# ENTERPRISE EQUITY x PATIENT EXPERIENCE (PHASE III)

**Objective:** To identify disparities in self-reported levels of patient satisfaction at the **clinic level**.

**Design, Setting, and Participants:** Patient information was gathered using demographic information abstracted from the electronic health record and linked with patient experience survey data provided by Press Ganey. The Press Ganey survey uses a Likert-type scale of 5 responses: very poor, poor, fair, good, and very good. The percentage of responses answered “very good” is called the Top Box score.

**Main Outcomes and Measures:**  The primary outcome of interest was the Top Box score for each survey question. Rather than separating by question, a combined roll-up score was calculated. Data collected was dependent and hierarchical and repeated responses for the same patient were recorded, so a mixed effects model was used. Odds ratios were calculated to compare the relative association of patient demographic factors with the Top Box score.

The factors are:

Race/Ethnicity: 3 levels (White, Hispanic, Asian/Black/Mixed Race or Other (ABMO))

Age: 2 levels (>65, <65)

Gender: 2 levels (female, male)

**Phase III Results (completed APR 23):** Self-reported patient satisfaction survey data received between October 1, 2022, and September 30, 2023, was analyzed. The service line was limited to Outpatient Oncology. A total of 37 clinics were examined. While the majority (24 out of 37) of the clinics had lower top box scores for ABO patients when compared to their White counterparts, these results were only significant in 4 of those 24 clinics. There are clinics where the scores of White patients were lower than those of the Hispanic and ABO groups, but these differences were not statistically significant.

# Clinic Survey Response Demographics

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| **Clinic** | **Racial Ethnic Breakdown n (%)** | | | |
| **White** | **ABMO** | **Hispanic** | **Total** |
| **ICE-T 3C Treatment Center (3 CT)** | 54 (76.06%) | 9 (12.68%) | 8 (11.27%) | 71 |
| **Ambulatory Internal Medicine Clinic (AIM)** | 125 (77.16%) | 21 (12.96%) | 16 (9.88%) | 162 |
| **Apheresis Unit (APHR)** | 37 (78.72%) | 4 (8.51%) | 6 (12.77%) | 47 |
| **Behavioral Medicine Clinic (BEHM)** | 253 (83.77%) | 24 (7.95%) | 25 (8.28%) | 302 |
| **Blood and Marrow Transplant Clinic (BMTC)** | 503 (81.26%) | 52 (8.4%) | 64 (10.34%) | 619 |
| **Comprehensive Breast Clinic (BRMK)** | 2528 (80.87%) | 260 (8.32%) | 338 (10.81%) | 3126 |
| **Blood Transfusion Unit (BTU)** | 145 (83.33%) | 12 (6.9%) | 17 (9.77%) | 174 |
| **McKinley Cardio-Oncology Clinic (COMK)** | 94 (77.05%) | 11 (9.02%) | 17 (13.93%) | 122 |
| **McKinley Clinical Research Unit (CRMK)** | 79 (89.77%) | 4 (4.55%) | 5 (5.68%) | 88 |
| **Clinical Research Unit (CRU)** | 201 (87.77%) | 14 (6.11%) | 14 (6.11%) | 229 |
| **Cutaneous Clinic (CUMK)** | 2932 (94.4%) | 39 (1.26%) | 135 (4.35%) | 3106 |
| **Moffitt at International Clinic (CWIP)** | 1764 (79.82%) | 189 (8.55%) | 257 (11.63%) | 2210 |
| **Endocrine Clinic (ECRI)** | 768 (82.23%) | 57 (6.1%) | 109 (11.67%) | 934 |
| **Genetics Clinic (GCMK)** | 287 (81.07%) | 26 (7.34%) | 41 (11.58%) | 354 |
| **GeneHome Clinic (GHMK)** | 51 (85%) | 4 (6.67%) | 5 (8.33%) | 60 |
| **Gastrointestinal Oncology Clinic (GI)** | 2056 (84.4%) | 164 (6.73%) | 216 (8.87%) | 2436 |
| **Genitourinary Clinic (GU)** | 2921 (89.03%) | 161 (4.91%) | 199 (6.07%) | 3281 |
| **Hematology Clinic (HEMM)** | 3021 (85.12%) | 226 (6.37%) | 302 (8.51%) | 3549 |
| **Head and Neck Clinic (H-N)** | 957 (87.4%) | 51 (4.66%) | 87 (7.95%) | 1095 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Clinic** | **Racial Ethnic Breakdown n (%)** | | | |
| **White** | **ABMO** | **Hispanic** | **Total** |
| **Moffitt at International Infusion Center (ICIP)** | 521 (85.69%) | 33 (5.43%) | 54 (8.88%) | 608 |
| **McKinley Infusion Center (IFMK)** | 929 (83.92%) | 80 (7.23%) | 98 (8.85%) | 1107 |
| **Infusion Center (INFU)** | 1641 (83.13%) | 164 (8.31%) | 169 (8.56%) | 1974 |
| **Interventional Pain Clinic (ITPN)** | 113 (80.71%) | 13 (9.29%) | 14 (10%) | 140 |
| **Magnolia Multi-Specialty Clinic (MMSC)** | 169 (86.67%) | 14 (7.18%) | 12 (6.15%) | 195 |
| **NeuroOncology Clinic (NEUR)** | 630 (82.35%) | 54 (7.06%) | 81 (10.59%) | 765 |
| **Plastic Surgery Center (PLMK)** | 487 (81.03%) | 39 (6.49%) | 75 (12.48%) | 601 |
| **Moffitt at International Radiation Therapy (ROIP)** | 139 (81.29%) | 12 (7.02%) | 20 (11.7%) | 171 |
| **Sarcoma Clinic (SARC)** | 859 (82.6%) | 78 (7.5%) | 103 (9.9%) | 1040 |
| **Senior Adult Clinic (SRAD)** | 630 (89.62%) | 37 (5.26%) | 36 (5.12%) | 703 |
| **Supportive Care Medicine Clinic (SUPP)** | 212 (82.49%) | 25 (9.73%) | 20 (7.78%) | 257 |
| **Survivorship Clinic (SURV)** | 533 (83.28%) | 59 (9.22%) | 48 (7.5%) | 640 |
| **Thoracic Clinic (THNE)** | 1478 (89.68%) | 86 (5.22%) | 84 (5.1%) | 1648 |
| **Moffitt Wesley Chapel Clinic (WCCL)** | 869 (81.37%) | 88 (8.24%) | 111 (10.39%) | 1068 |
| **Moffitt Wesley Chapel Infusion Center (WCIC)** | 379 (82.93%) | 33 (7.22%) | 45 (9.85%) | 457 |
| **Moffitt Wesley Chapel Radiation (WCRA)** | 164 (87.7%) | 9 (4.81%) | 14 (7.49%) | 187 |
| **Women's Oncology-GYN Clinic (WDC)** | 623 (78.36%) | 67 (8.43%) | 105 (13.21%) | 795 |
| **Radiation Therapy Clinic (XRT)** | 2474 (85.55%) | 204 (7.05%) | 214 (7.4%) | 2892 |

# Top Box Scores & Model Results

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| --- | --- | --- | --- | --- |
| **Clinic** | **Top Box Scores** | | | |
| **White** | **ABMO** | **Hispanic** | **Overall** |
| **ICE-T 3C Treatment Center (3 CT)** | 92.21 | 71.11 | 86.96 | **89.32** |
| **Ambulatory Internal Medicine Clinic (AIM)** | 86.96 | 90.03 | 91.83 | **87.92** |
| **Apheresis Unit (APHR)** | 92.82 | 64 | 97.3 | **90.77** |
| **Behavioral Medicine Clinic (BEHM)** | 87.31 | 79.86 | 96.41 | **87.5** |
| **Blood and Marrow Transplant Clinic (BMTC)** | 90.97 | 80.75 | 89.34 | **89.93** |
| **Comprehensive Breast Clinic (BRMK)** | 90.22 | 85.77 | 90.95 | **89.92** |
| **Blood Transfusion Unit (BTU)** | 86.26 | 86.21 | 90.57 | **86.73** |
| **McKinley Cardio-Oncology Clinic (COMK)** | 88.45 | 85.27 | 91.1 | **88.52** |
| **McKinley Clinical Research Unit (CRMK)** | 89.01 | 71.88 | 80 | **87.87** |
| **Clinical Research Unit (CRU)** | 91.02 | 90.8 | 85.09 | **90.59** |
| **Cutaneous Clinic (CUMK)** | 89.37 | 82.5 | 85.76 | **89.13** |
| **Moffitt at International Clinic (CWIP)** | 87.81 | 87.11 | 89.48 | **87.94** |
| **Endocrine Clinic (ECRI)** | 91.32 | 87.04 | 92.07 | **91.15** |
| **Genetics Clinic (GCMK)** | 94.65 | 82.85 | 93.21 | **93.56** |
| **GeneHome Clinic (GHMK)** | 91.53 | 100 | 85.19 | **91.57** |
| **Gastrointestinal Oncology Clinic (GI)** | 87.96 | 85.02 | 81.04 | **87.17** |
| **Genitourinary Clinic (GU)** | 87.58 | 85.03 | 90.82 | **87.64** |
| **Head and Neck Clinic (H-N)** | 88.48 | 83.4 | 90.96 | **88.46** |
| **Hematology Clinic (HEMM)** | 88.85 | 86.68 | 87.33 | **88.57** |

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| --- | --- | --- | --- | --- |
| **Clinic** | **Top Box Scores** | | | |
| **White** | **ABMO** | **Hispanic** | **Overall** |
| **Moffitt at International Infusion Center (ICIP)** | 89.23 | 91.9 | 83.14 | **88.9** |
| **McKinley Infusion Center (IFMK)** | 89.91 | 82.97 | 91.54 | **89.53** |
| **Infusion Center (INFU)** | 86.72 | 80.86 | 88.67 | **86.39** |
| **Interventional Pain Clinic (ITPN)** | 87.48 | 99.36 | 82.18 | **87.98** |
| **Magnolia Multi-Specialty Clinic (MMSC)** | 90.15 | 69.8 | 89.83 | **88.26** |
| **NeuroOncology Clinic (NEUR)** | 83.26 | 85.01 | 90.04 | **84.07** |
| **Plastic Surgery Center (PLMK)** | 86.49 | 85.86 | 81.95 | **85.93** |
| **Moffitt at International Radiation Therapy (ROIP)** | 84.79 | 78.57 | 97.18 | **86.08** |
| **Sarcoma Clinic (SARC)** | 89.66 | 87.83 | 86.99 | **89.27** |
| **Senior Adult Clinic (SRAD)** | 88.29 | 73.22 | 86.02 | **87.37** |
| **Supportive Care Medicine Clinic (SUPP)** | 83.74 | 76.82 | 84.46 | **83.13** |
| **Survivorship Clinic (SURV)** | 92.69 | 88.78 | 85.9 | **91.78** |
| **Thoracic Clinic (THNE)** | 87.07 | 83.1 | 84.04 | **86.73** |
| **Moffitt Wesley Chapel Clinic (WCCL)** | 90.85 | 89.82 | 92.15 | **90.87** |
| **Moffitt Wesley Chapel Infusion Center (WCIC)** | 89.02 | 91.2 | 89.45 | **89.23** |
| **Moffitt Wesley Chapel Radiation (WCRA)** | 91.92 | 96.9 | 91.71 | **92.21** |
| **Women's Oncology-GYN Clinic (WDC)** | 87.85 | 89.95 | 88.76 | **88.15** |
| **Radiation Therapy Clinic (XRT)** | 90.02 | 88.79 | 90.72 | **89.98** |

* White patients scored lowest in 4 clinics (AIM, NEUR, WCIC, WDC) and highest in 14 clinics.
* Hispanic patients scored lowest in 9 clinics. (CRU, GHMK, GI, ICIP, ITPN, PLMK, SARC, SURV, and WCRA) and highest in 17 clinics.
* ABO patients scored lowest in 24 clinics and highest in 6 clinics (GHMK, ICIP, ITPN, WCIC, WCRA, and WDC).

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| --- | --- | --- |
| **Clinic** | **Odds Estimate (95% Confidence Interval)** | |
| **ABMO** | **Hispanic** |
| **Apheresis Unit (APHR)** | **0.05 (0,0.99)** | **1.95 (0.08,48.71)** |
| **Blood and Marrow Transplant Clinic (BMTC)** | **0.15 (0.03,0.68)** | **1.02 (0.23,4.49)** |
| **Genetics Clinic (GCMK)** | **0.03 (0,0.69)** | **1.03 (0.11,9.94)** |
| **Senior Adult Clinic (SRAD)** | **0.09 (0.01,0.69)** | **0.87 (0.12,6.4)** |
| **Gastrointestinal Oncology Clinic (GI)** | **0.72 (0.28,1.9)** | **0.41 (0.17,0.98)** |
| **Genitourinary Clinic (GU)** | **0.81 (0.32,2.05)** | **2.64 (1.15,6.03)** |
| **Moffitt Wesley Chapel Radiation (WCRA)** | **56.06 (0.1,32835.33)** | **1.07 (1.07,1.08)** |

**Hispanic** patients had a ***statistically significant*** ***lower likelihood*** of giving top box scores than **White** patients in the ***Gastrointestinal Oncology Clinic (GI).***

**Hispanic** patients had a ***statistically significant*** ***higher likelihood*** of giving top box scores than **White** patients in the ***Genitourinary Clinic (GU)*** *and* ***Moffitt Wesley Chapel Radiation (WCRA).***

The ***lower likelihood*** of giving the top box for **Asian/Black/Mixed Race/Other** patients than **White** patients was ***statistically significant*** in four clinics:

* *Apheresis Unit (APHR)*
* *Blood and Marrow Transplant Clinic (BMTC)*
* *Genetics Clinic (GCMK)*
* *Senior Adult Clinic (SRAD)*

# Full Table Odds Ratio Estimates & Confidence Intervals

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|  | **Odds Estimates (95% Confidence Interval)** | | | |
| **Clinic** | **Age <65** | **ABMO** | **Hispanic** | **Male** |
| **ICE-T 3C Treatment Center (3 CT)** | 0.18 (0.01,3.51) | 0.05 (0,2.26) | 0.65 (0.01,38.95) | 1.67 (0.1,28.88) |
| **Ambulatory Internal Medicine Clinic (AIM)** | 0.9 (0.14,5.72) | 1.74 (0.12,24.9) | 3.68 (0.16,84.7) | 1.47 (0.25,8.59) |
| **Apheresis Unit (APHR)** | 0.17 (0.02,1.25) | ***0.05 (0,0.99)*** | 1.95 (0.08,48.71) | 0.12 (0.01,1.37) |
| **Behavioral Medicine Clinic (BEHM)** | 0.37 (0.08,1.81) | 0.19 (0.01,3.91) | ***605.3 (20.7,17702.93)*** | 0.49 (0.11,2.23) |
| **Blood and Marrow Transplant Clinic (BMTC)** | 1.32 (0.57,3.09) | ***0.15 (0.03,0.68)*** | 1.02 (0.23,4.49) | 0.66 (0.27,1.6) |
| **Comprehensive Breast Clinic (BRMK)** | 0.76 (0.49,1.18) | 0.49 (0.2,1.2) | 1.29 (0.6,2.75) | 3 (0.25,36.37) |
| **Blood Transfusion Unit (BTU)** | 0.65 (0.08,5.65) | 1.33 (0.03,53.1) | 1.2 (0.05,29.74) | 1.37 (0.21,9.12) |
| **McKinley Cardio-Oncology Clinic (COMK)** | 0.83 (0.08,8.45) | 0.36 (0.01,11.51) | 2.17 (0.12,39.85) | 1.06 (0.14,8.03) |
| **McKinley Clinical Research Unit (CRMK)** | 0.39 (0.02,6.86) | 1.69 (0,3662.78) | 0.78 (0,744.89) | 0.96 (0.03,28.31) |
| **Clinical Research Unit (CRU)** | 1.14 (0.31,4.14) | 0.63 (0.06,6.96) | 0.14 (0.01,1.39) | 0.95 (0.26,3.4) |
| **Cutaneous Clinic (CUMK)** | 1.1 (0.68,1.79) | 0.38 (0.05,2.95) | 0.61 (0.2,1.85) | 1.01 (0.64,1.58) |
| **Moffitt at International Clinic (CWIP)** | ***0.58 (0.34,0.99)*** | 1.16 (0.42,3.2) | 2.01 (0.85,4.78) | 1.06 (0.58,1.92) |
| **Endocrine Clinic (ECRI)** | 1.01 (0.4,2.55) | 0.67 (0.1,4.57) | 1.45 (0.33,6.26) | 1.31 (0.48,3.57) |
| **Genetics Clinic (GCMK)** | ***0.01 (0,0.13)*** | ***0.03 (0,0.69)*** | 1.03 (0.11,9.94) | 1.27 (0.22,7.22) |
| **GeneHome Clinic (GHMK)** | 0.46 (0.01,23.95) | *All responses Top Box* | 0.2 (0,510.1) | 1.41 (0.01,146.41) |
| **Gastrointestinal Oncology Clinic (GI)** | 0.84 (0.52,1.37) | 0.72 (0.28,1.9) | ***0.41 (0.17,0.98)*** | 0.95 (0.59,1.54) |
| **Genitourinary Clinic (GU)** | 1.07 (0.69,1.68) | 0.81 (0.32,2.05) | ***2.64 (1.15,6.03)*** | 1.02 (0.62,1.69) |
| **Head and Neck Clinic (H-N)** | 0.71 (0.34,1.48) | 0.29 (0.05,1.73) | 1.84 (0.49,6.95) | 1.18 (0.56,2.48) |
| **Hematology Clinic (HEMM)** | 1.12 (0.71,1.75) | 0.68 (0.29,1.59) | 1.16 (0.58,2.32) | 1.25 (0.84,1.87) |

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| --- | --- | --- | --- | --- |
|  | **Odds Estimates (95% Confidence Interval)** | | | |
| **Clinic** | **Age <65** | **ABMO** | **Hispanic** | **Male** |
| **Moffitt at International Infusion Center (ICIP)** | 0.47 (0.15,1.48) | 1.5 (0.13,17.73) | 0.77 (0.11,5.3) | 1.23 (0.41,3.68) |
| **McKinley Infusion Center (IFMK)** | 0.88 (0.39,1.98) | 0.35 (0.07,1.68) | 1.48 (0.38,5.72) | 1.66 (0.73,3.78) |
| **Infusion Center (INFU)** | 1.14 (0.62,2.09) | 0.35 (0.11,1.07) | 1.32 (0.47,3.66) | 1.44 (0.79,2.63) |
| **Interventional Pain Clinic (ITPN)** | 2.65 (0.27,25.59) | ***651.03 (4.84,87660.58)*** | 0.83 (0.02,33.01) | 4 (0.42,38.15) |
| **Magnolia Multi-Specialty Clinic (MMSC)** | 0.64 (0.08,5.01) | 0.07 (0,2.18) | 0.67 (0.02,23.82) | 1.82 (0.31,10.75) |
| **NeuroOncology Clinic (NEUR)** | 1.33 (0.54,3.24) | 0.77 (0.1,6.11) | 3.67 (0.78,17.32) | 1.42 (0.51,3.99) |
| **Plastic Surgery Center (PLMK)** | 0.51 (0.18,1.45) | 0.8 (0.09,6.75) | 0.58 (0.11,2.95) | 1.13 (0.17,7.67) |
| **Moffitt at International Radiation Therapy (ROIP)** | 0.5 (0.07,3.75) | 0.6 (0.01,30.25) | ***164.92 (2.38,11432.21)*** | 1.3 (0.18,9.48) |
| **Sarcoma Clinic (SARC)** | 1.57 (0.7,3.52) | 0.7 (0.16,3.12) | 0.53 (0.14,2.05) | 1.38 (0.63,3.01) |
| **Senior Adult Clinic (SRAD)** | 1.99 (0.12,33.71) | ***0.09 (0.01,0.69)*** | 0.87 (0.12,6.4) | 0.76 (0.31,1.89) |
| **Supportive Care Medicine Clinic (SUPP)** | 1 (0.2,4.86) | 0.43 (0.02,9.68) | 3.38 (0.14,79.13) | 0.57 (0.09,3.44) |
| **Survivorship Clinic (SURV)** | 1.07 (0.25,4.48) | 0.55 (0.08,3.95) | 0.36 (0.04,3.18) | 1.98 (0.31,12.5) |
| **Thoracic Clinic (THNE)** | ***2.04 (1.11,3.74)*** | 0.5 (0.13,1.88) | 0.39 (0.13,1.13) | 0.63 (0.35,1.13) |
| **Moffitt Wesley Chapel Clinic (WCCL)** | 0.87 (0.39,1.94) | 0.89 (0.21,3.74) | 1.43 (0.4,5.16) | 0.97 (0.44,2.15) |
| **Moffitt Wesley Chapel Infusion Center (WCIC)** | 0.51 (0.14,1.82) | 1.2 (0.13,11.05) | 1.26 (0.18,8.73) | 0.59 (0.18,1.93) |
| **Moffitt Wesley Chapel Radiation (WCRA)** | ***1.8 (1.79,1.8)*** | 56.06 (0.1,32835.33) | ***1.07 (1.07,1.08)*** | ***1.85 (1.84,1.85)*** |
| **Women's Oncology-GYN Clinic (WDC)** | 0.46 (0.18,1.15) | 1.79 (0.33,9.80) | 1.83 (0.44,1.67) | *All female patients* |
| **Radiation Therapy Clinic (XRT)** | 0.94 (0.59,1.52) | 0.92 (0.37,2.28) | 0.9 (0.38,2.18) | 1.52 (0.95,2.44) |