



Highest Acuity Dentistry:

Burden of Oral Disease and Dental Treatment Rendered for Inpatients at a Children's Hospital

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PURPOSE + METHODS

- Retrospective analysis of demographics, admission characteristics, and medical/dental needs of hospitalized children with medical complexity (CMC) requiring dental consultations at a children's hospital between 01/01/19-12/31/24
- Electronic health record review using international classification of diseases (10th rev) and Current Dental Terminology codes

RESULTS

- 1,862** Dental consultations for **1,792** unique patients
 - 55% Male, Age 0-42 years,
 - Age: <5 years (515, 28%), 14-17 years (469, 25%)
 - 1,402 (78%) Medicaid-funded
 - Patients with prolonged and/or multiple hospitalizations, polypharmacy, and high frequency of oral health needs
 - Consistent demand over the 6-year period
 - 789** patients needed treatment under general anesthesia (GA)

Figure 1. Referring Service Requesting Dental Consult

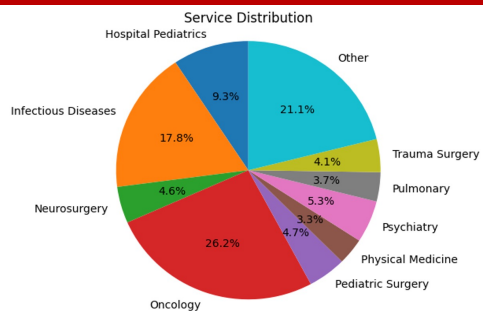


Table 1. Dental Treatment Severity (GA patients only)

CONDITION	Preventive	Operative Dentistry	Missing	Total ¹
Circulatory	1(9.1%)	8(72.7%)	2(18.2%)	11
Congenital/ Genetic	0(0%)	5(100%)	0(0%)	5
Digestive	13(16.7%)	59(75.6%)	6(7.7%)	78
Endocrine/ Metabolic	2(10%)	18(90%)	0(0%)	20
External cause of morbidity	0(0%)	0(0%)	1(100%)	1
Eye/ Ear	1(33.3%)	1(33.3%)	1(33.3%)	3
Factors influencing health status	1(7.7%)	11(84.6%)	1(7.7%)	13
Genitourinary	1(16.7%)	3(50%)	2(33.3%)	6
Hematology/ Immune	6(23.1%)	20(76.9%)	0(0%)	26
Infectious/ Parasitic	0(0%)	2(50%)	2(50%)	4
Injury/ Poisoning	4(12.9%)	18(58.1%)	9(29%)	31
Mental/ Behavioral/ Neurodevelopmental	3(15%)	15(75%)	2(10%)	20
Multiple	4(30.8%)	9(69.2%)	0(0%)	13
Musculoskeletal/ Connective Tissue	8(61.5%)	3(23.1%)	2(15.4%)	13
Nervous System	1(11.1%)	4(44.4%)	4(44.4%)	9
Not otherwise classified	26(31%)	50(59.5%)	8(9.5%)	84
Oncology/ Neoplasms	22(25.6%)	59(68.6%)	5(5.8%)	86
Other	0(0%)	1(100%)	0(0%)	1
Respiratory	5(20.8%)	17(70.8%)	2(8.3%)	24
Skin/ Subcutaneous	1(3.7%)	24(88.9%)	2(7.4%)	27
Special	0(0%)	1(100%)	0(0%)	1

¹Total # GA patients: 789. Table depicts those with documented Primary Diagnosis: 476.

DISCUSSION

- Burden**
 - Rampant disease – urgent treatment first
 - Combo cases with other surgical services
 - 47 patients required multiple GA encounters
 - Gaps in longitudinal care and social barriers (no medical/dental home, financial, transportation)
- Complexity**
 - Prolonged &/or multiple hospitalizations: service dependent
 - Polypharmacy: >85% Oncology & Perinatal patients taking 4+ medications
- Acuity**
 - Medical fragility and complexity requiring integrated hospital-based dental care (navigating clinically-altering medications and diseases)

CONCLUSION

- CMC have substantial oral health needs frequently requiring invasive dental treatment while admitted.
- CMC tend to be low income, primarily 0-5 years old and systemically fragile, requiring advanced behavior guidance techniques.
- The medical complexity and various medications affect oral health and care delivery requiring well-trained and well-equipped interdisciplinary teams.



SCAN FOR MORE INFO