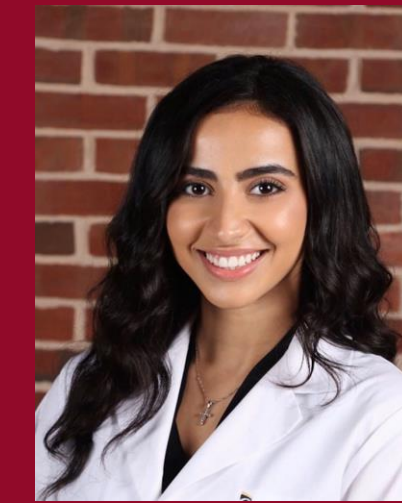


# Development of a Pediatric Oncology Clinical Experience to Facilitate Positive Patient Outcomes



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## Abstract

CODA-required pediatric medicine rotations during pediatric dental residency are designed to expose the pediatric dental resident to an often-limited interprofessional collaboration for the management of immunocompromised patients. A desire to facilitate comprehensive oral healthcare for the heme-oncologic demographic spurred an initiative at Stony Brook Children's Hospital in Long Island, New York to establish a pediatric oncology clinical experience in addition to the required pediatric medicine rotation with the goals of increasing accessibility to and education in oral healthcare for both children with cancer and their caretakers, including medical providers <sup>(2)</sup>.

The clinical experience protocol established a therapy-based dental home for the pediatric cancer patient engaged in active heme-oncology therapies that would transition to a permanent dental home upon completion of therapy and cultivated an impactful interprofessional relationship between pediatric healthcare professionals.

The pediatric dental resident on the novel pediatric oncology clinical experience facilitated oral health screenings to assess for dental, periodontal, or pathologic diseases and comorbidities and emphasized dental education while the caretaker and healthcare team was also present. Early oral health intervention through the establishment of the novel pediatric oncology rotation promoted improved oral prognosis through immunosuppressive therapy and facilitated timely dental treatment options for this vulnerable population.

## Goals and Objectives

### Why was Clinical Experience implemented?

- History of pediatric dental resident on-call being paged on multiple occurrences to address chief complaints of dental pain for pediatric oncology patients
- Majority of requested consults occurred when dental treatment options were already limited by extent of decay

### A disparity among the pediatric oncology and pediatric dental team was identified

#### Immediate goal:

- To bridge the gap in care by facilitating dental evaluation for pediatric cancer patients prior to heme-oncology treatment <sup>(6)</sup> and subsequently monitor patients throughout their course of cancer therapies; to establish a dental home upon completion of treatment able to communicate with heme-oncology team

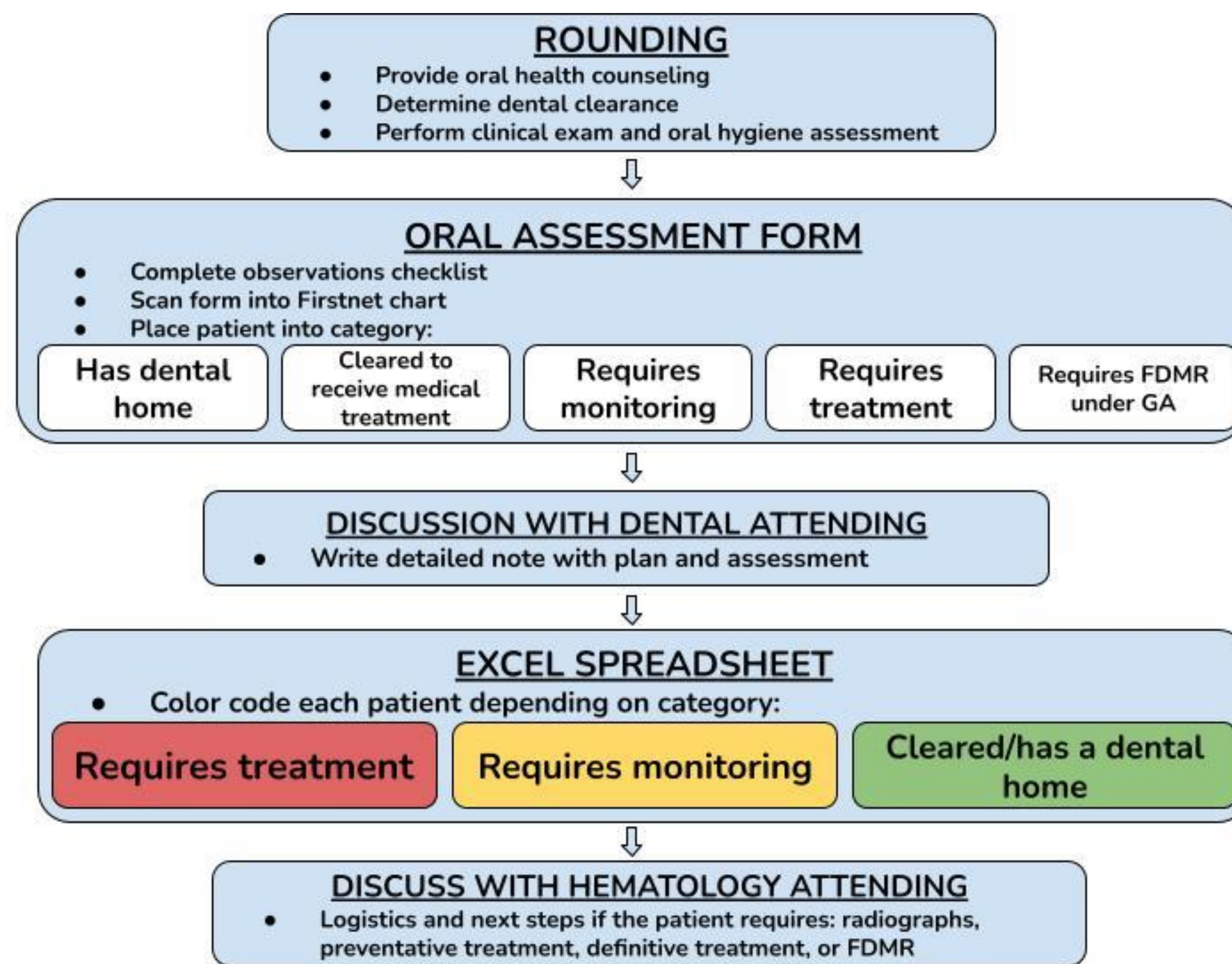
#### Short-term goals?

- Help pediatric cancer patients receive dental clearance before undergoing oncologic treatment
- Pediatric dental residents now paged to triage the pediatric cancer patients prior to the start of any treatment and therapy
- Obtain pre-treatment dental intra/extraoral exam and radiographs
- Timely consultation with pediatric oncology team to determine most appropriate dental treatment along the care-team timeline <sup>(4), (5)</sup>
- Create an interdisciplinary care-team approach** to manage dental care for pediatric oncology patients

#### Long-term goals?

- Establish a dental home during ongoing cancer treatment
- Assist parents of immunocompromised patients in seeking dental care <sup>(3)</sup> without compromising attendance of medical appointments, school-work and additional responsibilities <sup>(1)</sup>

## Novel Oncology Clinical Experience Protocol



- The pediatric dentistry resident on-call collects the weekly schedule, marked by hematology attendings for patients that require dental clearance printed by the Pediatric Oncology front desk**

## Sample of Spreadsheet

Patient	Dental home	Last seen date	Comments
1	Dental home	3/8/22	Clinical caries noted during last encounter 1/11/21. Pt has dental home. *3/8 small occlusal caries noted on posterior molars, patient sees private dentist in Port Jeff and LV as in Nov.
2	Cleared	1/20/22	Dad stated he brought patient to private dentist about 3 months ago. No cavities. Patient will go again in another 3 months for a recall. Private dentist in Hauppauge
3	Cleared	11/22/21	Followed by peds dental, patient has a dental home in Wading River with [private dentist]
4	Dental home	2/15/21	Patient has dental home, Patient is asymptomatic and no complaints
5	Monitor	11/22/21	No current dental home. Rec SBDCC, patient will need abx prior to dental visits, follow up to see if they became a patient at SBUDCC
6	Monitor	7/13/21	No current dental home, Rec SBDCC, patient states that mother scheduled dental appointment at private dentist for later this week (7/13/21)
7	Dental home	8/31/21	FMDR treatment completed on 8/20/2021. Patient will follow up at SBDCC 2 weeks from the procedure date. Dental Home is SBUDCC
8	Dental home	2/28/22	Patient followed by [Stony Brook attending] in faculty practice
9	No dental home	2/18/22	Patient has no dental home, Rec SBDCC
10	Dental home	7/13/21	Patient has dental home
11	Dental home	7/13/21	Patient of record at SBDCC, cleared for dental tx, no abx prophylaxis required (per [heme-onc Pt is cleared for routine dental exam/radiographs/cleaning, no CC and asymptomatic. Gave SBDCC # to schedule an appointment.
12	No dental home	2/24/22	No dental home, Rec SBDCC, no CC and asymptomatic, if seen at SBDCC (NEED ABX)
13	Monitor	8/9/21	No dental home, Rec SBDCC, no CC and asymptomatic, if seen at SBDCC (NEED ABX)
14	Dental home	11/2/21	Patient has dental home
15	Monitor	8/9/21	No dental home, Rec SBDCC, no CC and asymptomatic, if seen at SBDCC (NEED ABX)
16	No dental home	8/27/21	Patient has no dental home, cleared for treatment, with clinical caries noted throughout dentition, pt being referred to SBDCC for NP exam and xrays; no CC and asymptomatic
17	No dental home	9/14/21	Pt does not have a dental home. Pt being referred to SBDCC for NP exam and xrays. Mom was reached on the phone 02/22/22 and said the pt has seen a lot of doctors recently and does not want to frustrate him by bringing him in for dental check up. Mom will call to make appointment at a
18	No dental home	9/14/21	Pt does not have a dental home. Pt being referred to SBDCC for NP exam and xrays. No CC and pt is asymptomatic.
19	No dental home	10/21/21	Pt does not have dental home. Pt being referred to SBDCC

## Discussion

Establishing open communication, a single point of reliable contact between pediatric dentistry and heme-oncology, mutually beneficial time of patient evaluation were initial foci of identifying the need for a clinical experience protocol. Working through specifics revealed challenges in real time as noted below:

#### Logistical issues:

- Access to space  
ED not feasible to triage immunocompromised patients
- Hospital regulations  
COVID-19 protocols limited patient care options
- Logistics for taking radiographs:  
Portable radiology equipment initially not available on treatment floor

#### Implemented Enhancements:

- Established an easy-to-follow protocol
- Created an Excel spreadsheet posted to shared drive to document all patients seen by pediatric dental residents, organized in a color-coded system for easy follow-up
- Established an oral assessment form to facilitate easier communication between the dental team and hematology/oncology team

## Conclusions

#### Improvements identified:

- Access to dental materials
- Access to dental radiographs
- Creating a footprint for patients in dental software (axiUm)

#### How has this rotation improved the experience of pediatric dental residents at Stony Brook School of Dental Medicine?

- Improved sustainability
- Dental home/ urgent care
- Funding: grant application is ongoing to improve the materials and infrastructure of this novel clinical experience. Support from both the pediatric heme-oncology department as well as the pediatric dentistry clinic, faculty and residents have made this endeavor an initial success.

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IRB was not required for this implementation of clinical experience. No initial funding was utilized for implementation of clinical experience.

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