



DID THE TEMPORARY ASSISTANCE PAYMENTS SCHEME (TAPS) TO NURSING HOMES IN IRELAND REDUCE THE IMPACT OF COVID-19?

DATE: 9TH SEPTEMBER 2022

VENUE: ILPN CONFERENCE @LSE

DR BRENDAN WALSH ^{1, 2}

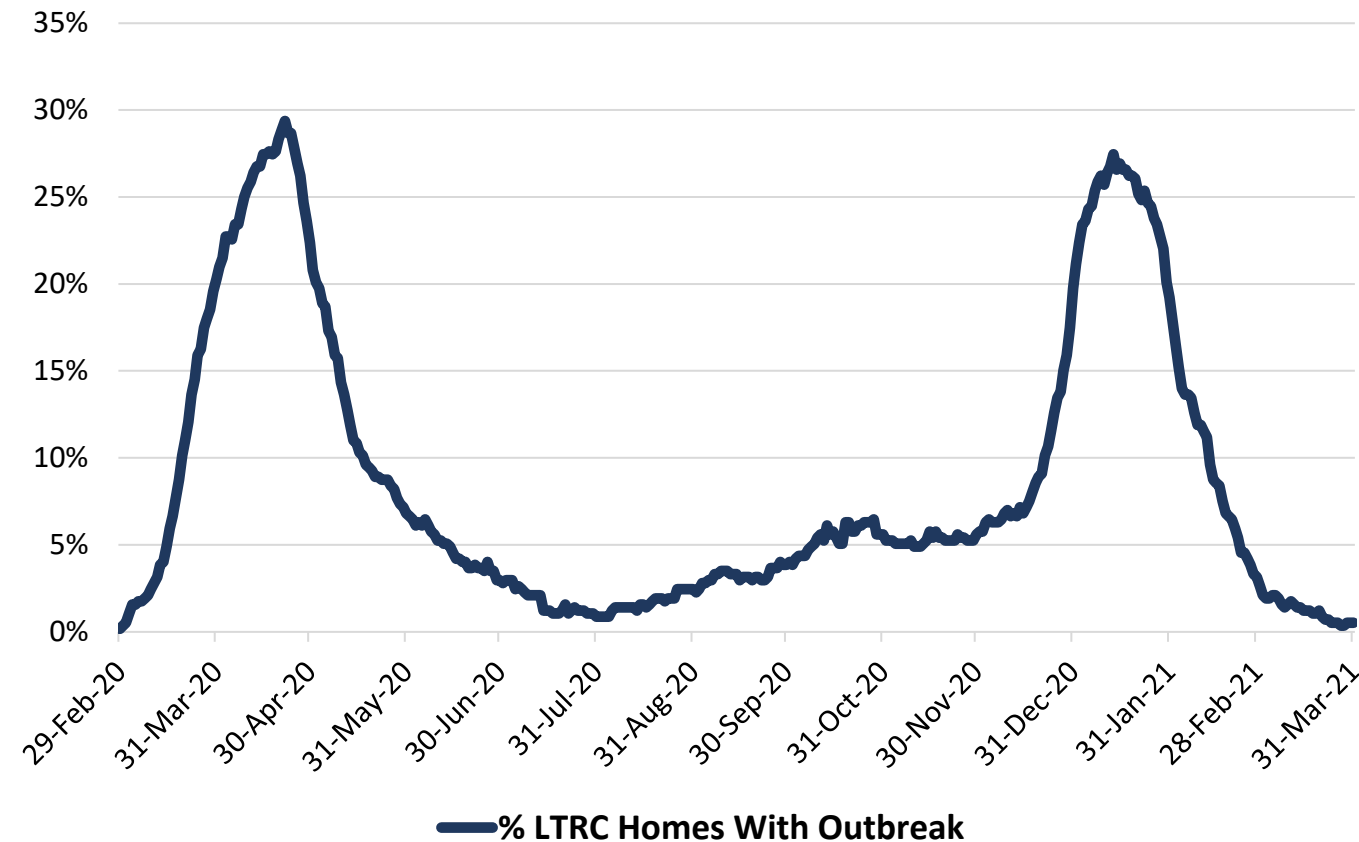
¹ ECONOMIC AND SOCIAL RESEARCH INSTITUTE (ESRI), DUBLIN

² TRINITY COLLEGE DUBLIN

BACKGROUND – LTRC

- 4% of 65+ pop use Long-Term Residential Care (LTRC).
- LTRC in Ireland is a mixture of public and private payments and provision.
- 70% LTRC funded by State (mainly via Nursing Home Support Scheme)
- 84% LTRC supplied by Private Providers
 - European private-equity firms have become largest providers of LTRC

BACKGROUND – COVID-19 IN LTRC



- 66% of COVID-19 deaths linked to LTRC homes
- **03/2020-03/2021:** 65% of LTRC homes had an outbreak
- 2,107 resident COVID-19 deaths

BACKGROUND – COVID-19 RESPONSE

- Early response to COVID-19 in Ireland focused on hospital system. Qs were raised on the ability of LTRC to ensure the safety of residents.
- Focused PPE and Testing.
- Accommodation for Staff.
- *'Covid-19 Nursing Homes Expert Panel'* established. 86 recommendations to protect LTRC residents.
- **Temporary Assistance Payment Scheme (TAPS)**

TEMPORARY ASSISTANCE PAYMENT SCHEME (TAPS)

- TAPS provided support to private (for profit and not-for-profit) LTRC homes who had additional costs due to COVID-19.
- Began in April 2020 and ceased in 2021 (subsequently extended to Sept 2022).
- LTRC homes applied for TAPS and outlined how funding would be spent:
 - e.g. PPE, Nursing overtime, Agency staff, ICT
- **2020-2021:** €132million funded via TAPS
 - Nursing Home Support Scheme (NHSS) = €1,422million in 2019
 - 434/450 eligible LTRC homes used TAPS



DATA AND METHODS



DATA

- **Outbreak data:** March 2020-March 2021
 - LTRC Home ID, Cases (HCW, Resident), Deaths, Hospitalisations, Start of Outbreak, End of Outbreak.
 - County level cases by date (local outbreaks/rates).
- **LTRC Home Characteristics:** February 2020 and June 2022
 - LTRC Home ID, Ownership, Maximum Occupancy (Size), Address.
- **TAPS data:** April 2020 – December 2021
 - LTRC Home ID, TAPS used by Month.

TEMPORARY ASSISTANCE PAYMENT SCHEME (TAPS) DATA

1. **Non-Pay:** Cleaning/Infection Control -
 - Infection prevention and Control, Cleaning Supplies, PPE, Laundry
2. **Non-Pay:** Other
 - Equipment, Maintenance, ICT
3. **Pay:** Nursing
 - Additional pay for nursing
4. **Pay:** Healthcare Assistants (HCAs)
 - Additional pay for HCAs
5. **Pay:** Other (e.g. Porters)
6. **Pay:** Agency (Nursing, HCA, & other)

SAMPLE & ANALYSES

- **450/572** LTRC homes (designated centres for older people) who continuously provided care between February 2020 and March 2021.
 - Only 450 private LTRC homes included
- **LTRC-Month-Level Data:** Analyses limited to March 2020 – March 2021. 5,850 observations.

ANALYSES

1. Probability of Outbreak:

$$- Pr(Outbreak)_t = \gamma Z_t + \beta TAPS_{c,t-2} + \omega Covid\ Rates_t + t + R + \varepsilon_t$$

2. Severity of Outbreak:

$$- Deaths\ per\ case_t = \gamma Z_t + \beta TAPS_{c,t-2} + \omega Covid\ Rates_t + t + R + \varepsilon_t$$

3. Probability of TAPS use:

$$- Pr(TAPS)_{c,t(-1,+1,+2)} = \gamma Z_t + \beta Outbreak_t + \omega Covid\ Rates_t + t + R + \varepsilon_t$$

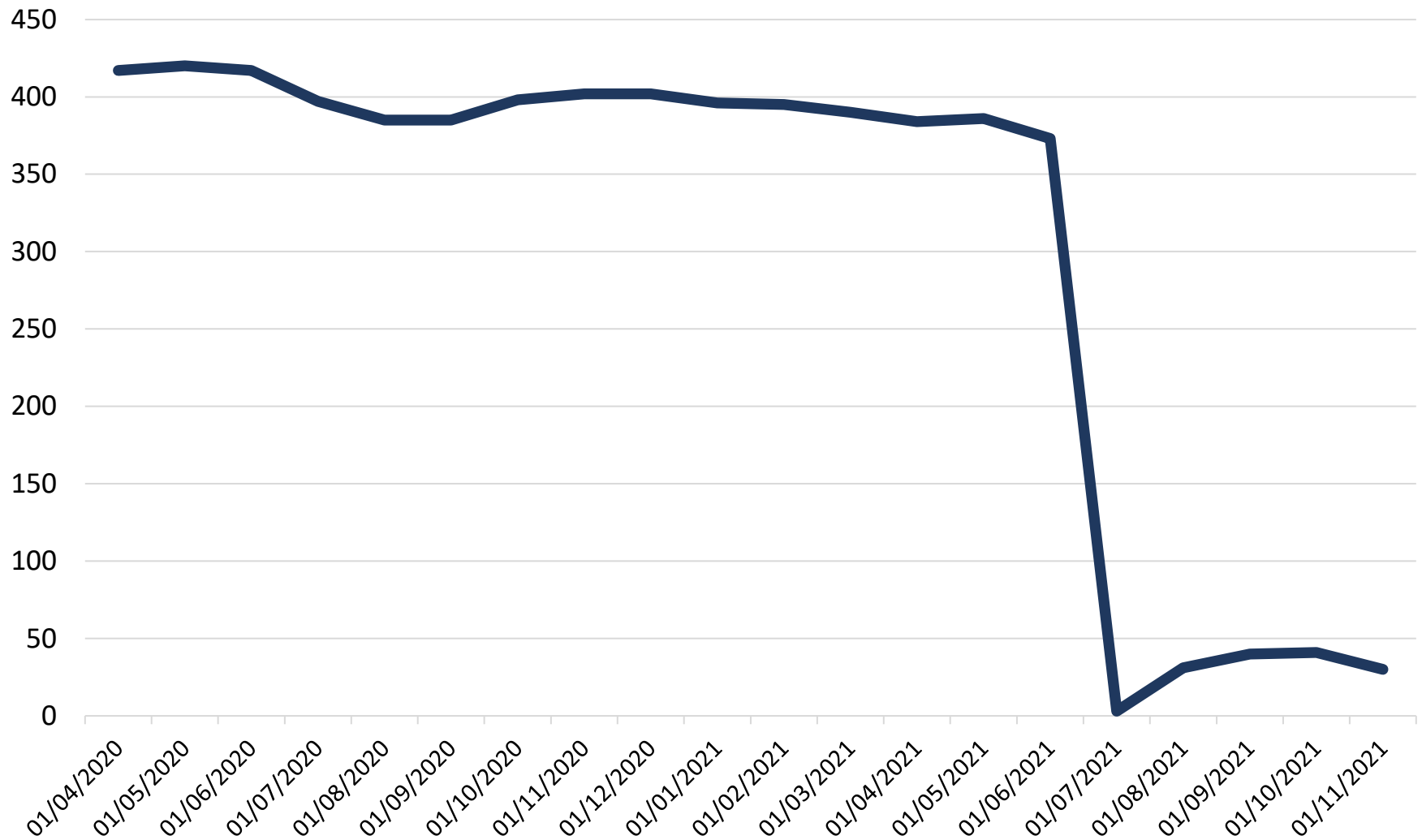
- Z_t is a vector of LTRC level characteristics including size, ownership.
- t is a time trend; R are regional fixed effects.



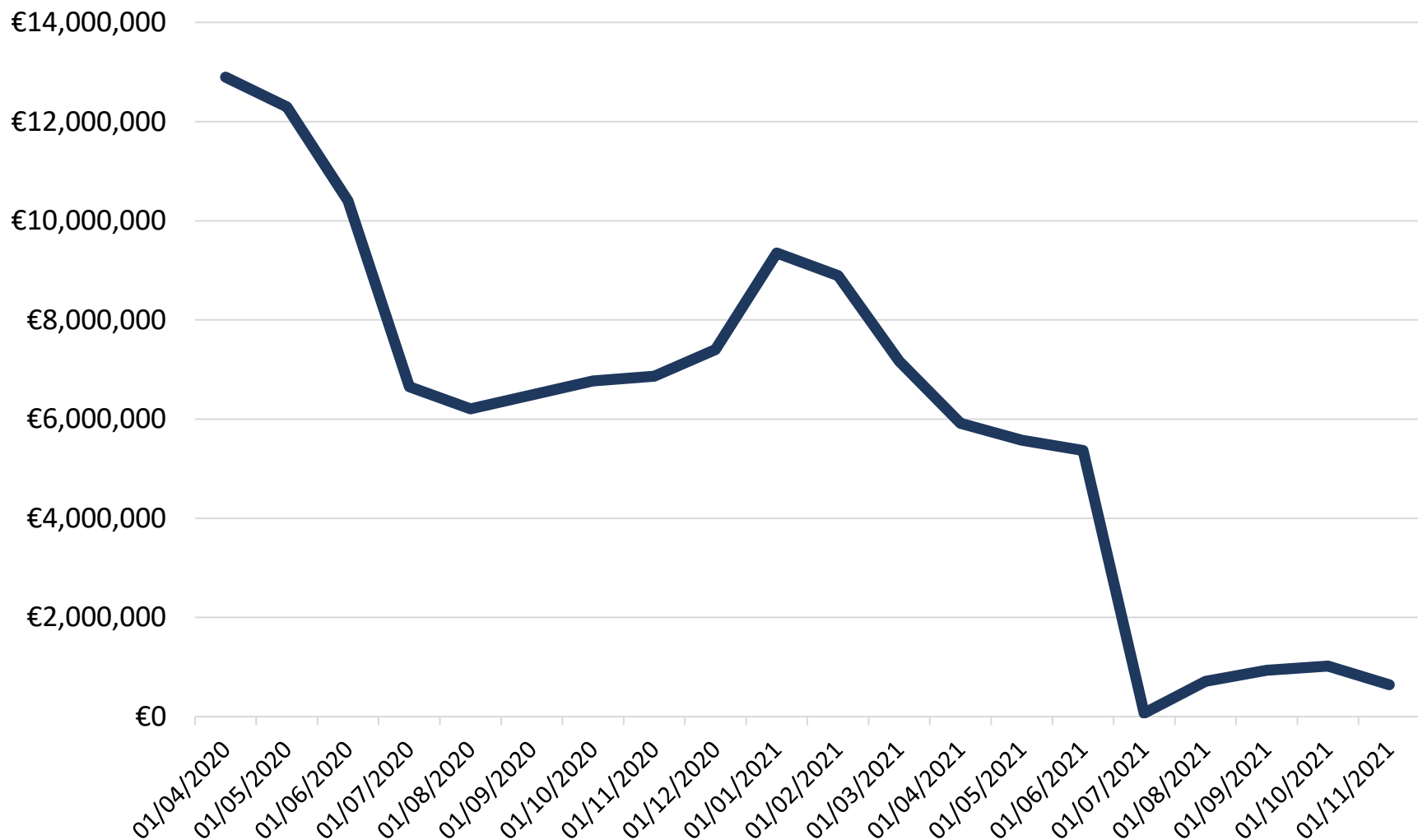
RESULTS – DESCRIPTIVES



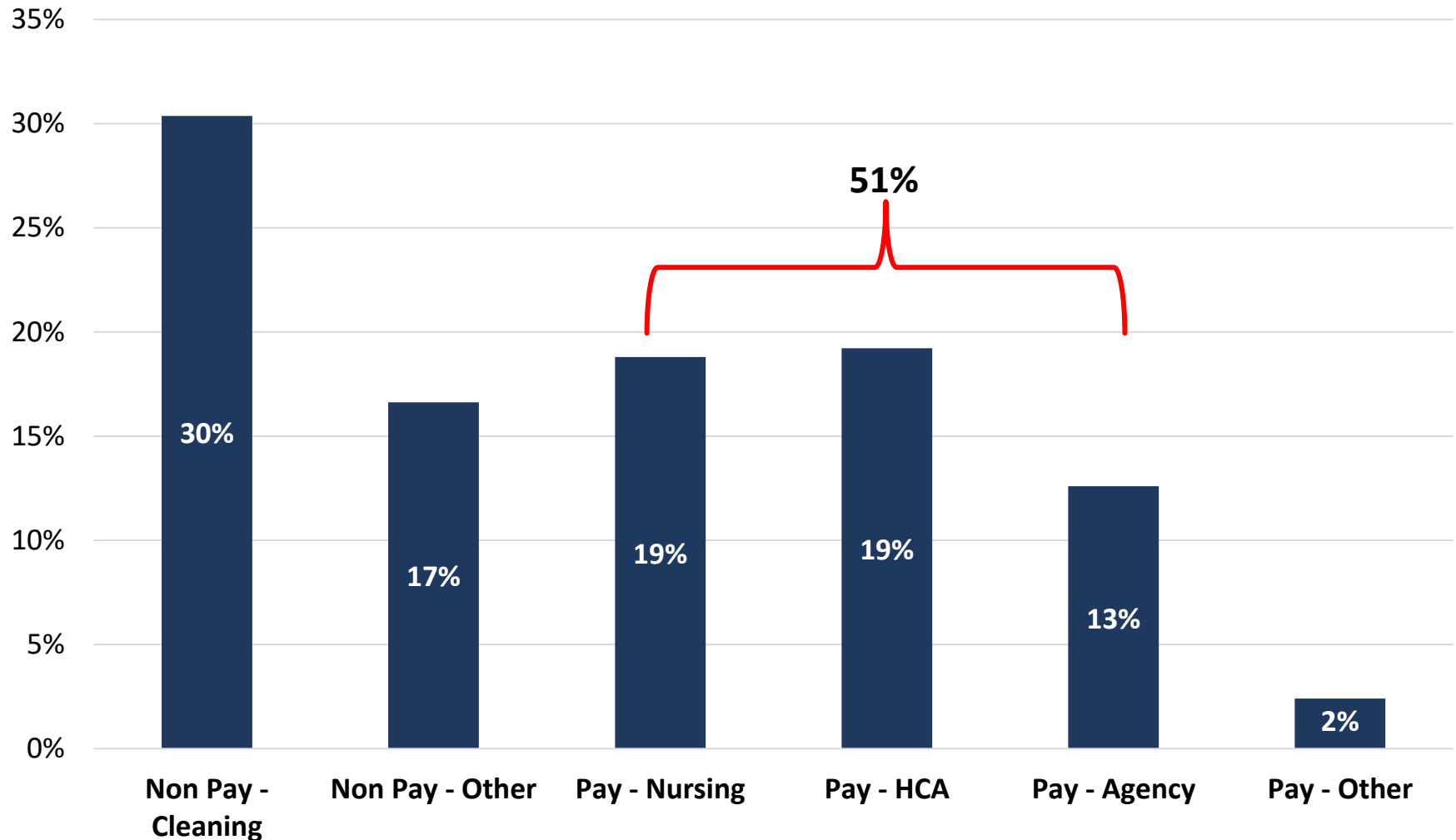
MONTHLY TAPS COSTS



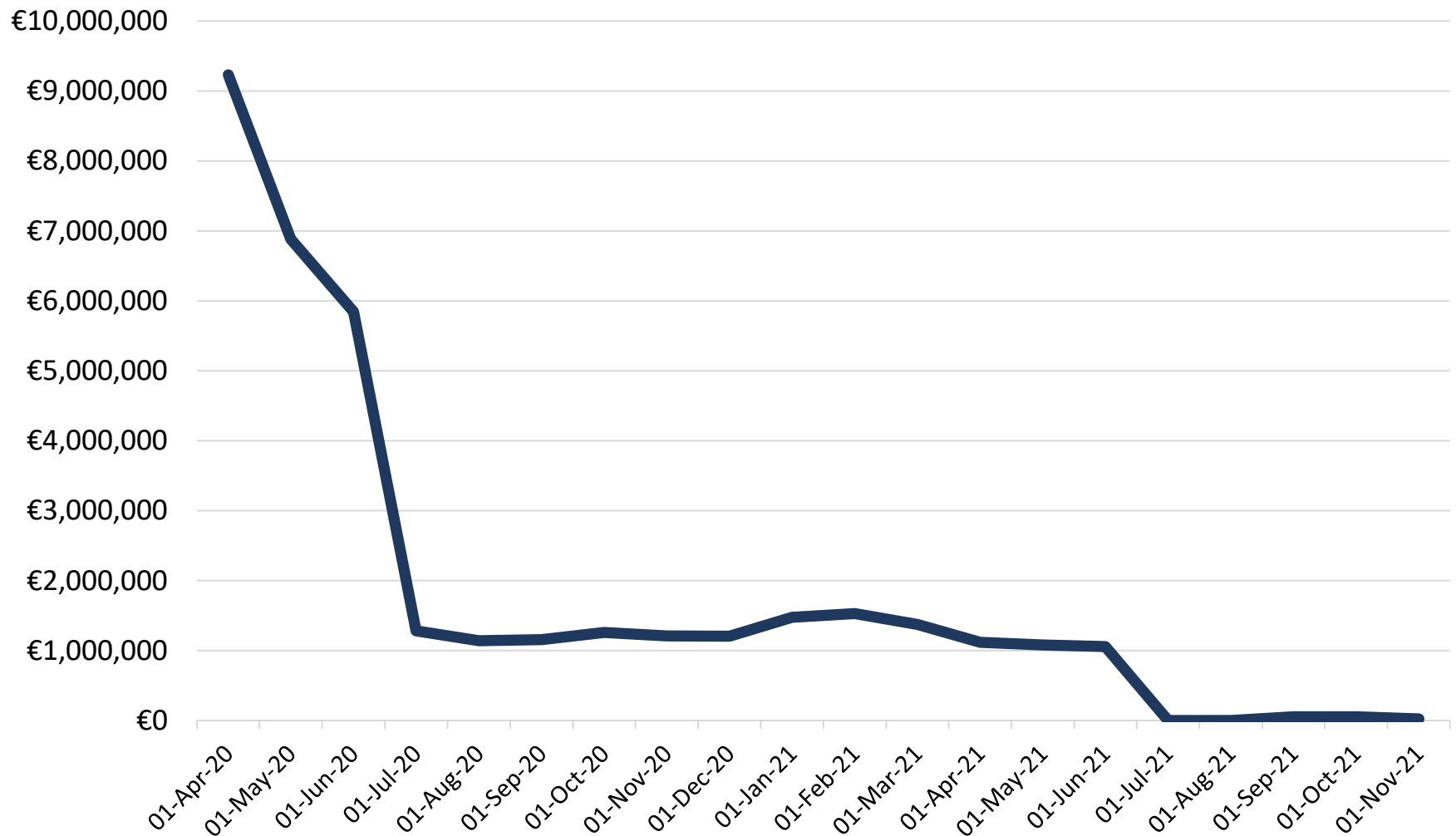
MONTHLY TAPS COSTS



TEMPORARY ASSISTANCE PAYMENT SCHEME (TAPS) DATA



NON-PAY: CLEANING/INFECTION CONTROL

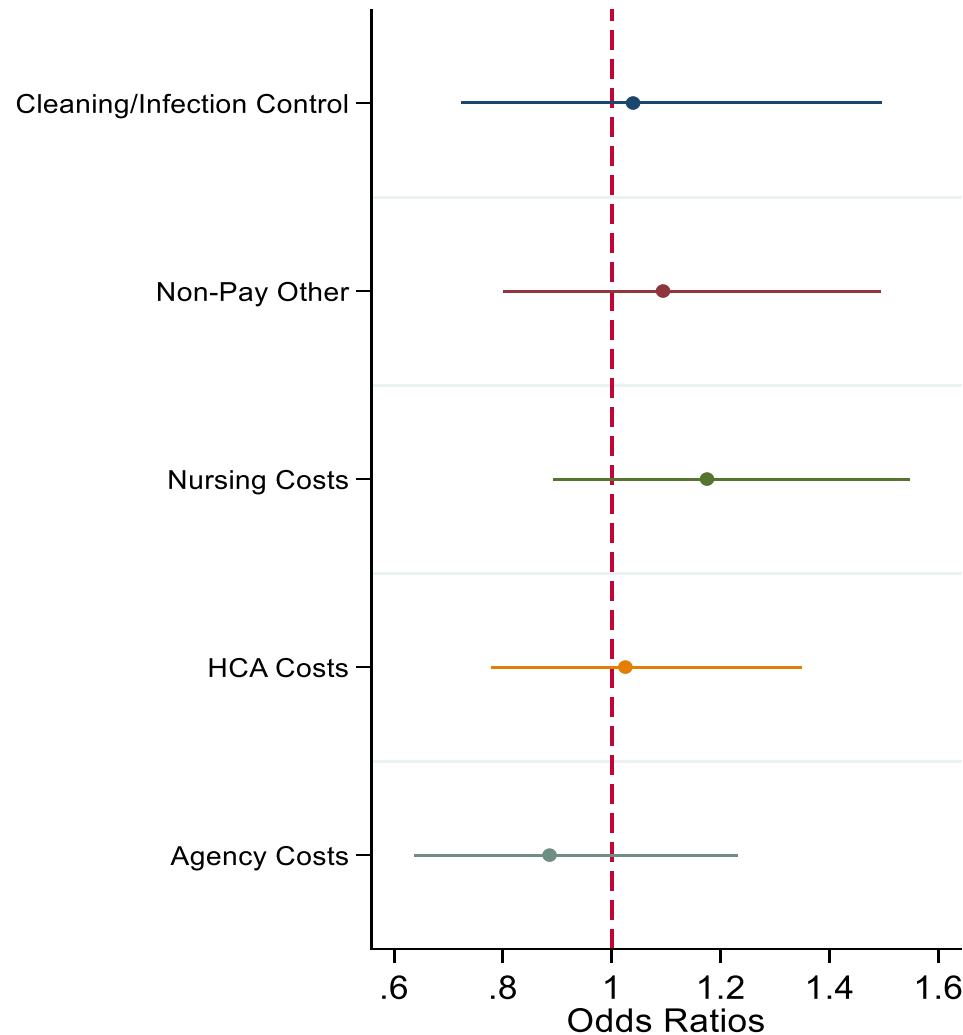




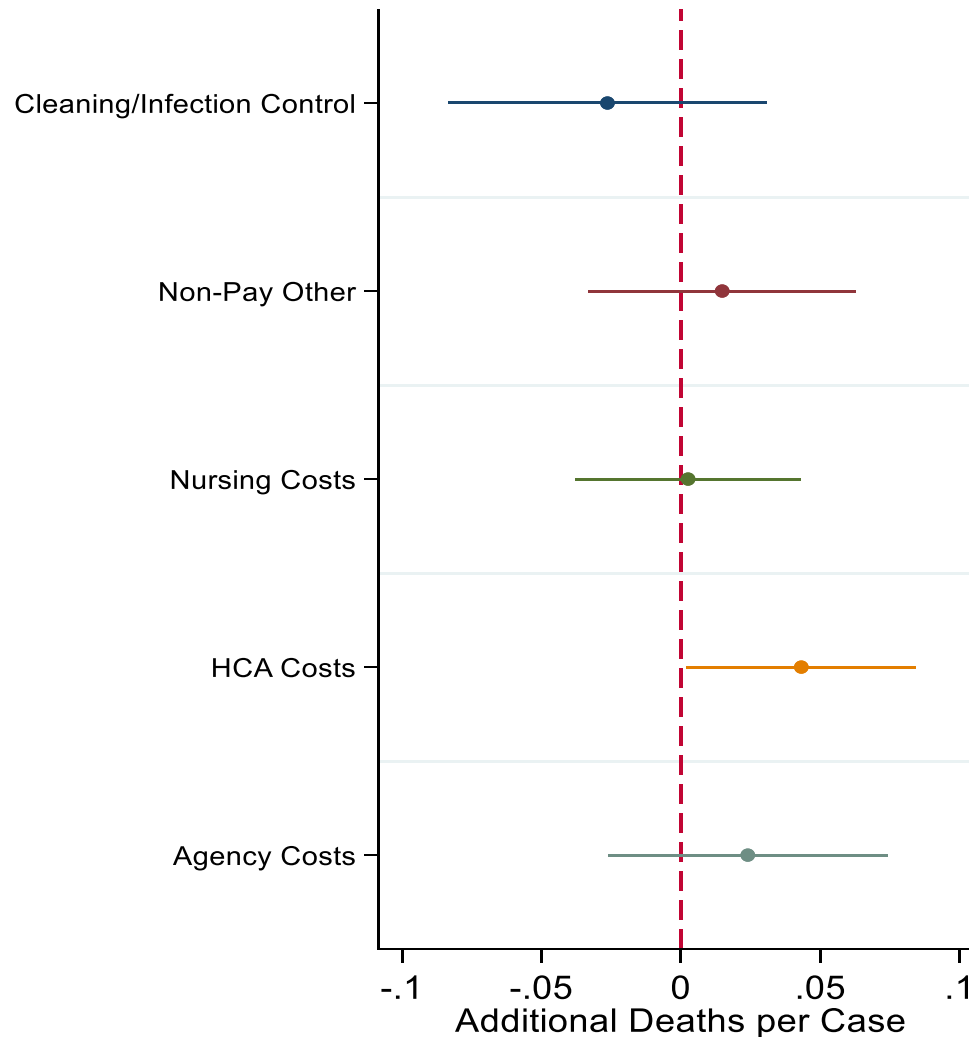
RESULTS – IMPACT OF TAPS ON COVID-19 OUTCOMES



IMPACT OF TAPS(t-2) ON PROBABILITY OF OUTBREAK



IMPACT OF TAPS($t-2$) ON SEVERITY OF OUTBREAK



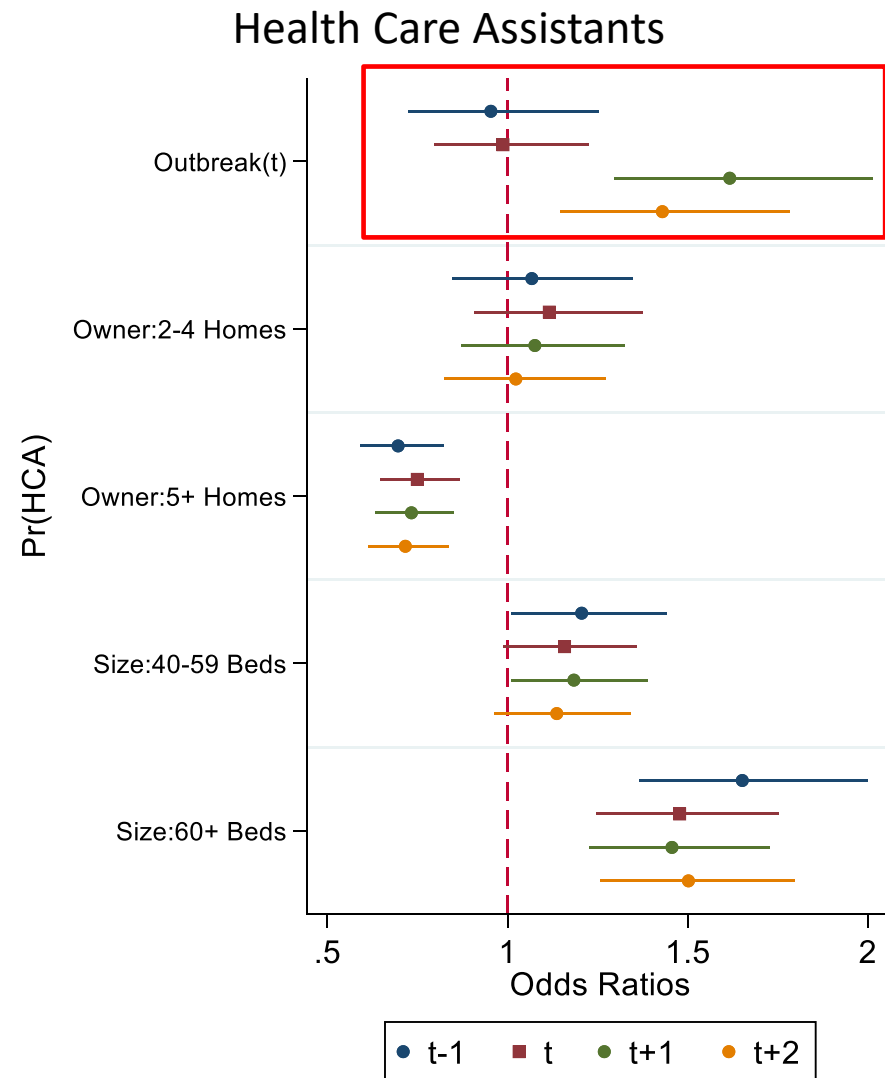
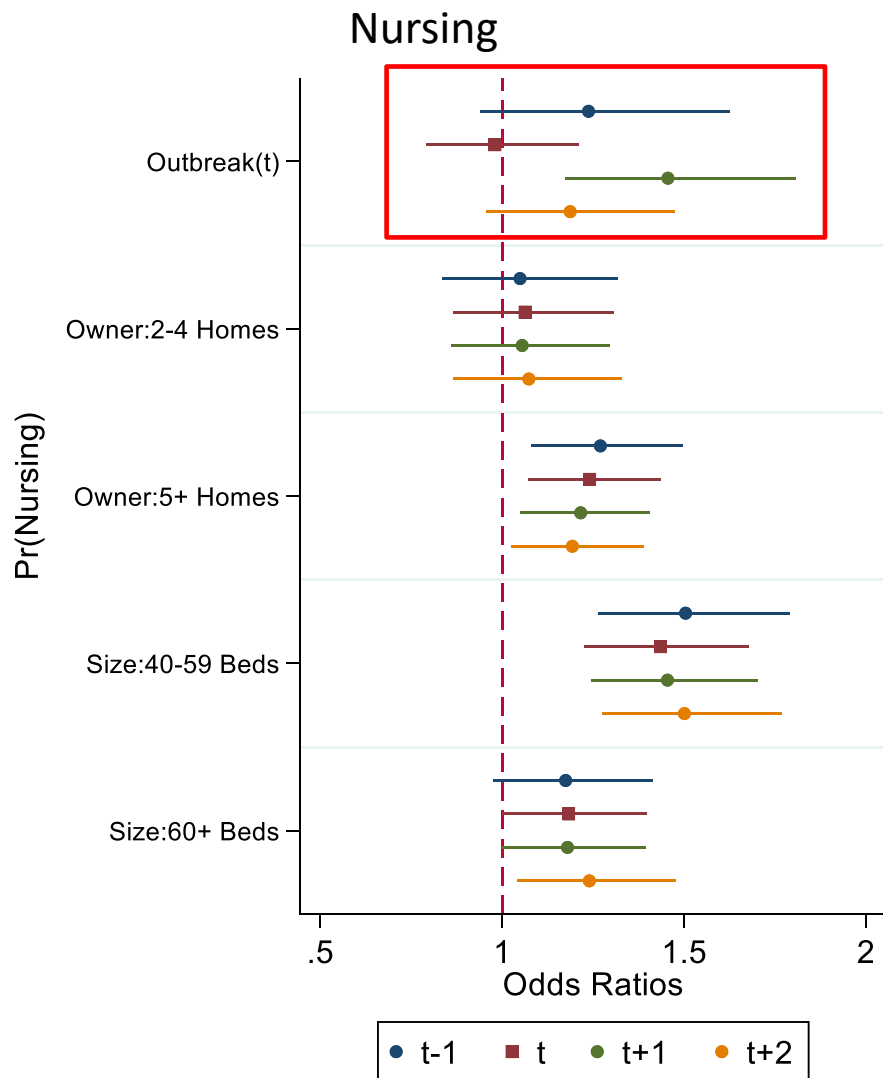
Linear Regression: TAPS included in $t-2$. Controls for ownership, size, time trend, region, local Covid-19 rates.



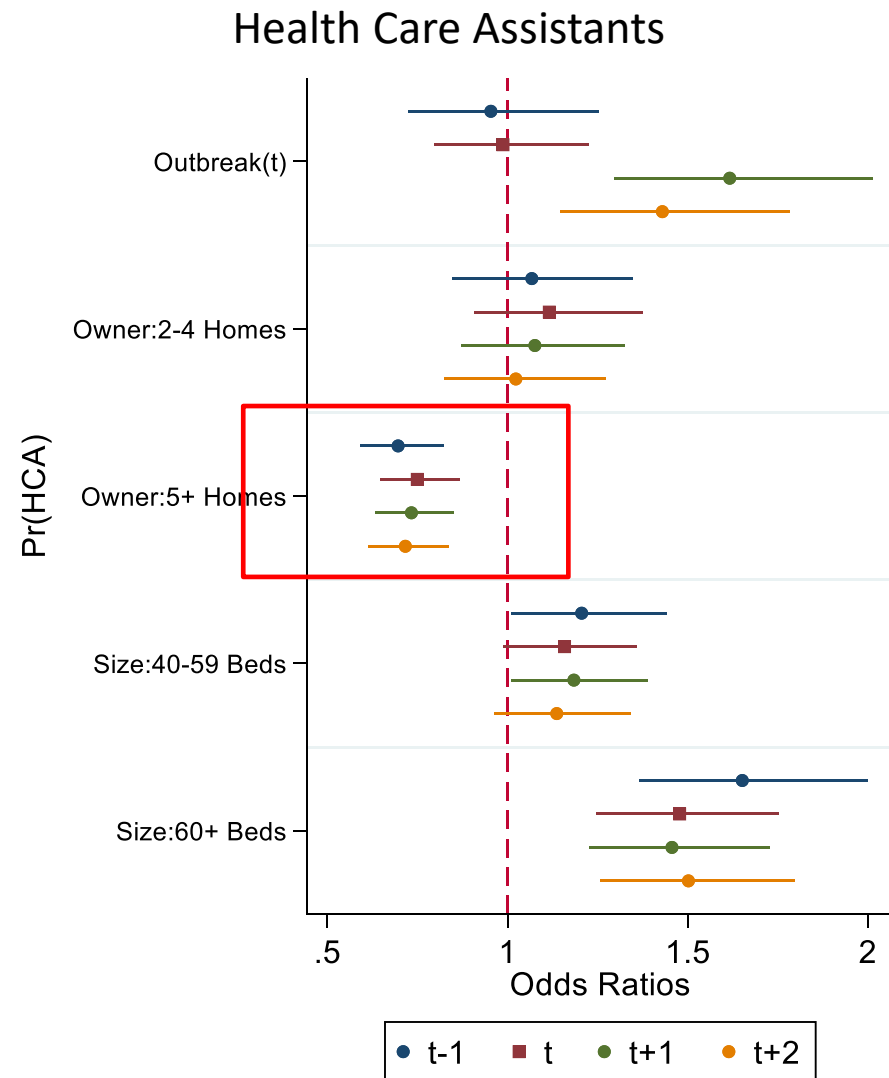
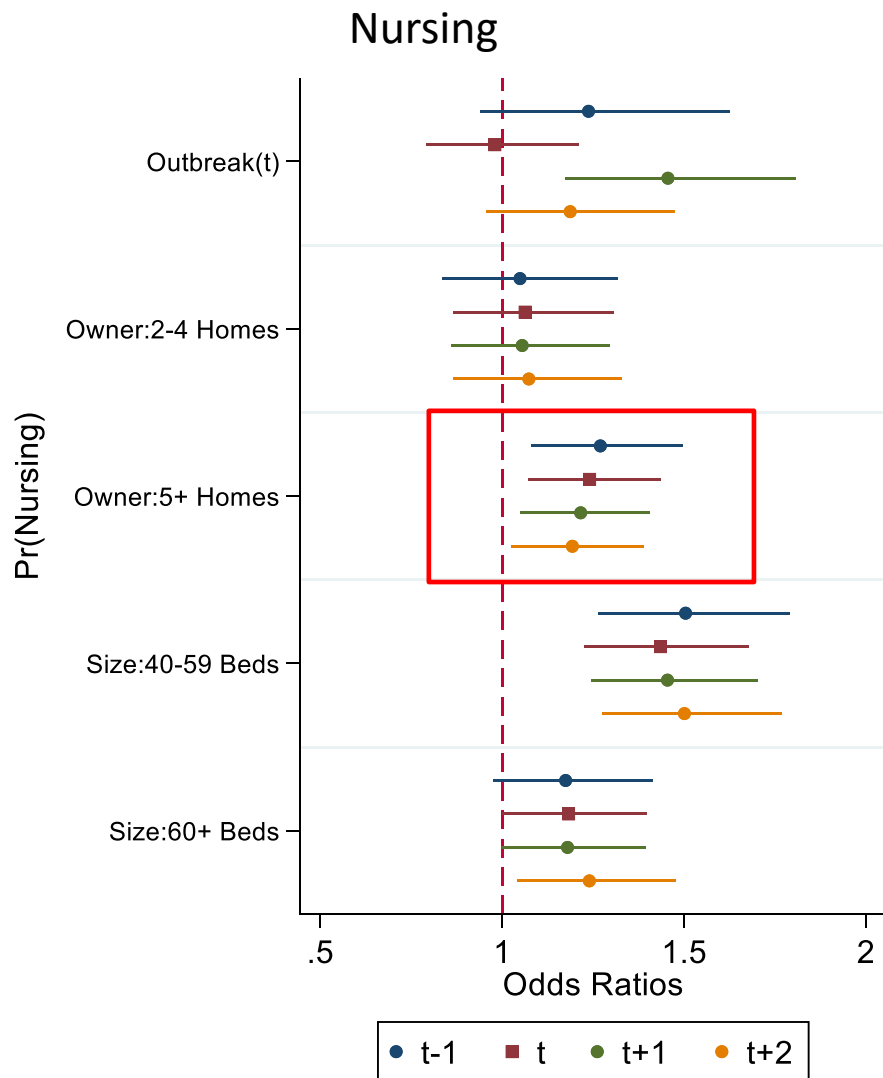
RESULTS –TAPS USE AND LTRC HOME CHARACTERISTICS



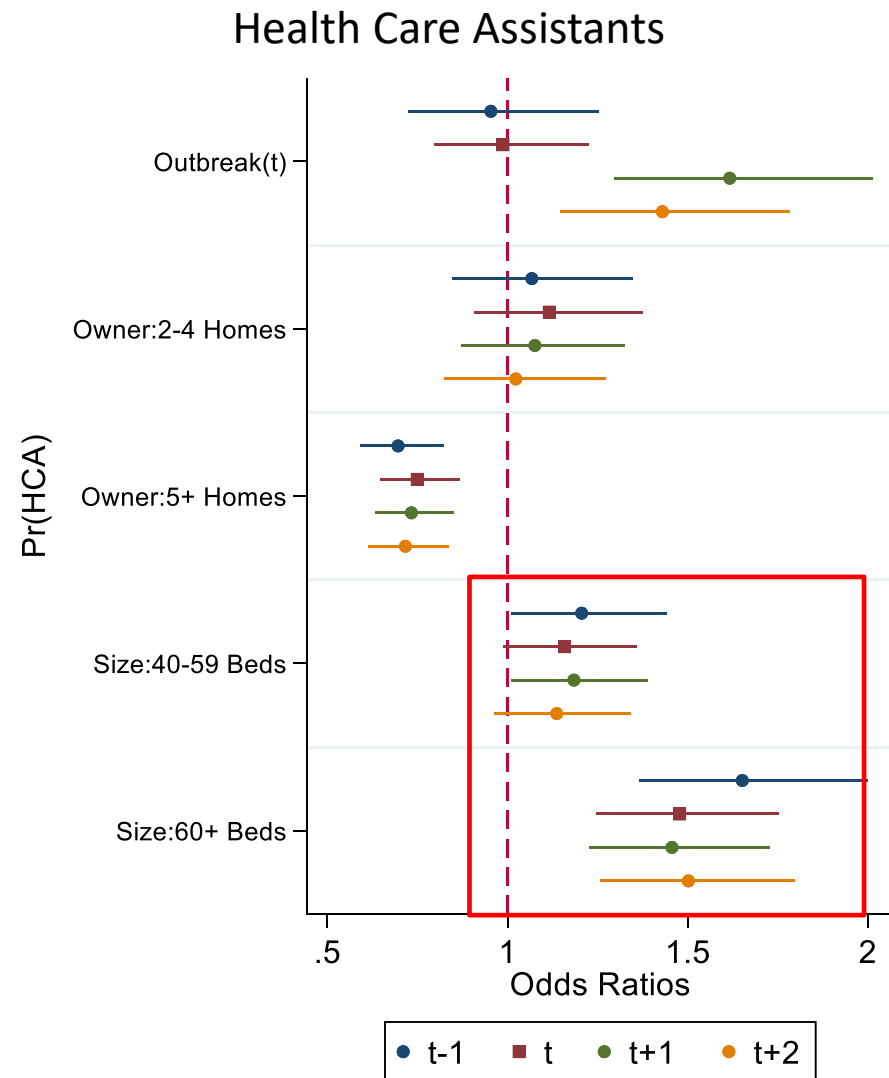
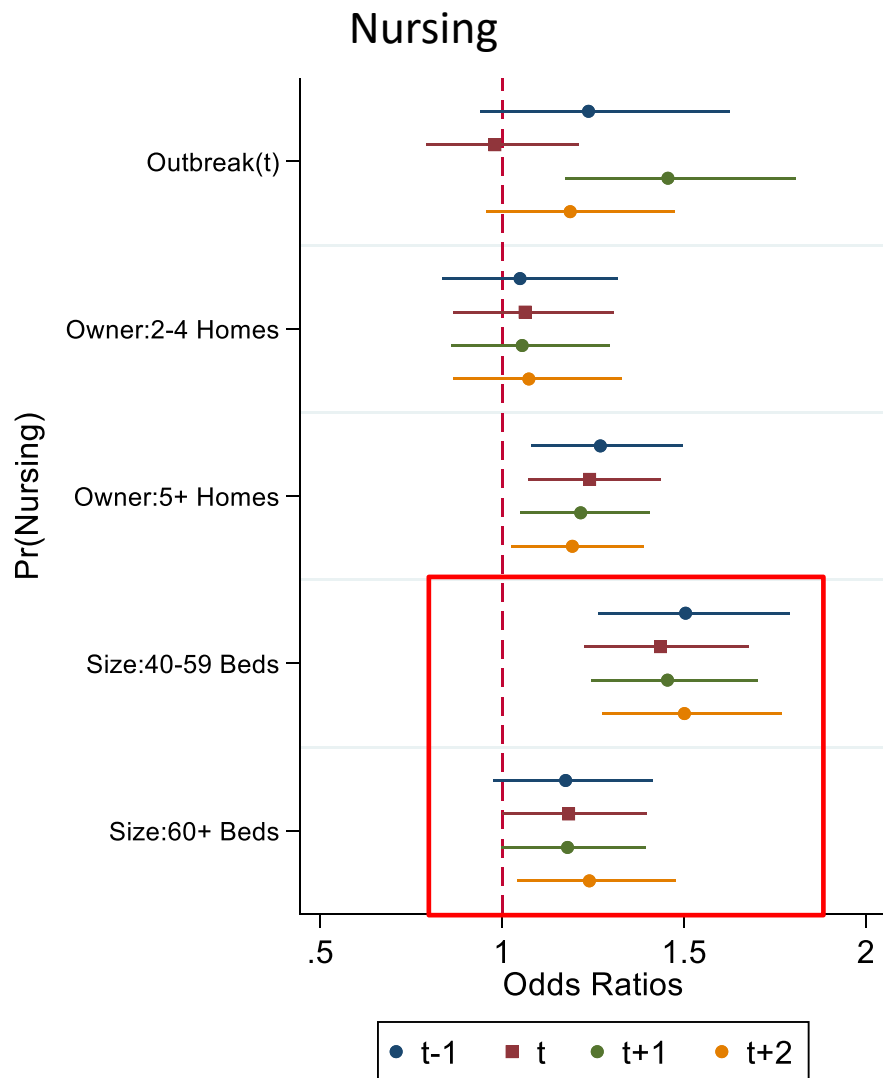
TAPS: NURSING COSTS / HCA COSTS



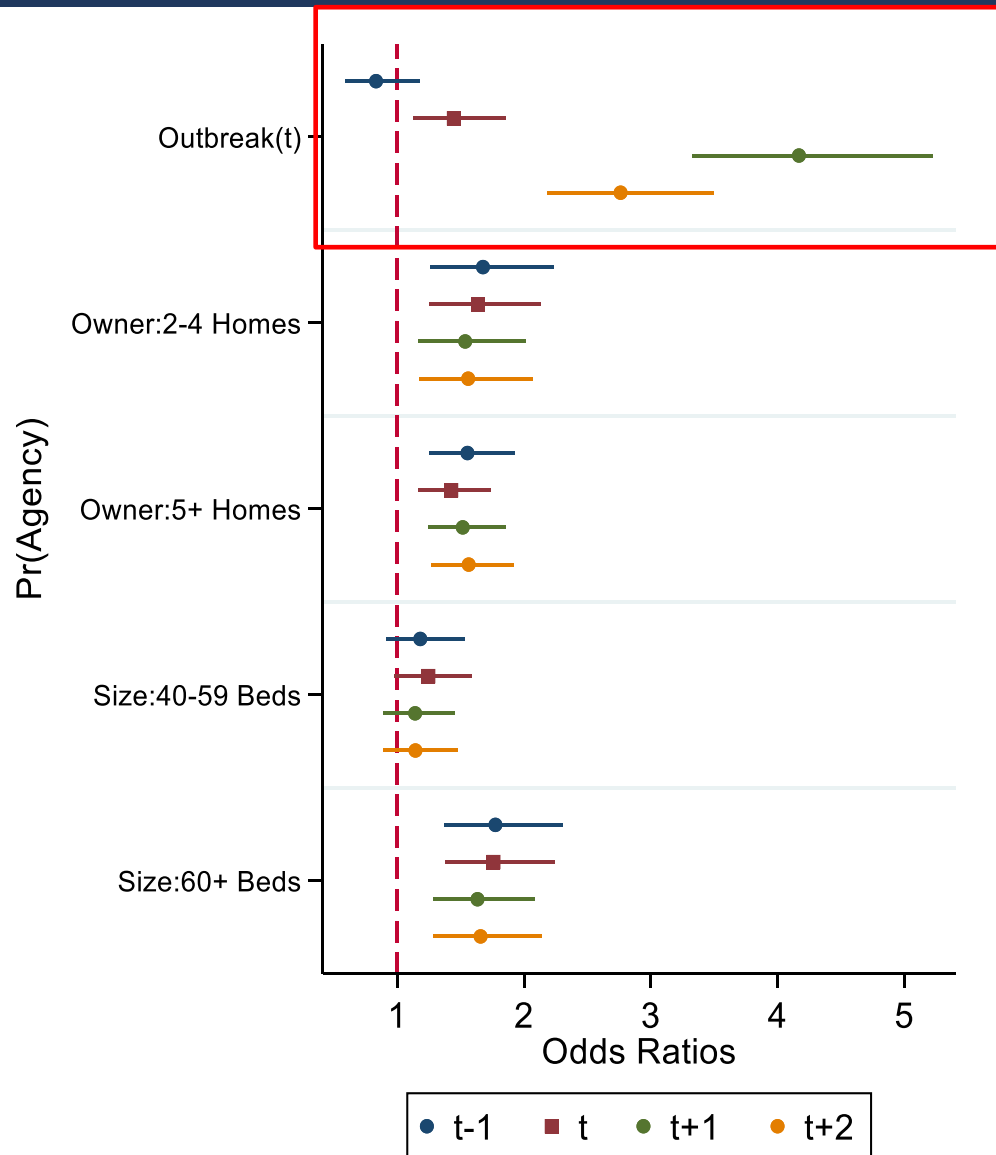
TAPS: NURSING COSTS / HCA COSTS



TAPS: NURSING COSTS / HCA COSTS



TAPS: AGENCY STAFFING COSTS





DISCUSSION



MAIN POINTS

- TAPS was heavily used by LTRC homes – especially LTRC homes owned by larger providers.
- No evidence to show TAPS reduced Covid-19 outbreaks or severity.
- TAPS used reactively – especially for staffing.
- Lack of information on other important outcomes.



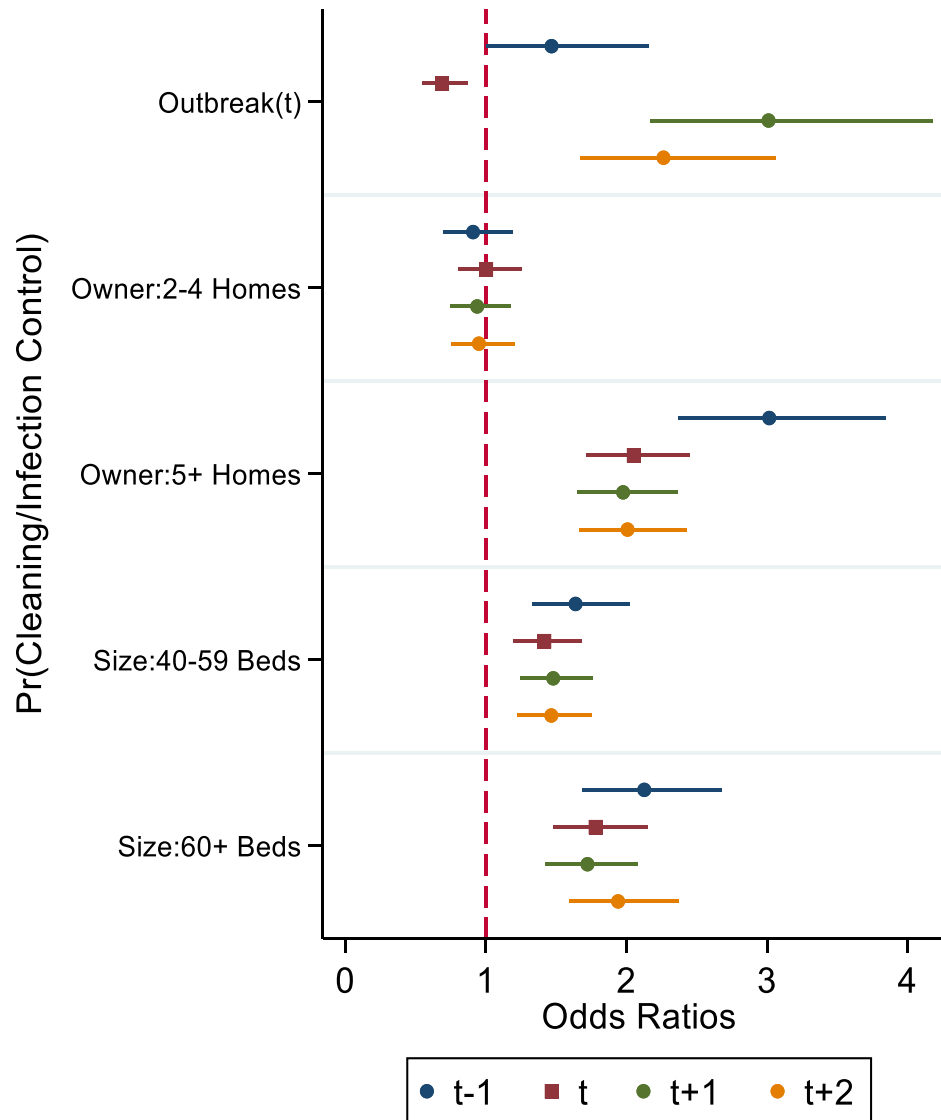
EXTRA SLIDES



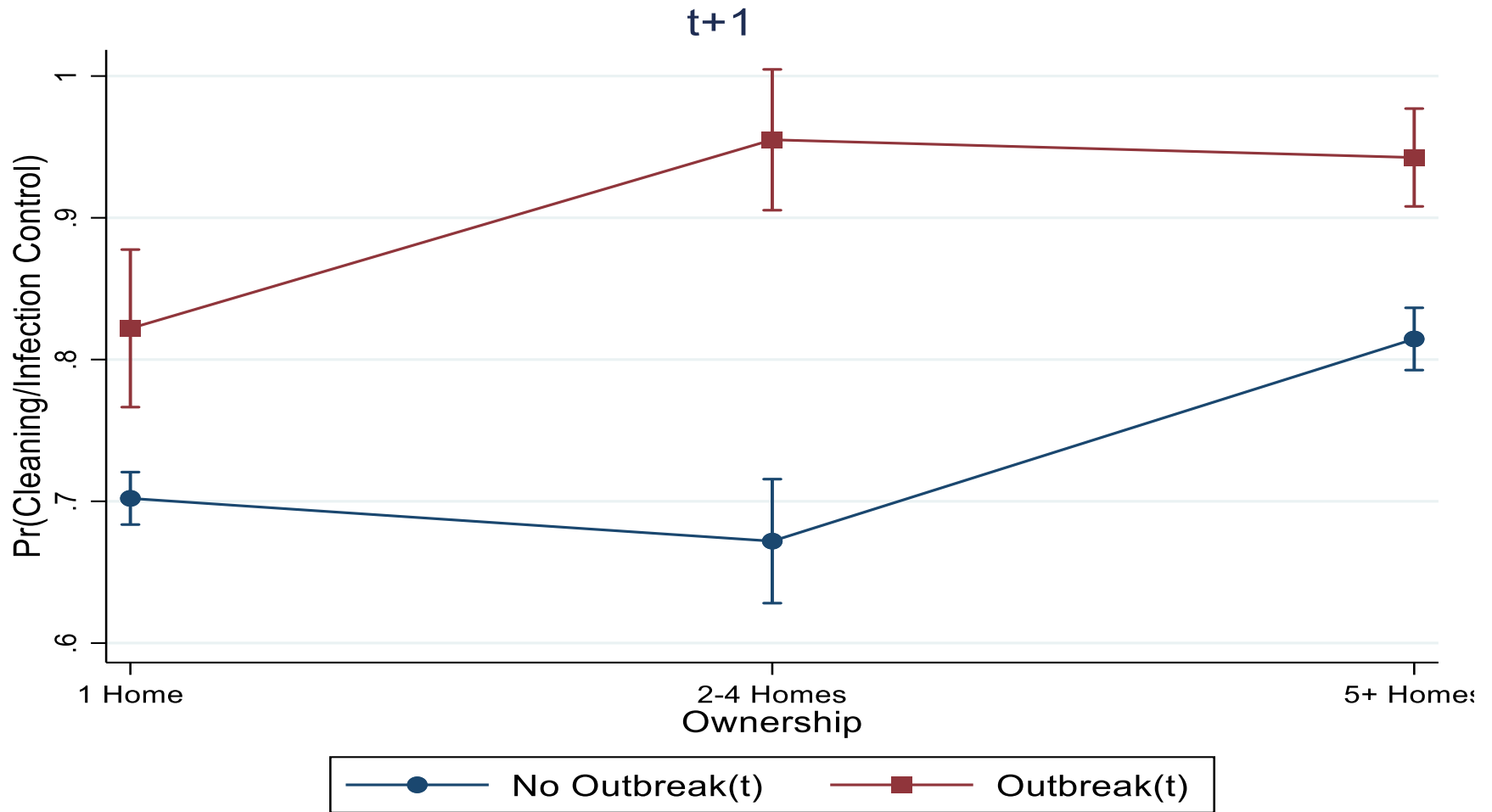
TEMPORARY ASSISTANCE PAYMENT SCHEME (TAPS) DATA

| B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R |
|--|-----------|---|------------|---|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | | TOTAL | | Apr 2020 | May 2020 | Jun 2020 | Jul 2020 | Aug 2020 | Sep 2020 | Oct 2020 | Nov 2020 | Dec 2020 | Jan 2021 | Feb 2021 | Mar 2021 |
| | | | € | | € | € | € | € | € | € | € | € | € | € | € | € |
| Standard Assistance Form B Payments | | | | | | | | | | | | | | | | |
| DIR NURSING | Pay | | 21,042,948 | | 1,378,310 | 1,307,768 | 1,337,814 | 1,242,051 | 1,274,720 | 1,385,325 | 1,518,675 | 1,458,861 | 1,518,949 | 1,674,638 | 1,551,185 | 1,430,912 |
| DIR PATIENT CARE | Pay | | 21,527,465 | | 1,268,042 | 1,593,225 | 1,498,632 | 1,437,909 | 1,447,834 | 1,420,315 | 1,535,164 | 1,350,819 | 1,452,615 | 1,559,556 | 1,378,867 | 1,524,222 |
| DIR OTHER | Pay | | 6,326,129 | | 547,110 | 552,805 | 512,545 | 512,195 | 422,197 | 440,454 | 445,130 | 402,929 | 375,875 | 425,287 | 481,051 | 288,880 |
| Subtotal DIRECT STAFF COST | Pay | | 48,896,542 | | 3,193,462 | 3,453,798 | 3,348,991 | 3,192,156 | 3,144,751 | 3,246,094 | 3,498,968 | 3,212,609 | 3,347,439 | 3,659,481 | 3,411,103 | 3,244,014 |
| INDIR ADMINISTRATION | Pay | | 3,365,556 | | 254,978 | 310,326 | 268,378 | 166,486 | 171,331 | 181,607 | 179,658 | 191,735 | 214,827 | 245,801 | 250,471 | 256,168 |
| INDIR CLEANING | Pay | | 5,228,768 | | 314,919 | 316,108 | 402,747 | 283,243 | 297,159 | 287,460 | 344,016 | 335,875 | 337,192 | 393,139 | 404,193 | 398,158 |
| INDIR SUPPORT STAFF | Pay | | 5,118,815 | | 386,344 | 428,288 | 317,590 | 416,575 | 363,299 | 364,625 | 354,296 | 308,444 | 328,677 | 341,254 | 355,321 | 316,479 |
| Subtotal INDIRECT STAFF COST | Pay | | 13,713,140 | | 956,240 | 1,054,722 | 988,715 | 866,304 | 831,789 | 833,692 | 877,969 | 836,054 | 880,696 | 980,194 | 1,009,985 | 970,805 |
| DIR AGENCY NURSING | Pay | | 3,163,206 | | 313,931 | 477,239 | 149,940 | 205,486 | 150,663 | 201,243 | 104,284 | 261,603 | 154,627 | 310,080 | 369,415 | 111,645 |
| DIR AGENCY PATNT CARE | Pay | | 3,869,310 | | 352,107 | 267,444 | 84,553 | 121,592 | 170,706 | 177,152 | 246,724 | 169,404 | 272,004 | 356,473 | 331,434 | 412,684 |
| DIR AGENCY OTHER | Pay | | 289,925 | | 39,752 | 15,674 | 5,395 | 8,707 | 12,547 | 14,565 | 19,089 | 32,139 | 17,921 | 39,641 | 43,296 | 14,505 |
| INDIR AGENCY ADMIN | Pay | | 241,688 | | 32,557 | 1,450 | 19,453 | 13,520 | 10,005 | 12,704 | 15,858 | 13,148 | 22,367 | 13,858 | 27,061 | 9,822 |
| INDIR AGENCY CLEANING | Pay | | 236,317 | | 22,617 | 25,044 | 16,477 | 6,497 | 12,437 | 7,531 | 23,470 | 17,020 | 6,399 | 22,791 | 24,133 | 35,286 |
| INDIR AGENCY SUPPORT | Pay | | 821,240 | | 149,363 | 89,798 | 113,242 | 63,010 | 52,912 | 46,933 | 22,750 | 46,015 | 61,595 | 36,307 | 25,961 | 25,421 |
| Subtotal AGENCY STAFF COST | Pay | | 8,621,685 | | 910,326 | 876,649 | 389,059 | 418,812 | 409,268 | 460,127 | 432,176 | 539,329 | 534,913 | 779,149 | 821,299 | 609,363 |
| OTHER PAY RELATE COST | Pay | | 4,769,873 | | 1,040,425 | 996,859 | 780,099 | 384,962 | 366,932 | 363,475 | 132,749 | 111,555 | 115,995 | 203,198 | 85,883 | 54,162 |
| TOTAL PAY COSTS | Pay | | 76,001,240 | | 6,100,453 | 6,382,028 | 5,506,864 | 4,862,234 | 4,752,741 | 4,903,388 | 4,941,862 | 4,699,547 | 4,879,043 | 5,622,022 | 5,328,270 | 4,878,343 |
| CLEANING SUPPLIES | Non Pay | | 4,673,007 | | 849,994 | 519,977 | 433,113 | 362,319 | 267,536 | 260,538 | 294,141 | 231,813 | 249,974 | 281,458 | 206,507 | 209,122 |
| INFECT PREV & CONTRL | Non Pay | | 8,163,391 | | 929,576 | 814,066 | 794,948 | 458,401 | 386,499 | 443,877 | 445,283 | 432,647 | 429,112 | 477,358 | 603,366 | 559,092 |
| ADDITION PURCH PPE | Non Pay | | 6,629,681 | | 2,770,166 | 2,222,140 | 1,637,374 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ADDITION PURCH EQUIP | Non Pay | | 2,051,577 | | 598,056 | 436,814 | 250,670 | 128,059 | 102,061 | 104,895 | 104,295 | 55,910 | 53,053 | 71,751 | 53,558 | 21,329 |
| RENT ADDIT EQUIPMENT | Non Pay | | 1,077,730 | | 61,363 | 66,848 | 134,173 | 89,160 | 75,221 | 68,083 | 63,357 | 61,479 | 61,092 | 66,395 | 77,217 | 67,741 |
| STAFF COVID TRAINING | Non Pay | | 1,708,210 | | 162,010 | 143,512 | 129,735 | 156,687 | 130,821 | 205,820 | 136,914 | 129,786 | 98,854 | 76,844 | 77,202 | 68,070 |
| OTH COST RECRUITMENT | Non Pay | | 2,212,732 | | 156,188 | 117,211 | 264,755 | 152,688 | 174,458 | 238,856 | 211,185 | 219,631 | 151,827 | 110,623 | 109,447 | 87,573 |
| OTH COST MAINTENANCE | Non Pay | | 809,110 | | 91,535 | 126,268 | 168,809 | 81,620 | 82,196 | 46,390 | 42,764 | 32,075 | 22,644 | 31,883 | 18,500 | 13,444 |
| OTH COST CLEAN/STERIL | Non Pay | | 2,376,497 | | 181,924 | 147,458 | 281,647 | 181,815 | 171,303 | 160,298 | 159,487 | 193,763 | 174,436 | 194,579 | 181,694 | 108,146 |
| OTH COST STAFF AC/FD | Non Pay | | 2,581,092 | | 301,141 | 368,118 | 300,284 | 220,200 | 252,814 | 283,857 | 236,524 | 216,037 | 165,814 | 96,517 | 64,837 | 20,692 |
| OTH COST COMMUNICATE | Non Pay | | 877,036 | | 109,899 | 128,036 | 83,475 | 60,008 | 79,719 | 41,905 | 50,403 | 54,670 | 57,229 | 39,942 | 38,016 | 50,871 |
| OTH COST COVID19 REL | Non Pay | | 2,179,589 | | 185,577 | 207,668 | 231,581 | 118,038 | 115,412 | 155,667 | 135,715 | 98,359 | 133,632 | 152,159 | 147,446 | 141,472 |
| OTH CONSUMABLE | Non Pay | | 1,207,298 | | 166,840 | 170,047 | 159,784 | 73,637 | 57,996 | 77,538 | 71,120 | 55,993 | 49,755 | 63,558 | 70,197 | 66,192 |
| TOTAL NONPAY COSTS | Non Pay | | 36,546,951 | | 6,564,270 | 5,468,165 | 4,870,348 | 2,082,631 | 1,896,035 | 2,087,724 | 1,951,186 | 1,782,164 | 1,647,421 | 1,663,068 | 1,647,986 | 1,413,744 |
| THRESHOLD EXCESS B | Less | | -7,901,244 | | -1,210,405 | -967,217 | -647,229 | -464,295 | -549,986 | -629,916 | -436,158 | -418,947 | -397,753 | -542,084 | -523,836 | -360,669 |
| ISOLATION ROOM(S) RET | Occupancy | | 3,220,000 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 446,000 | 446,000 | 455,000 | 418,000 | 363,000 |

TAPS: CLEANING/INFECTION CONTROL

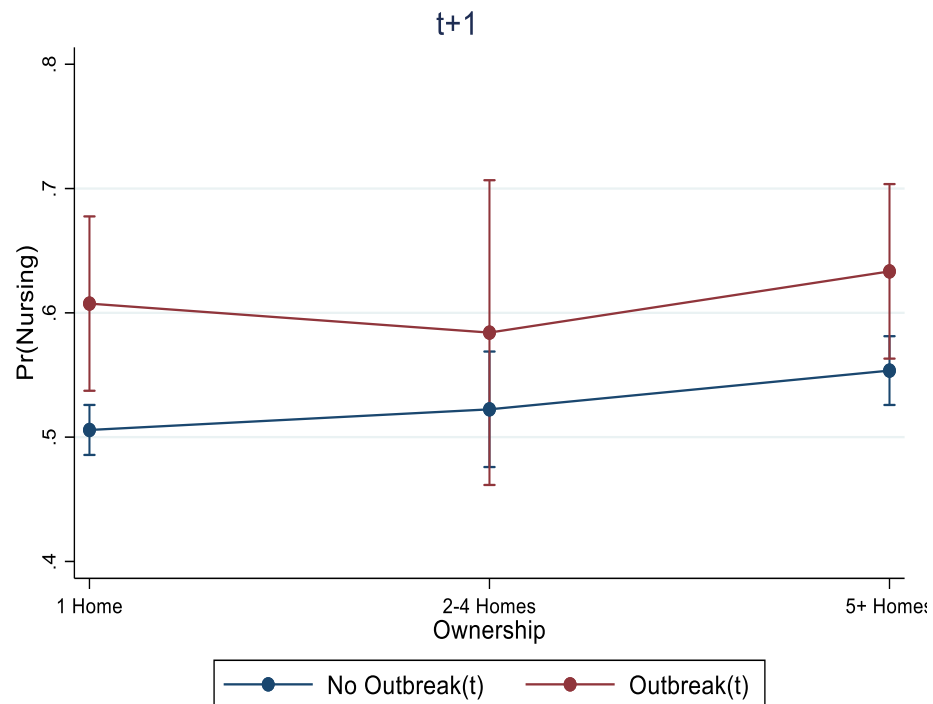


TAPS: CLEANING/INFECTION CONTROL – OUTBREAK/OWNERSHIP INTERACTION

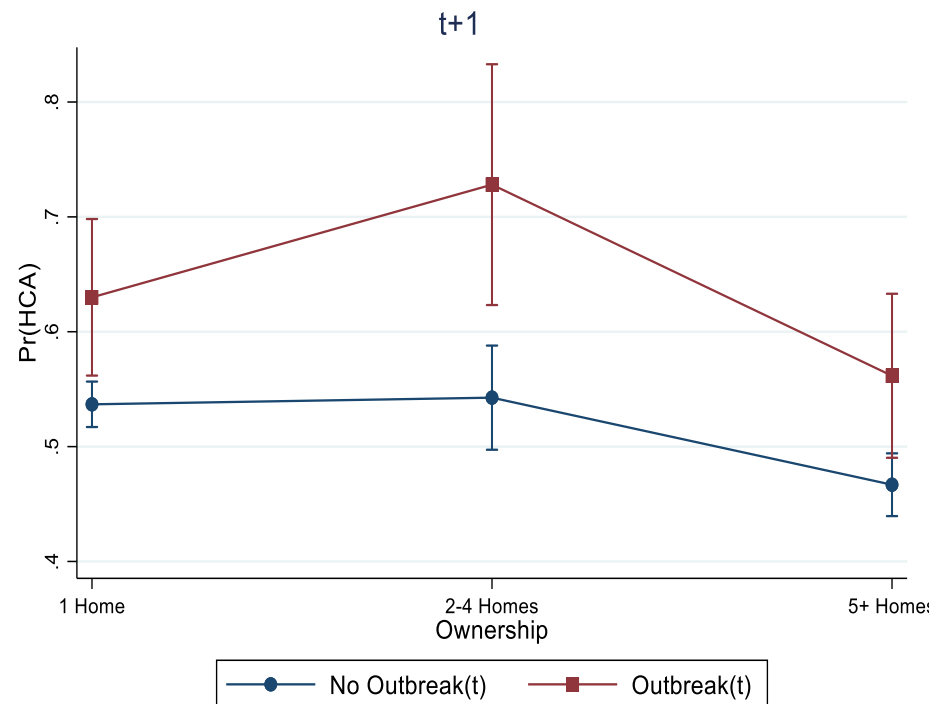


TAPS: NURSING/HCA – OUTBREAK/OWNERSHIP INTERACTION

Nursing



Health Care Assistants



AGENCY– OUTBREAK/OWNERSHIP INTERACTION

