

## ABSTRACT: 2016 ELAM Institutional Action Project Symposium

**Project Title:** An Assessment of Various Strategies to Improve Dental Clinical Chair Utilization

**Name and Institution:** Adriana Segura DDS, MS, University of Texas Health Science Center at San Antonio, School of Dentistry

**Collaborators:** Dr. Gary Guest, Associate Dean for Patient Care, Dr. William Dodge, Dean – School of Dentistry

**Background, Challenge or Opportunity:** The School of Dentistry contains five departments and eight clinical specialties. The clinical educational component includes 220 students (DS3 and DS4) who work in the pre-doctoral program and 126 advanced education residents who work within the different clinical specialties. In July 2015 all pre-doctoral and post-doctoral patient care was transferred to a new center of Oral Health Care and Research and a coordinated referral process from the pre-doctoral clinic to the specialty clinics was implemented. This move facilitated the examination of several new initiatives that were introduced to increase patient visits and clinical revenue. These new initiatives included the use of social media as a new marketing tool, the establishment of a new clinical enterprise committee to coordinate efforts amongst all the clinics and the implementation of a calling center to facilitate scheduling of appointments. The mission is to have UT Dentistry to be recognized as a premier multi-specialty academic dental practice and to increase margins of clinical profit from 3% to 5%.

**Purpose/Objectives:** The purpose of this project was to assess clinical dental chair utilization in the new clinical building for UT Dentistry and evaluate whether the new initiatives improved patients visits. Completed number of clinical appointments were assessed for 4 of the specialty programs. The Orthodontics, Endodontics, Pediatric Dentistry and Periodontics specialty clinics were evaluated to assess the percentage of patient appointments made in contrast to the actual available dental chairs/appointment time slots for the months of October 2015 and February 2016.

**Methods/Approach:**

UT Dentistry utilizes *axiUm* Dental Software for the electronic patient record system. This software system is unique to field of dentistry and includes HIPPA complaint electronic health record, billing and practice management applications. The product allows the assessment of appointments cancelled with in 24 hours and allows also the tracking of no-show patient appointments. Each clinical specialty was able to customize the appointment screen to display the number of providers available and the possible number of hour slots for appointment.

**Outcomes and Evaluation Strategy:**

The *axiUm* appointment records were assessed for utilization of available appointments. The number of possible one-hour appointments was tabulated. The number of actual appointments visits completed was tabulated based on one-hour utilizations.

	Monthly Percent Utilization October	Monthly Percent Utilization February	Percent Increase or Decrease
Endodontics	69.65	73.67	+4.02
Pediatric Dentistry	56.12	54.79	-1.33
Orthodontics	24.32	26.85	+2.33
Periodontics	38.84	48.48	+9.64

The preliminary data suggests that the new-implemented initiatives have achieved modest increases in patient visits. Further investigation will be directed towards determining which initiative has the most impact.

### Background Challenge

The School of Dentistry contains five departments and eight clinical specialties. The clinical educational component includes 220 students (DS3 and DS4) who work in the pre-doctoral program and 126 advanced education residents who work within the different clinical specialties. In July 2015 all pre-doctoral and post-doctoral patient care was transferred to a new Center of Oral Health Care and Research. A coordinated referral process from the pre-doctoral clinic to the specialty clinics was implemented. This move facilitated the examination of several new initiatives that were introduced to increase patient visits and clinical revenue. These new initiatives included the use of social media as a marketing tool, the establishment of a clinical enterprise committee to coordinate efforts amongst all the clinics and the implementation of a call center to facilitate the scheduling of appointments. The goals are to have UT Dentistry be recognized as a premier multi-specialty academic dental practice and to increase margins of clinical profit from 3% to 5%.

#### Revenue Resources

State*	Fees	Clinic**	Research	Giving	Outreach	Other
39.3%	8.1%	28.9%	16.6%	1.0%	3.3%	2.8%

\*Includes tuition; \*\*Includes all clinic revenue

### Objectives

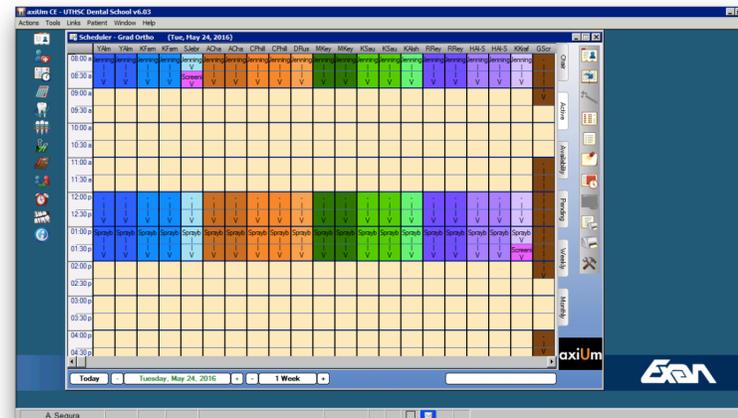
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### Approach

UT Dentistry utilizes *axiUm* Dental Software for the electronic patient record system. This software system is unique to field of academic dentistry and includes HIPPA compliant electronic health record, billing and practice management applications. The product allows the assessment of appointments cancelled within 24 hours and also allows the tracking of no-show patient appointments. Each clinical specialty was able to customize the appointment screen to display the number of providers available and the possible number of hour slots for appointments.

Example of *axiUM* appointment screen



### Outcomes

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	# Clinical Chairs	# cancellations 10/2015	# cancellations 02/2016	# No Shows 10/2015	# No Shows 02/2016
Endodontics	11	27	21	73.35	35.75
Pediatric Dentistry	9	39	90	59.75	52
Orthodontics	21	189.25	185.5	72.5	93.5
Periodontics	18	116	107.5	23	11

### Summary

The outcomes indicate that the initiatives implemented did not dramatically improve utilization for the identified specialty clinics.

#### Variables affecting revenue and utilization

- Fees (Predoctoral, Postdoctoral and Faculty Practice)
- Types of Procedures
- Hours of Operation
- Patient Pool

#### Variables affecting expenditures

- Staff
- Materials
- Equipment
- Faculty
- Facility- Utility and Debt

### Challenges

- Academic requirements imposed from the Commission on Dental Accreditation for the Advanced Education Programs (Didactic vs. Clinical Training)
- Offsite rotations for the residents
- Dentistry revenue is highly dependent on fees per procedure

	2013-2014	2014-2015	2015 to February
Predoctoral # Procedures	55,144	53,138	44,836
Postdoctoral # Procedures	72,038	69,424	46,363

	2013-2014	2014-2015	2015-to February
Predoctoral Clinic Revenue	\$4,611,659.00	\$4,314,116.00	\$3,204,774.00
Postdoctoral Clinic Revenue	\$12,689,786.00	\$12,823,460.00	6,743,073.00
Predoctoral #Visits	62,873	59,389	39,903
Postdoctoral #Visits	68,757	66,794	41,933

### Future Directions

- Assess which marketing tools are more effective.
- A new registration form will have a question asking which specific media impacted patients to make an appointment
- Tailor strategies for the different specialties
- Assess the reason for the high no show and cancellation of appointments.
- Evaluate the difference of chair utilization vs. hourly revenue
- Complete data analysis for Oral & Maxillofacial Surgery, Prosthodontics and Advanced Education in General Dentistry

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