

Antimicrobial Stewardship Program

Fiscal Year 2021/2022 Q1 Report

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Public distribution via Temiskaming Hospital Website

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Executive Summary

Temiskaming Hospital's Antimicrobial Stewardship Program (ASP) uses a collaborative and evidence-based approach to improve the quality of antimicrobial treatments. ASP helps to ensure that patients receive the right antibiotic, when they need them. The ASP follows evidence-based quality improvement methodology to pursue the best possible clinical outcomes for our patients.

ANTIMICROBIAL CONSUMPTION AND COSTS METRICS

Antimicrobial usage metrics are extracted from Temiskaming Hospital's health information system (HIS), Meditech. Metrics excludes data not input into the HIS system and, unless otherwise noted, outpatient treatments. Any future changes in data extraction methodology will be noted. Where possible, antibiotics are measured in Defined Daily Doses (DDD) to standardized analysis of usage. DDD are defined by the World Health Organization (WHO) as the assumed average maintenance dose per day for a drug used for its main indication in adults.

Complex or lengthy regimens may disproportionally alter antimicrobial usage statistics. For each unit, regimens totaling more than 25 DDD are outlined in the "Comments/Notes" section of each patient care area. An adjusted DDD/100 patient days has been calculated. This is performed to better represent overall trends and identify outliers.

Note: Temiskaming Hospital reassigned room designations within the Complex Continuing Care and Medical Surgical unit due to the COVID-19 pandemic. Consequently, quarter-to-quarter comparison is not reliable from Q1 to Q2 in FY 2020/2021. An additional indicator, MES + CCC, was established to compare overall metrics between the reassigned room designations.

Fiscal Year 2020/21 Results

Hospital-Wide Usage Trends

Comments/Notes:

- DDD/100 patient days increased from 23.34 to 31.78
- Antimicrobial cost(\$)/patient day reduced from 1.91 to 1.72

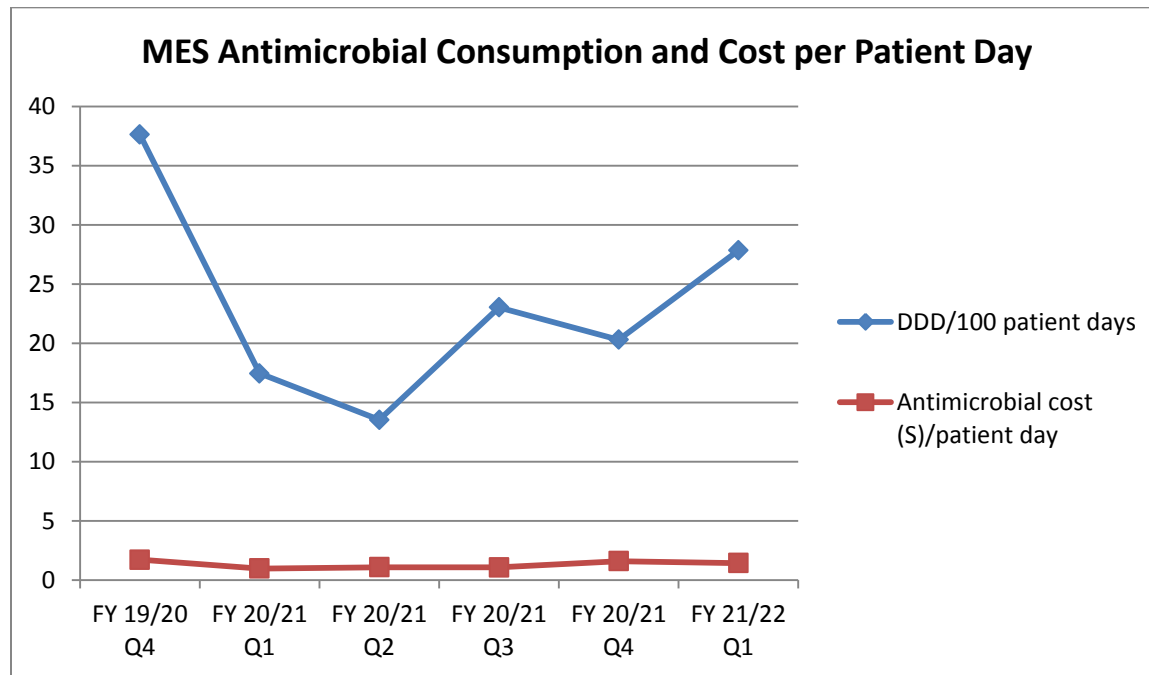
	FY 19/20	FY 20/21				FY 21/22
	Q4	Q1	Q2	Q3	Q4	Q1
Antimicrobial DDDs per 100 patient days	33.16	22.14	25.32	29.48	23.34	31.78
Systemic Antibacterials	15.42	10.42	14.67	15.75	11.13	16.13
Oral Antibacterials	17.74	11.72	10.65	13.73	12.21	15.65
Antimicrobial costs (\$) per patient day	2.70	1.19	1.63	1.61	1.91	1.72

Fiscal Year 2020/21 Results

Medical Surgical Unit (MES)

Comments/Notes:

- Q1 high usage data extraction:
 - 26 DDD cefazolin regimen
 - 45 DDD azithromycin regimen
 - 50 DDD cefazolin regimen
 - 100 DDD cefazolin regimen
 - Adjusted DDD/100 patient days: 21.91



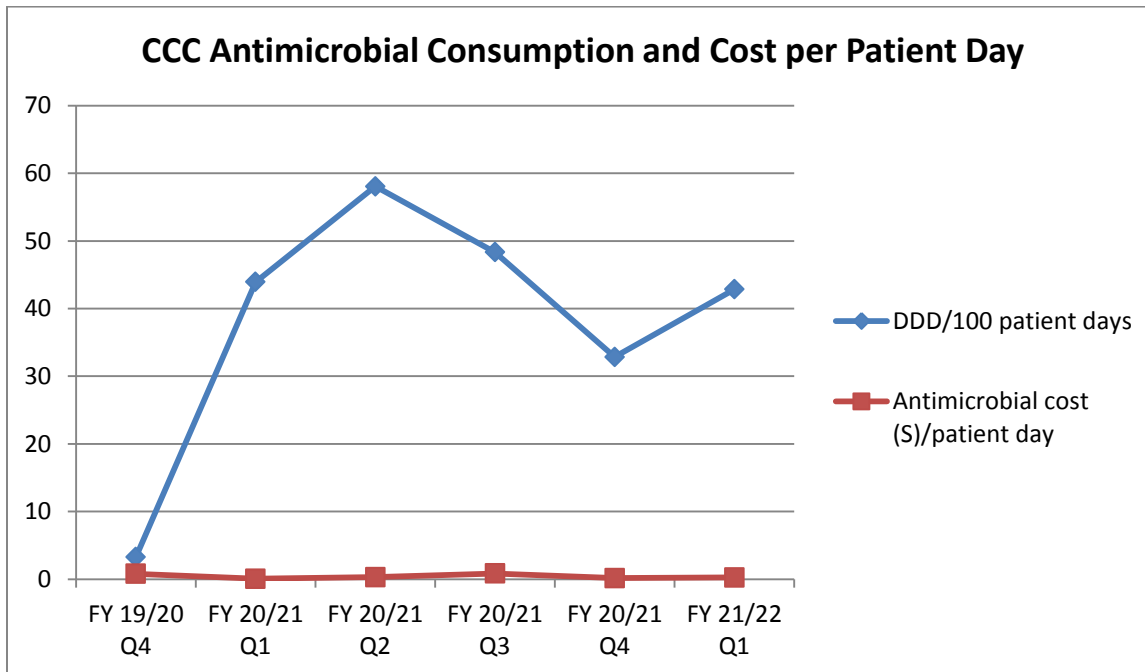
	FY 19/20	FY 20/21				FY 21/22
	Q4	Q1	Q1	Q3	Q4	Q1
Period DDD	1365.6	596.4	488.5	824.6	733.2	1038.6
Patient Days	3629	3419	3614	3581	3612	3731
Antimicrobial DDDs per 100 patient days	37.63	17.44	13.52	23.03	20.30	27.84
Systemic Antibacterials	15.97	5.62	4.84	7.79	7.81	14.32
Oral Antibacterials	21.66	11.83	8.68	15.24	12.49	13.51
Antimicrobial costs (\$) per patient day	1.71	0.97	1.07	1.06	1.59	1.43

Fiscal Year 2020/21 Results

Complex Continuing Care Unit (CCC)

Comments/Notes:

- Charges to CCC differ based on method of drug distribution. To assess costing trends, refer to MES + CCC section
- Q1 high usage data extraction:
 - 30 DDD doxycycline regimen
 - Adjusted DDD/100 patient days: 39.58



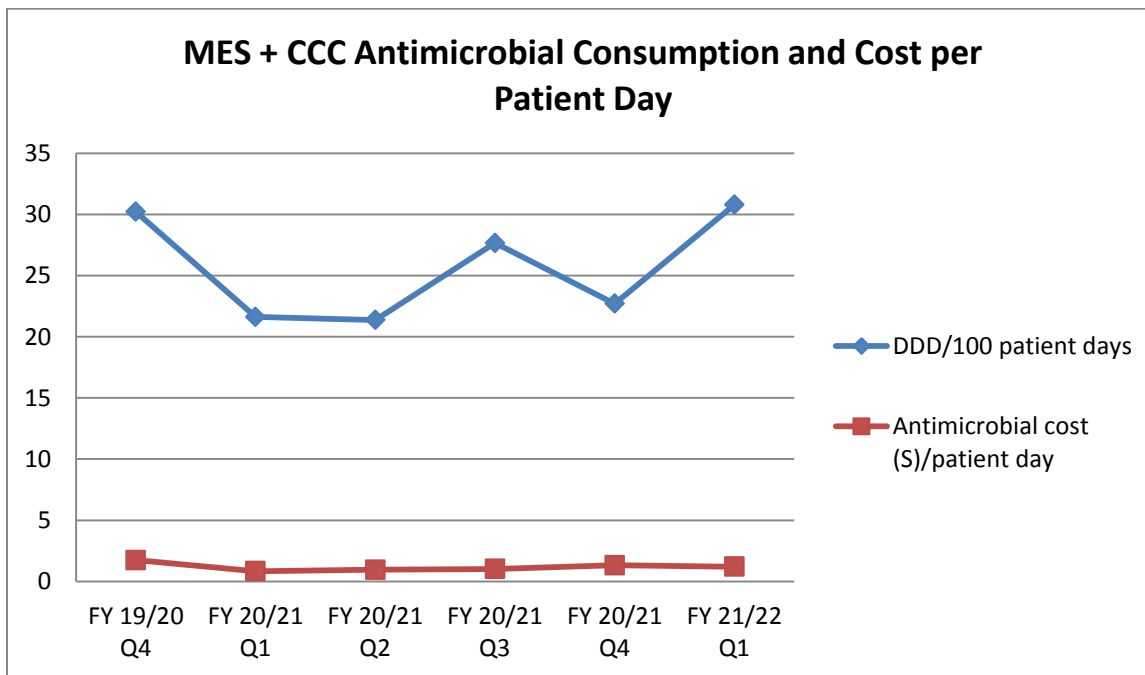
	FY 19/20	FY 20/21				FY 21/22
	Q4	Q1	Q1	Q3	Q4	Q1
Period DDD	32.8	282.1	450	389.7	284.1	393.3
Patient Days	999	642	775	806	865	918
Antimicrobial DDDs per 100 patient days	3.28	43.95	58.06	48.35	32.84	42.85
Systemic Antibacterials	0	28.37	40.08	39.10	22.66	19.22
Oral Antibacterials	3.28	15.58	17.98	9.25	10.19	23.63
Antimicrobial costs (\$) per patient day	0.80	0.06	0.30	0.85	0.16	0.25

Fiscal Year 2020/21 Results

Medical Surgical + Complex Continuing Care Unit (MES+CCC)

Comments/Notes:

- Indicator added to compare total usage and costs due to room reassignment within MES and CCC in Q1 and Q2 of FY 2020/21.
- Q1 high usage data extraction:
 - 26 DDD cefazolin regimen
 - 30 DDD doxycycline regimen
 - 45 DDD azithromycin regimen
 - 50 DDD cefazolin regimen
 - 100 DDD cefazolin regimen
 - Adjusted DDD/100 patient days: 25.40



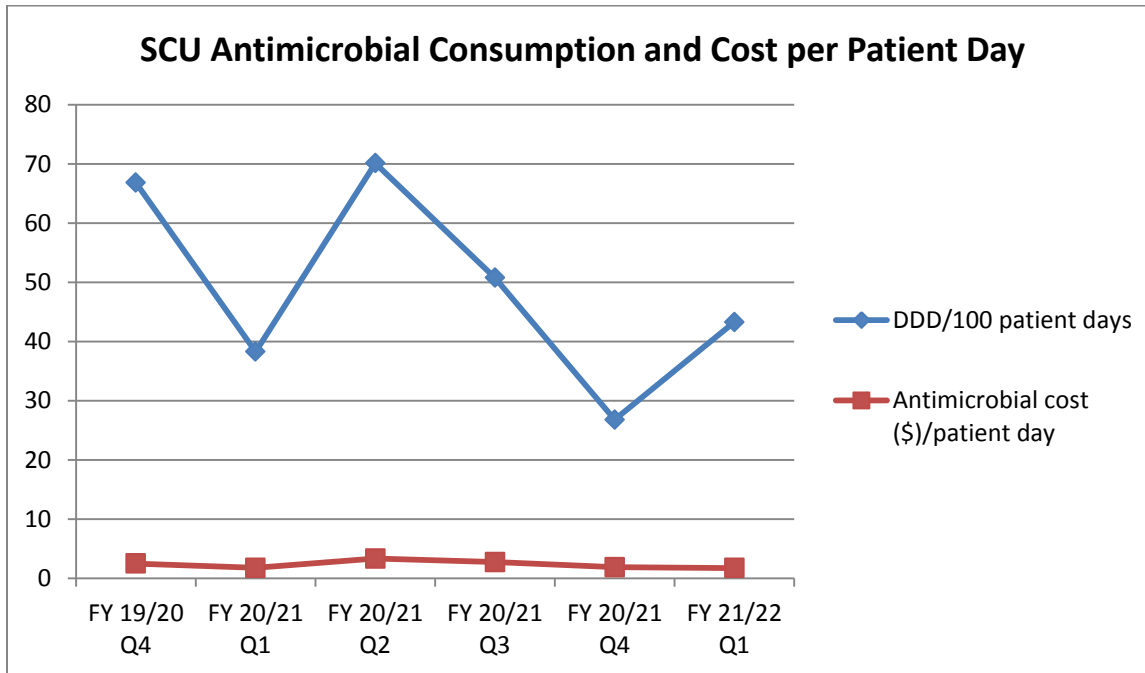
	FY 19/20	FY 20/21				FY 21/22
	Q4	Q1	Q1	Q3	Q4	Q1
Period DDD	1398.4	877.5	938.5	1214.3	1017.3	1431.9
Patient Days	4628	4061	4389	4387	4477	4649
Antimicrobial DDDs per 100 patient days	30.22	21.63	21.38	27.68	22.72	30.80
Systemic Antibacterials	12.52	9.21	11.06	13.54	10.68	15.29
Oral Antibacterials	17.69	12.42	10.32	14.14	12.04	15.51
Antimicrobial costs (\$) per patient day	1.73	0.83	0.95	1.01	1.31	1.20

Fiscal Year 2020/21 Results

Special Care Unit (SCU)

Comments/Notes:

- Q1 high usage data extraction:
 - None > 25 DDD



	FY 19/20	FY 20/21				FY 21/22
	Q4	Q1	Q1	Q3	Q4	Q1
Period DDD	329.5	125.1	272	195.5	132.6	189.9
Patient Days	493	327	388	385	495	439
Antimicrobial DDDs per 100 patient days	66.83	38.26	70.11	50.77	26.79	43.26
Systemic Antibacterials	41.31	28.63	52.54	36.11	13.03	24.45
Oral Antibacterials	25.52	9.62	17.57	14.66	13.76	18.81
Antimicrobial costs (\$) per patient day	2.47	1.74	3.32	2.72	1.86	1.72