Monthly EASIL Report: Nursing Home A

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Executive Summary:

Antibiotic starts at Nursing Home A (new starts) decreased through quarter 4 of 2020, before seeing an increase in January of 2021. The number of new starts decreased through the rest of Quarter 1(Figure 1). Urinary tract infections, lower respiratory infections, and skin soft tissue infections tend to be the major infections sites for which antibiotics are prescribed. UTI starts remain stable, but LRI starts are up (Figure 2). Quarterly days of therapy for UTI's per 1000 resident days have been stable, at 0.93. LRI starts per 1,000 pt days have increased a bit to 1.09 (Figure 3). Quinolone use has continued to be good (Table 1). SBAR and Loeb's criteria utilization for UTI has been very good (Table 2). Levofloxacin prescriptions were all above the recommended duration (Table 5).

Potential action item(s):

- 1. Monitor LRI starts in quarter 2 of 2021.
- 2. Consider speaking to prescribers about the duration of Levofloxacin prescriptions, and confirm that the duration of these are appropriate.

Antibiotic Starts

Figure 1. Total antibiotic starts by order type (Nursing Home A, January 2019-February 2020)

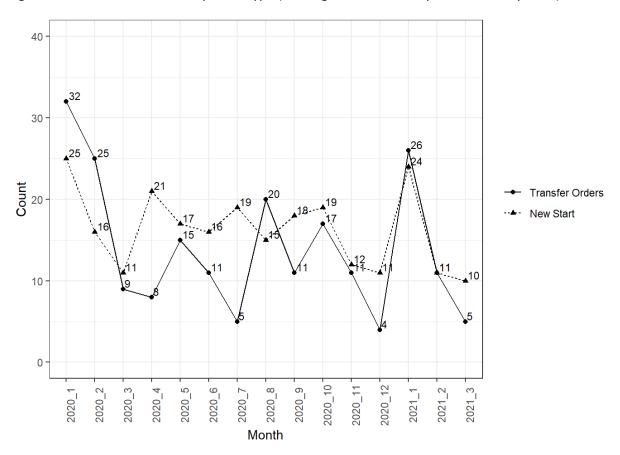


Figure 2. New antibiotic starts by site code (Nursing Home A, January 2019-February 2020)

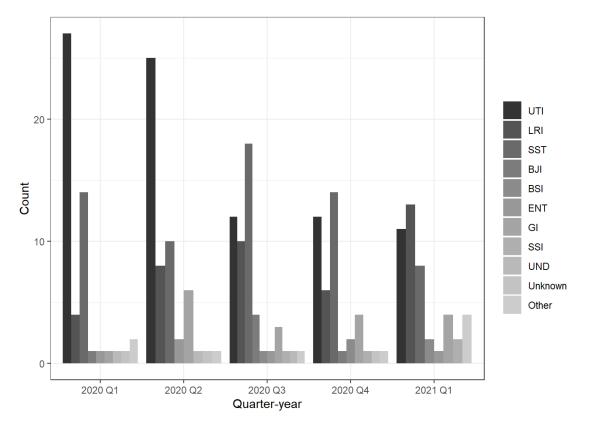


Table 1. Quinilone starts for UTI (Nursing Home A, January 2019- February 2020)

	2020 Q1 (N=27)	2020 Q2 (N=25)	2020 Q3 (N=12)	2020 Q4 (N=12)	2021 Q1 (N=11)	Total (N=87)
Quinolone						
Yes	0 (0 %)	1 (4 %)	0 (0 %)	0 (0 %)	0 (0 %)	1 (1 %)
No	27 (100 %)	24 (96 %)	12 (100 %)	12 (100 %)	11 (100 %)	86 (99 %)

Table 2. SBAR compliance and Loeb's criteria for new UTI starts (Nursing Home A, January 2019- February 2020)

	2020 Q1 (N=27)	2020 Q2 (N=25)	2020 Q3 (N=12)	2020 Q4 (N=12)	2021 Q1 (N=11)	Total (N=87)
SBAR Used						
Yes	22 (81 %)	23 (92 %)	12 (100 %)	12 (100 %)	11 (100 %)	80 (92 %)
No	5 (19 %)	2 (8 %)	0 (0 %)	0 (0 %)	0 (0 %)	7 (8 %)
Not Applicable	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
Unknown	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
Loeb's Criteria Met						
Yes	22 (81 %)	21 (84 %)	11 (92 %)	12 (100 %)	11 (100 %)	77 (89 %)
No	3 (11 %)	3 (12 %)	0 (0 %)	0 (0 %)	0 (0 %)	6 (7 %)
Not Applicable	0 (0 %)	1 (4 %)	0 (0 %)	0 (0 %)	0 (0 %)	1 (1 %)
Unknown	2 (7 %)	0 (0 %)	1 (8 %)	0 (0 %)	0 (0 %)	3 (3 %)

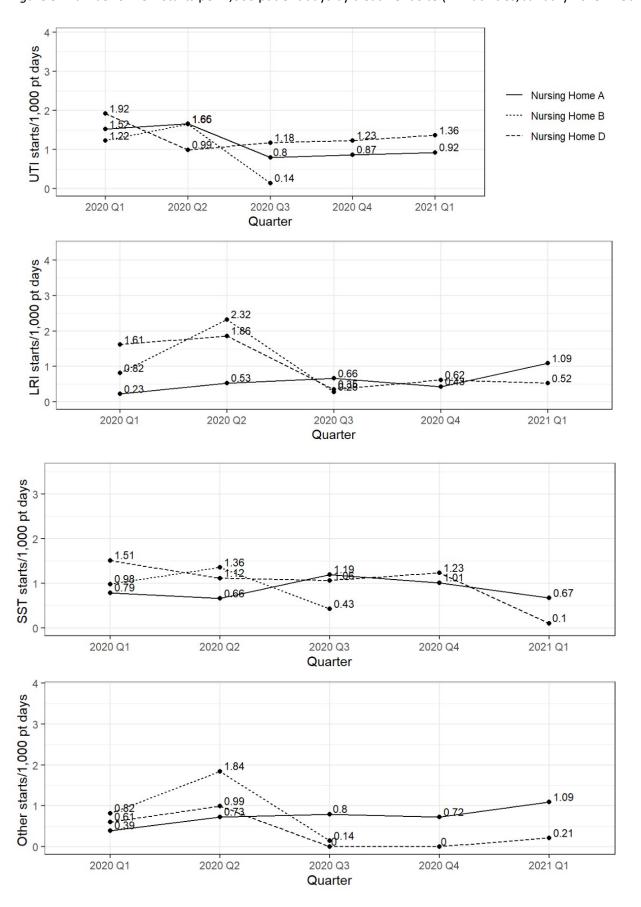
Table 3. Loeb's criteria for new LRI starts (Nursing Home A, January 2019- February 2020)

	2020 Q1 (N=4)	2020 Q2 (N=8)	2020 Q3 (N=10)	2020 Q4 (N=6)	2021 Q1 (N=13)	Total (N=41)
Loeb's Criteria Met						5
Yes	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
No	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
Not Applicable	4 (100 %)	8 (100 %)	10 (100 %)	6 (100 %)	13 (100 %)	41 (100 %)
Unknown	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)

Table 4. Loeb's criteria for new SST starts (Nursing Home A, January 2019- February 2020)

	2020 Q1 (N=14)	2020 Q2 (N=10)	2020 Q3 (N=18)	2020 Q4 (N=14)	2021 Q1 (N=8)	Total (N=64)
Loeb's Criteria Met						
Yes	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
No	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)
Not Applicable	14 (100 %)	10 (100 %)	18 (100 %)	14 (100 %)	8 (100 %)	64 (100 %)
Unknown	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)

Figure 3. Number of new starts per 1,000 patient days by treatment site (All Facilities, January 2019 - February 2020)



Antibiotic Days of Therapy

Table 5. Days of therapy for UTI by antibiotic code (Nursing Home A, Q1 2019- Q4 2019, then Q1 2020)

simp.site	abxnm	Mean	Median	Minimum	Maximum	Pct_ov_rec	n
UTI	CEPHLX	4.590909	5	3	7	4.545454	22
UTI	NITRO	5.150000	5	2	14	5.000000	20
UTI	CEFTRX	4.333333	5	3	5	NaN	6
UTI	CEFDIN	5.666667	5	5	7	NaN	3
UTI	DOXY	5.000000	5	5	5	0.000000	2
UTI	SULFAET	3.000000	3	3	3	0.000000	2
UTI	AMOXWC	5.000000	5	5	5	0.000000	1
UTI	LEVO	7.000000	7	7	7	100.000000	1
UTI	LNZ	5.000000	5	5	5	NaN	1
UTI	NAF	5.000000	5	5	5	NaN	1
UTI	OTHER	7.000000	7	7	7	NaN	1
UTI	CEPHLX	3.727273	3	1	5	0	11
UTI	CEFTRX	3.142857	3	1	5	NaN	7
UTI	NITRO	4.600000	5	3	5	0	5
UTI	AMP	1.000000	1	1	1	NaN	1
UTI	CEFDIN	5.000000	5	5	5	NaN	1
UTI	DOXY	10.000000	10	10	10	100	1
UTI	SULFAET	3.000000	3	3	3	0	1

Table 6. Days of therapy for LRI by antibiotic code (Nursing Home A, January 2019- February 2020)

simp.site	abxnm	Mean	Median	Minimum	Maximum	n
LRI	CEFTRX	4.315790	5.0	1	7	19
LRI	AMOXWC	6.571429	7.0	3	10	7
LRI	AZITH	8.571429	5.0	5	30	7
LRI	LEVO	6.333333	6.5	5	7	6
LRI	DOXY	7.000000	7.0	7	7	2

Table 7. Days of therapy for SST by antibiotic code (Nursing Home A, January 2019- February 2020)

simp.site	abxnm	Mean	Median	Minimum	Maximum	n
SST	CEPHLX	7.545454	7.0	5	14	22
SST	DOXY	8.428571	7.0	7	21	15
SST	METRO	26.333333	30.0	7	31	12
SST	AMOXWC	6.333333	7.0	5	7	3
SST	SULFAET	6.333333	7.0	5	7	3
SST	AMOX	10.500000	10.5	7	14	2
SST	CEFDIN	19.000000	19.0	8	30	2
SST	CLIN	6.000000	6.0	6	6	1
SST	FLUCO	7.000000	7.0	7	7	1
SST	LEVO	30.000000	30.0	30	30	1
SST	NITRO	7.000000	7.0	7	7	1
SST	TRIM	5.000000	5.0	5	5	1

Figure 4. Days of therapy/1,000 resident days by site code (All Facilities, January 2019 - February 2020)

