roughly under 2,000 visits per quarter.

CATEGORY 3

increased from 563 in Q1 2021 before stabilizing above 1,500 visits per quarter by Q4 2021.

In all quarters since Q1 2021, **CATEGORY 1** has accounted for the largest share of visits.



EXHIBIT 1 METHODOLOGY:

Refer to Overall Methodology for details.

Exhibit 2. Breakdown of HIT service visits by initial/subsequent visit and by drug category, past twelve months (ending 6/30/2023)

Type of HIT Service Visit	Category 1		Category 2		Category 3		Total	
	N	%	N	%	N	%	N	%
Initial Visit	234	1.6%	333	4.2%	329	4.6%	896	3.0%
Subsequent Visit	14,543	98.4%	7,519	95.8%	6,756	95.4%	28,818	97.0%
Total	14,777	100.0%	7,852	100.0%	7,085	100.0%	29,714	100.0%

Category 1: Intravenous anti-infective, pain management, chelation, pulmonary hypertension, and inotropic drugs.

Category 2: Subcutaneous infusions including immunotherapy drugs.

Category 3: Highly complex intravenous infusions including chemotherapy drugs.

Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

CATEGORY 1

the **lowest share** of initial visits
1.6%

CATEGORY 3

the **highest share** of initial service visits
4.6%

For all payment categories, there are significantly more subsequent visits than initial visits.



EXHIBIT 2 METHODOLOGY:

Refer to Overall Methodology for details.

Exhibit 3. Utilization of HIT service visits by HIT drug category and linked drug, past twelve months (ending 6/30/2023)

Drug Category	Linked Drug	Frequency of HIT Service Visits	Share of Drug Category	Share of All HIT Service Visits
Category 1	Milrinone lactate (J2260)	13,253	89.7%	44.6%
	Dobutamine HCl (J1250)	683	4.6%	2.3%
	Treprostinil (J3285)	208	1.4%	0.7%
	Other	633	4.3%	2.1%
	Category 1 Total	14,777	100.0%	49.7%
Category 2	Hizentra (J1559 JB)	3,337	42.5%	11.2%
	Cuvitru (J1555 JB)	1,674	21.3%	5.6%
	Hyaluronidase (Hyqvia) (J1575 JB)	1,145	14.6%	3.9%
	Other	1,696	21.6%	5.7%
	Category 2 Total	7,852	100.0%	26.4%
Category 3	Fluorouracil (J9190)	6,734	95.0%	22.7%
	Blinatumomab (J9039)	325	4.6%	1.1%
	Other	26	0.4%	0.1%
	Category 3 Total	7,085	100.0%	23.8%

Category 1: Intravenous anti-infective, pain management, chelation, pulmonary hypertension, and inotropic drugs.

Category 2: Subcutaneous infusions including immunotherapy drugs.

Category 3: Highly complex intravenous infusions including chemotherapy drugs.

Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

The most linked drug is **milrinone lactate** **CATEGORY 1**
 followed by **fluorouracil** **CATEGORY 3**
 followed by **Hizentra** **CATEGORY 2**



These three drugs link to 78.5 percent of all HIT service visits.

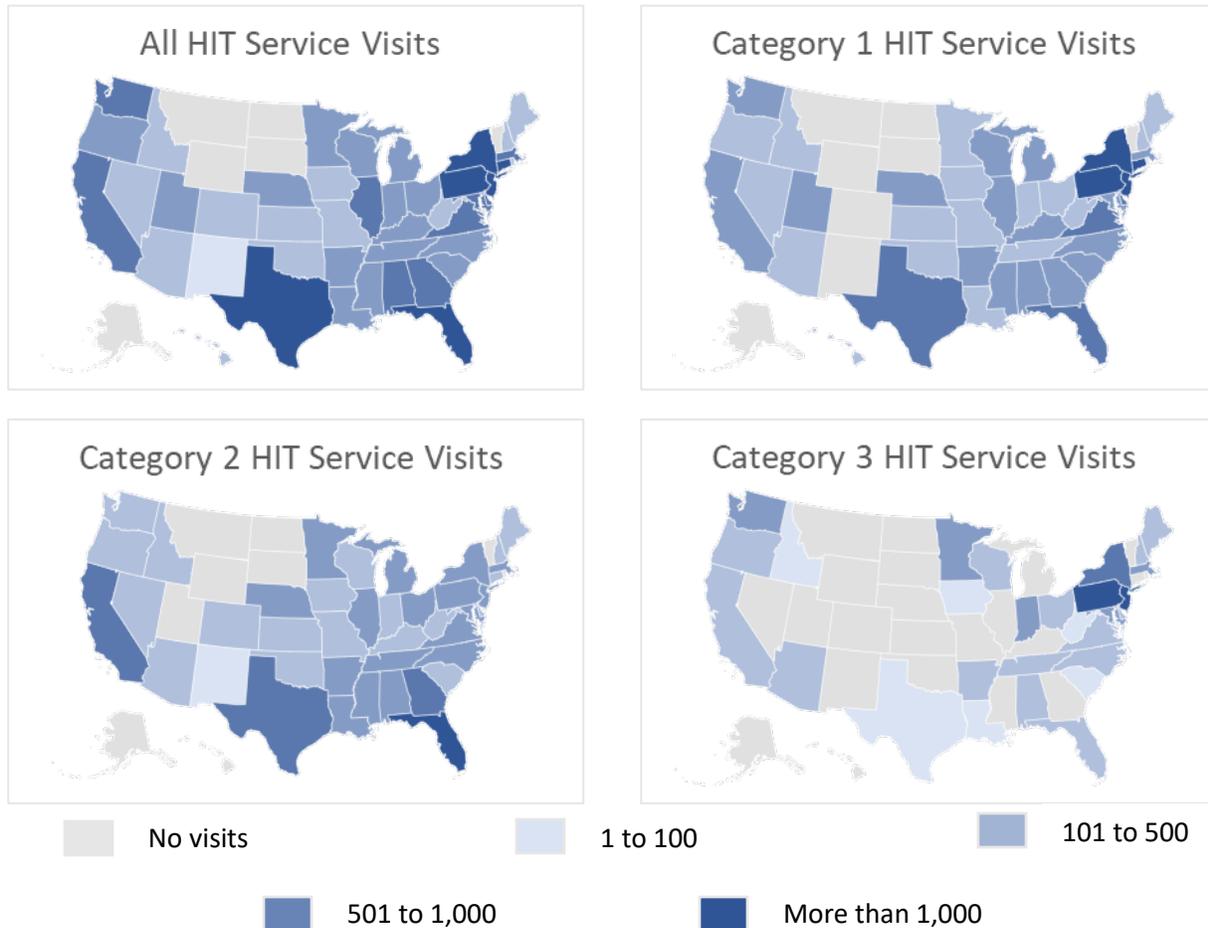
One linked drug dominates the share of each drug category, with **milrinone lactate at 89.7 percent, Hizentra at 42.5 percent, and fluorouracil at 95.0 percent.**



EXHIBIT 3 METHODOLOGY:

For reimbursement, all HIT service visits must occur within 30 days of a HIT prescription fill, which can be identified using drug-specific HCPCS codes (J-codes) on the Part B Medicare FFS DME claims data. The top three HIT drugs for each payment category are shown, and the remaining drugs are listed as "Other."

Exhibit 4. HIT service visits by state and payment category, past twelve months (ending 6/30/2023)



Category 1: Intravenous anti-infective, pain management, chelation, pulmonary hypertension, and inotropic drugs.
Category 2: Subcutaneous infusions including immunotherapy drugs.
Category 3: Highly complex intravenous infusions including chemotherapy drugs.

Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

Without adjusting for Medicare FFS enrollment across states, **HIT service visits are concentrated in the Mid-Atlantic**, especially in Pennsylvania, New York, and New Jersey. Florida and Texas also have a higher concentration of visits. With some exceptions, states in the West and Midwest have few visits.

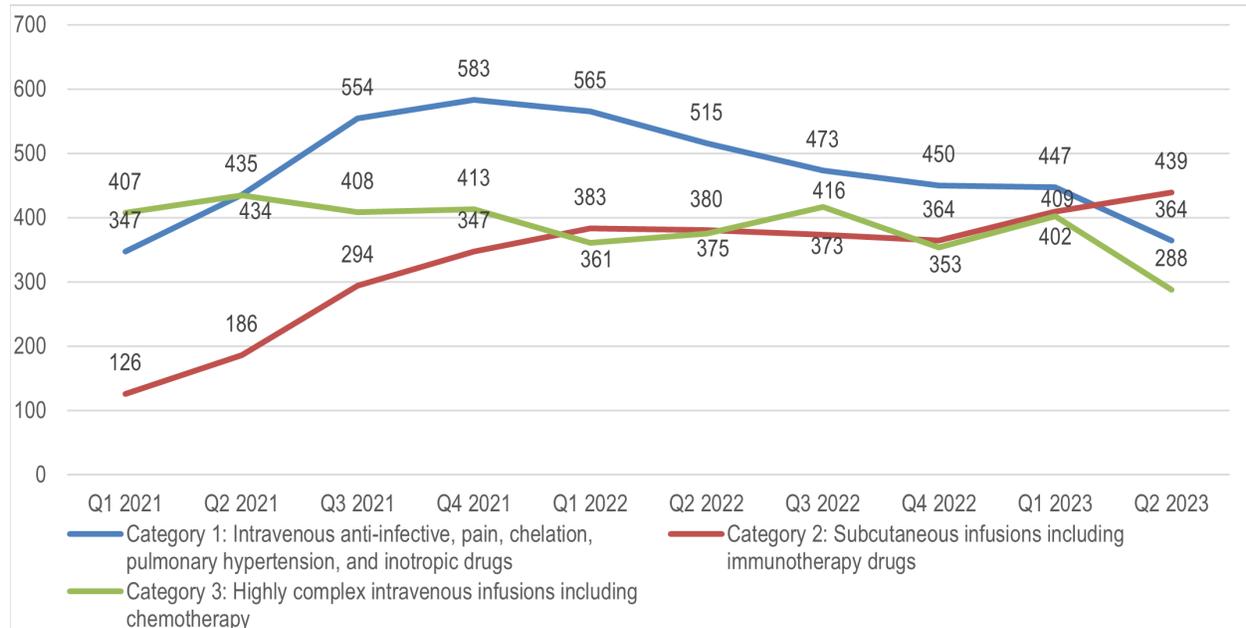
- CATEGORY 1** visits are geographically dispersed, with many visits in Texas, Florida, and the Northeast.
- CATEGORY 2** visits are concentrated in Florida, and
- CATEGORY 3** visits are heavily concentrated in Pennsylvania & New Jersey.



EXHIBIT 4 METHODOLOGY:

We identify the state of the HIT service visits using the beneficiary residence state code located on the HIT claim.

Exhibit 5. Number of HIT service visit recipients by drug category (Q1 2021 – Q2 2023)



Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)

KEY TAKEAWAYS:

The number of HIT service visit recipients: **increased** from Q1 2021 to Q4 2021, then **decreased** through Q2 2023.

- Q1 2021:** 880 users
- Q4 2021:** 1,343 users
- Q2 2023:** 1,091 users

CATEGORY 1 recipients increased from 347 in Q1 2021 to 583 in Q4 2021 before **steadily declining** to 364 in Q2 2023.

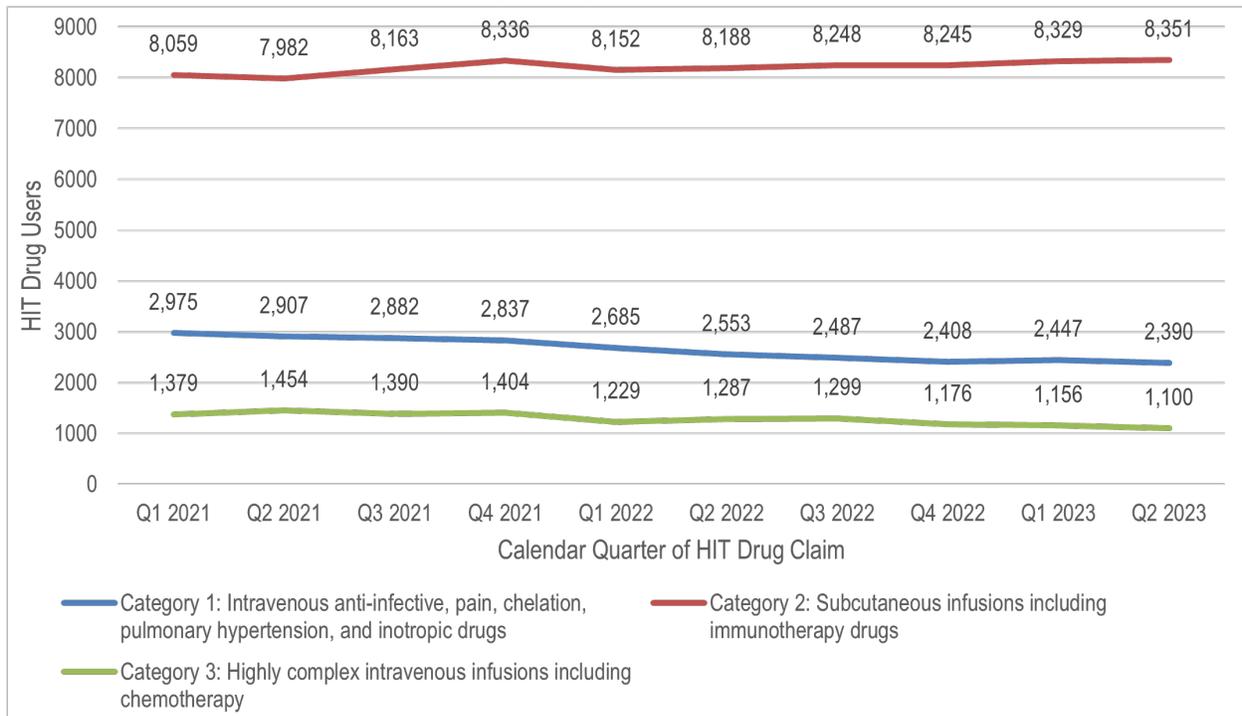
CATEGORY 2 recipients increased by **313** from Q1 2021 to Q2 2023, with a quarterly high of 439 in Q2 2023.

CATEGORY 3 recipients have been **hovering** between 350 and 420 since Q1 2021, except for Q2 2023 when it reached a quarterly low of 288.

EXHIBIT 5 METHODOLOGY:

Note that recipients who receive service visits in multiple quarters will be included in each quarterly total when the service visit occurred. Refer to Overall Methodology for other details.

Exhibit 6. Number of HIT drug recipients (Q1 2021 – Q2 2023)



Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)

KEY TAKEAWAYS:

The number of **CATEGORY 2** HIT drug recipients **has slowly increased**

FROM **Q1 2021** **TO** **Q2 2023**

8,059 recipients **8,351** recipients

CATEGORY 1 and **CATEGORY 3** HIT drug recipients **have slowly decreased** since Q2 2021.

EXHIBIT 6 METHODOLOGY:

Refer to Overall Methodology for details on definitions for HIT drug recipients and payment categories. If a HIT drug recipient receives multiple HIT drug fills within a quarter across payment categories, the highest numbered payment category is assigned to that recipient. Note that recipients who fill HIT prescriptions in multiple quarters will be included in each quarterly total when the HIT prescriptions were filled.

Exhibit 7. Number and percent of HIT service visit recipients by demographic characteristics, past twelve months (ending 6/30/2023)

Demographic	Category 1		Category 2		Category 3		Total		Medicare FFS 2022*
	N	%	N	%	N	%	N	%	%
Race									
White	633	70.4%	708	95.0%	701	80.9%	2,042	81.4%	80.9%
Black	193	21.5%	14	1.9%	86	9.9%	293	11.7%	8.2%
Other	73	8.1%	23	3.1%	79	9.1%	175	7.0%	10.9%
Total	899	100%	745	100%	866	100%	2,510	100%	100%
Sex									
Female	325	36.2%	559	75.0%	370	42.7%	1,254	50.0%	52.7%
Male	574	63.8%	186	25.0%	496	57.3%	1,256	50.0%	47.3%
Total	899	100%	745	100%	866	100%	2,510	100%	100%
Age									
Age < 65	202	22.5%	87	11.7%	75	8.7%	364	14.5%	11.0%
65 <= Age < 75	320	35.6%	336	45.1%	472	54.5%	1,128	44.9%	51.3%
75 <= Age < 85	284	31.6%	256	34.4%	288	33.3%	828	33.0%	26.8%
85 <= Age	93	10.3%	66	8.9%	31	3.6%	190	7.6%	10.9%
Total	899	100%	745	100%	866	100%	2,510	100%	100%
Eligibility for both Medicare and Medicaid (Dually Eligible)									
Never Dually Eligible	721	80.2%	669	89.8%	754	87.1%	2,144	85.4%	88.5%
Any Dually Eligible	178	19.8%	76	10.2%	112	12.9%	366	14.6%	11.5%
Total	899	100%	745	100%	866	100%	2,510	100%	100%

* Contains all Medicare FFS beneficiaries from the Medicare Beneficiary Summary File (MBSF) with both Part A and Part B enrollment.

Source: Analyses of Medicare FFS Part B DME claims and the MBSF (Accessed from CCW VRDC on January 25, 2024)

Category 1: Intravenous anti-infective, pain management, chelation, pulmonary hypertension, and inotropic drugs.

Category 2: Subcutaneous infusions including immunotherapy drugs.

Category 3: Highly complex intravenous infusions including chemotherapy drugs.



KEY TAKEAWAYS:

HIT service visit recipients are predominately

WHITE (81.4%) and **AGES 65 TO 85 (77.9%)**

Relative to the other payment categories, the **CATEGORY 1** HIT service visit recipients are more likely to be **BLACK**, and **DUALLY ELIGIBLE** for Medicare and Medicaid.

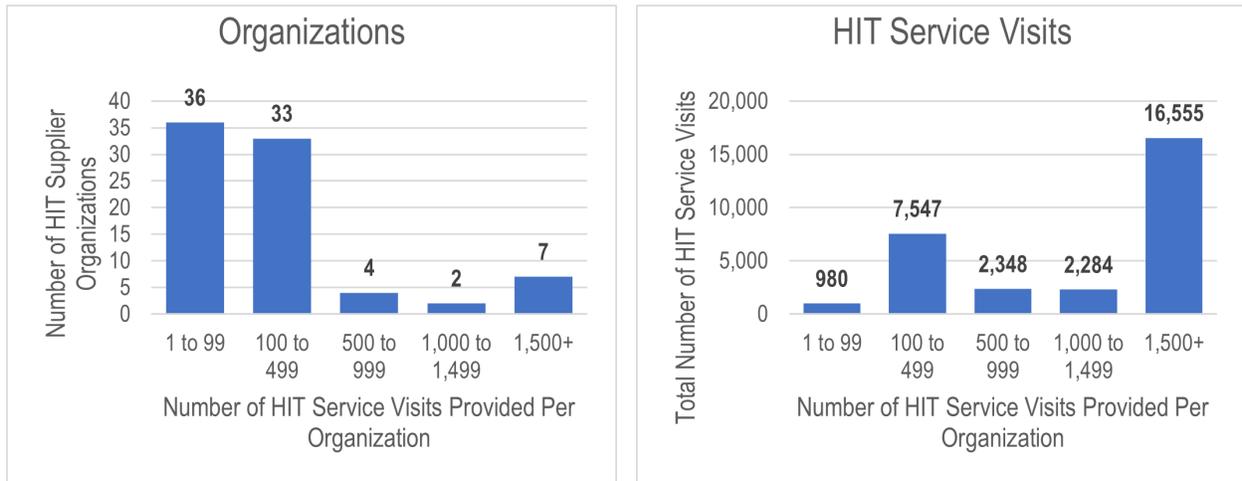
Relative to the other payment categories, the **CATEGORY 2** HIT service visit recipients are more likely to be **FEMALE**, (75.0 percent compared to 36.2 percent for Category 1 and 42.7 percent for Category 3).



EXHIBIT 7 METHODOLOGY:

We obtained demographic characteristics for HIT service visit recipients from the Medicare Beneficiary Summary File (MBSF). We calculate age at the end of the twelve-month period or at the beneficiary's date of death, if applicable. Dual eligibility status for Medicare and Medicaid, which is assigned monthly in the MBSF, is assigned as never eligible versus any eligibility for the 12 months we examined. Because recipients exist over multiple quarters, the sum of recipients in Exhibit 5 will not equal the totals in this exhibit.

Exhibit 8. Histogram of HIT supplier organizations and HIT service visits by HIT service visits provided per organization, past twelve months (ending 6/30/2023)



Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

Seven of 82 HIT supplier organizations supply 55.7 percent of HIT service visits.

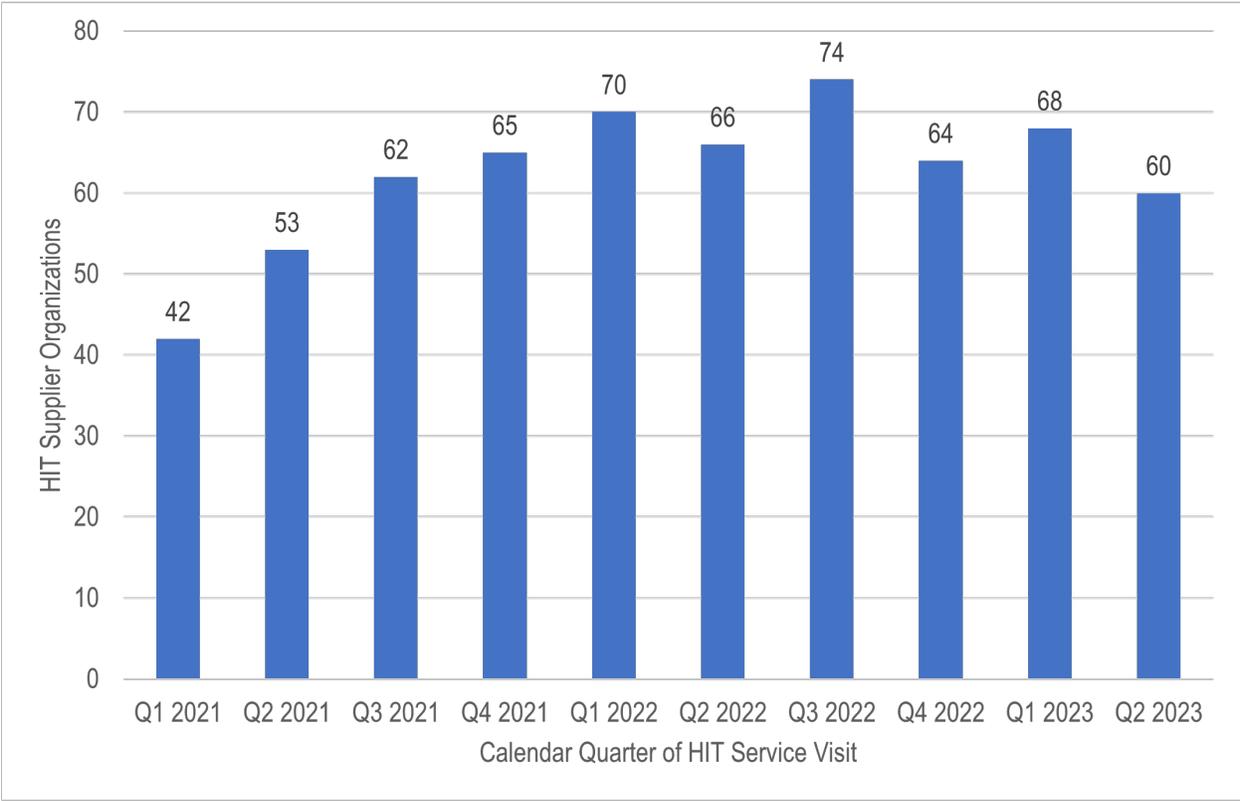
36 organizations provide fewer than 100 HIT service visits.



EXHIBIT 8 METHODOLOGY:

After implementation of the permanent HIT benefit, only accredited HIT suppliers, which could include DME suppliers, can provide HIT service visits. Any supplier (based on its National Provider Identifier (NPI)) that provides at least one or more HIT service visits is considered a HIT supplier. After identification, NPIs are consolidated using the NPI's organization name field in the January 2024 National Plan & Provider Enumeration System (NPPES). NPIs with the same or similar organization names are grouped together as a single organization. We combined 203 NPIs into 82 different HIT supplier organizations.

Exhibit 9. Number of HIT supplier organizations providing HIT service visits (Q1 2021 - Q2 2023)



Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

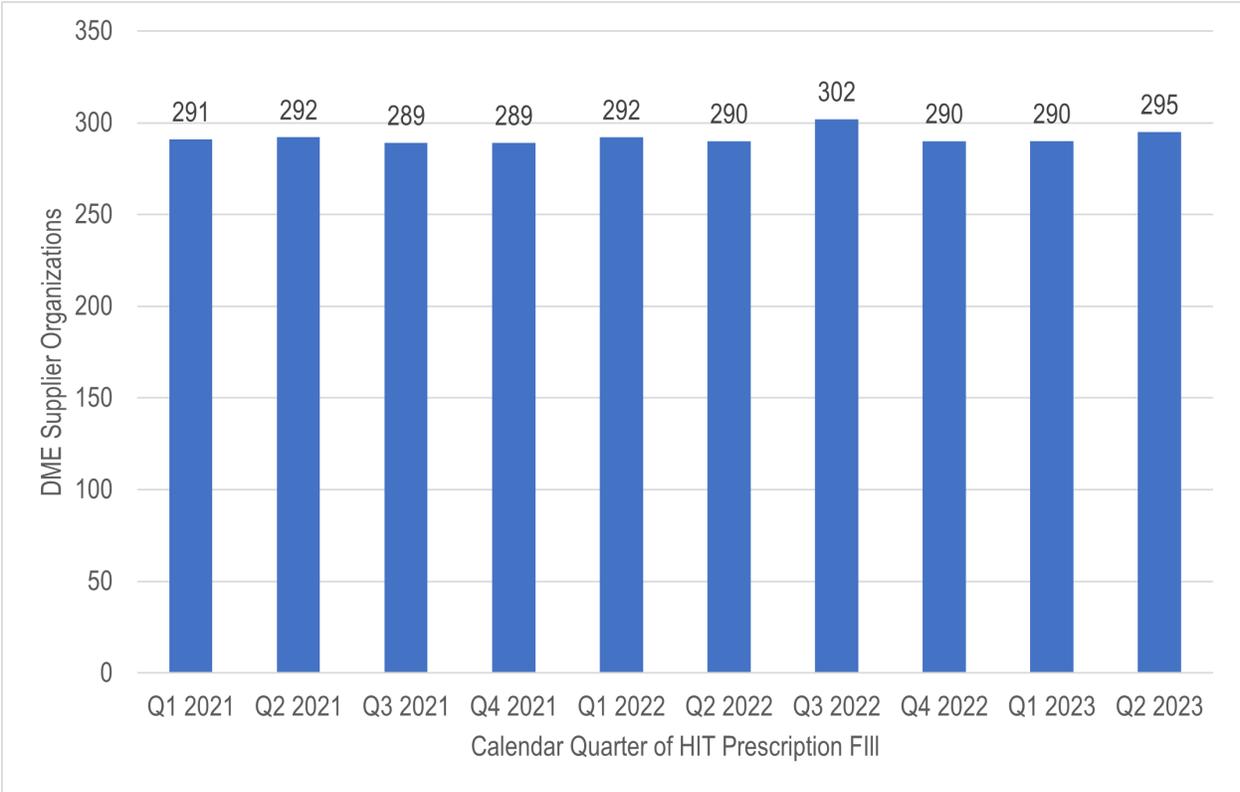
The number of DME/HIT supplier organizations providing HIT service visits **increased** from 42 in Q1 2021 to 70 in Q1 2022 then **eventually decreased** to 60 in Q2 2023.



EXHIBIT 9 METHODOLOGY:

After implementation of the permanent HIT benefit, only accredited HIT suppliers, which could include DME suppliers, can provide HIT service visits. Any supplier (based on its National Provider Identifier (NPI)) that provides at least one or more HIT service visits is considered a HIT supplier. After identification, NPIs are consolidated using the NPI's organization name field in the January 2024 National Plan & Provider Enumeration System (NPPES). NPIs with the same or similar organization names are grouped together as a single organization. We combined 263 NPIs into 89 different HIT supplier organizations over the 30-month reporting period.

Exhibit 10. Number of DME supplier organizations providing HIT prescription fills (Q1 2021 – Q2 2023)



Source: Analyses of Medicare FFS Part B DME claims (Accessed from CCW VRDC on January 25, 2024)



KEY TAKEAWAYS:

The number of DME supplier organizations providing HIT drugs has been relatively steady since Q1 2021 with a one quarter temporary jump to 302 suppliers in Q3 2022.



EXHIBIT 10 METHODOLOGY:

Only DME suppliers can provide HIT prescription fills. Any supplier (based on its National Provider Identifier (NPI)) that provides at least one or more HIT prescription fills is considered a DME supplier. After identification, NPIs are consolidated using the NPI’s organization name field in the January 2024 National Plan & Provider Enumeration System (NPPES). NPIs with the same or similar organization names are grouped together as a single organization. We combined 730 NPIs into 388 different DME supplier organizations over the 30-month reporting period.

Appendix A: HIT HCPCS Codes

Table A1: Transitional Home Infusion Drugs Covered by Medicare Part B, specified by the Bipartisan Budget Act of 2018

HCPCS Code	Therapeutic Class	Drug Name (Listed in Corresponding Order with HCPCS Code)
Category 1: Anti-Infectives, Chelation, Pain Management, and Cardiovascular Drugs		
J0133; J0285; J0287; J0288; J0289; J0895; J1455; J1457; J1570	Anti-Infective, Chelation, and Hypercalcemia	Acyclovir; Amphotericin B; Amphotericin B, Lipid; Amphotericin B, Cholesteryl Sulfate; Amphotericin B, Liposome; Deferoxamine Mesylate; Foscarnet Sodium; Gallium Nitrate; Ganciclovir Sodium
J1170; J2175; J2270; J2274*; J2278*; J3010	Pain Management	Hydromorphone; Meperidine HCl; Morphine Sulfate; Morphine Sulfate, Preservative Free*; Ziconotide*; Fentanyl Citrate
J1250; J1265; J1325; J2260; J3285	Cardiovascular	Dobutamine HCl; Dopamine HCl; Epoprostenol; Milrinone Lactate; Treprostinil
Category 2: Subcutaneous Immune Globulin		
J1555 JB; J1559 JB; J1561 JB; J1562 JB; J1569 JB; J1575 JB	Immune Globulin	CUVITRU; Hizentra; GAMUNEX-C/GAMMAKED; Vivaglobin; GAMMAGARD LIQUID; HYQVIA
Category 3: Chemotherapy Drugs		
J9000; J9039; J9040; J9065; J9100; J9190; J9200*; J9360; J9370	Chemotherapy	Doxorubicin; Blinatumomab; Bleomycin Sulfate; Cladribine; Cytarabine; Fluorouracil; Floxuridine*; Vinblastine Sulfate; Vincristine Sulfate

* HCPCS codes and corresponding drug names with asterisks were eligible drugs during the Temporary Transitional Payment period but were removed from the permanent HIT benefit (beginning on January 1, 2021). The Category 2 drugs Cutaquig (J1551 JB) and XEMBIFY (J1558 JB) were not eligible drugs during the Temporary Transitional Payment period and became eligible with the implementation of the permanent HIT benefit.

Table A2: HIT Service Visit Codes

HCPCS Code	Description
G0068	Professional services for the administration of anti-infective, pain management, chelation, pulmonary hypertension, inotropic, or other intravenous infusion drug or biological (excluding chemotherapy or other highly complex drug or biological) for each infusion drug administration calendar day in the individual's home, each 15 minutes
G0069	Professional services for the administration of subcutaneous immunotherapy or other subcutaneous infusion drug or biological for each infusion drug administration calendar day in the individual's home, each 15 minutes
G0070	Professional services for the administration of intravenous chemotherapy or other intravenous highly complex drug or biological infusion for each infusion drug administration calendar day in the individual's home, each 15 minutes
G0088*	Professional services, initial visit, for the administration of anti-infective, pain management, chelation, pulmonary hypertension, inotropic, or other intravenous infusion drug or biological (excluding chemotherapy or other highly complex drug or biological) for each infusion drug administration calendar day in the individual's home, each 15 minutes
G0089*	Professional services, initial visit, for the administration of subcutaneous immunotherapy or other subcutaneous infusion drug or biological for each infusion drug administration calendar day in the individual's home, each 15 minutes
G0090*	Professional services, initial visit, for the administration of intravenous chemotherapy or other intravenous highly complex drug or biological infusion for each infusion drug administration calendar day in the individual's home, each 15 minutes

* The HCPCS codes G0088, G0089, and G0090 signify an initial HIT service visit only and were created as part of the implementation of the permanent HIT benefit.