Title: Digitization of an Advanced Education Resident Manual and Dental Student Clinical Rotation Guidelines

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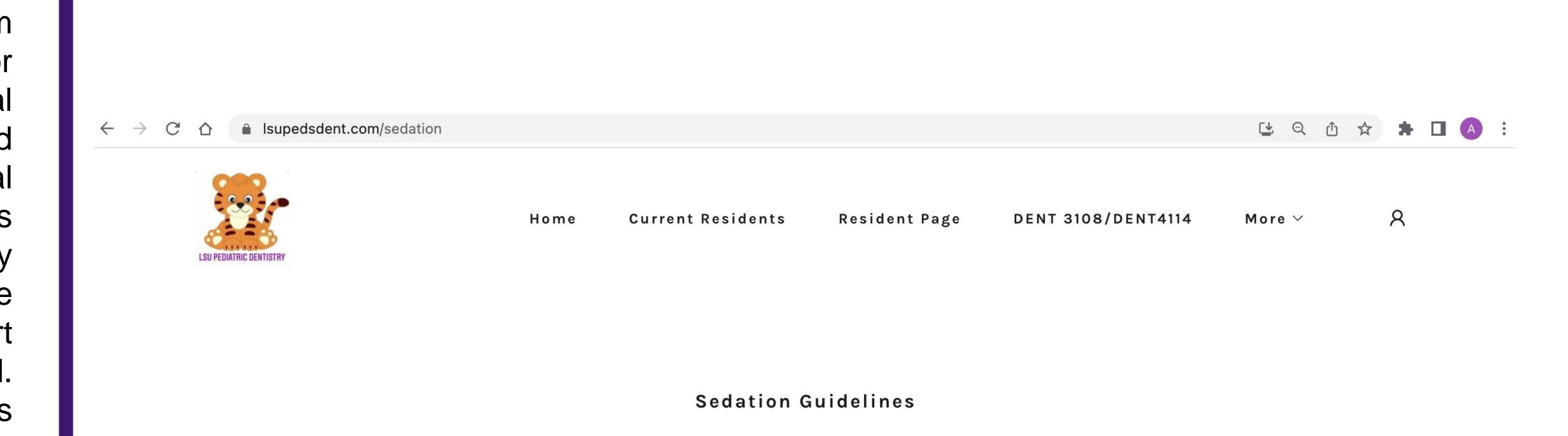**LSU Health NEW ORLEANS School of Dentistry**

INTRODUCTION

Knowledge transfer refers to the exchange of ideas from one entity to another. This may be from one individual to another, from a company to its employees, or from teachers to learners. In the case of a post-graduate residency program, this transfer occurs between program directors and residents, senior residents and junior residents, and from both of those cohorts to dental students. The knowledge that needs to be conveyed includes clinical guidelines, protocols, and procedural outlines. The use of printed mediums has many downfalls and has been the crux of knowledge transfer for residency programs in the past. These printed mediums must be comprehensive; making them cumbersome to transport and often they end up being stored and rarely referenced. This leads to residents looking for answers to questions that are often contained in the provided manual from their senior residents or program directors. Fischer et al. highlighted the promise of utilizing computerized information as it allows for a presentation of data in a cohesive manner which is conducive to sustainable learning. If a residency program desires to convey updates throughout the year, it is impractical to repeatedly reprint a manual which may lead to clinical protocols that are now incongruent with the originally supplied manual. While students normally have access to educational resources on platforms hosted by their respective institutions, they are often outdated and complicated to add content to. A survey analysis by Weaver et al. of a learning management software used in their institution found that 70% of academic staff experienced problems and believed the software was "clunky, slow and awkward to upload files." This project was reviewed by LSUHSC-NO IRB and approved under protocol #1826.

METHODS

A simple and practical solution to the problems presented is a web page directly controlled by the residency program instead of an institution's information technology department. This places control in the hands of program directors and residents and allows them to add or remove the content as they deem necessary. Web Page development tools have become incredibly user-friendly and simple even for those who may be inexperienced in website design. Recent studies have shown "Gen-Z" learners, who will soon make up the majority of healthcare students, demonstrate improved outcomes and are more readily accepting of digital learning and communication. The benefit for dental students is the access to an indexed web page with step-by-step instructions on how to maneuver in the clinic, how to perform necessary procedures, and if desired, it can allow for a truly anonymous feedback communication system.

Figure 1. Sample from LSUPedsDent.com

Figure 2. Survey Results

CONCLUSIONS

- Dental students strongly preferred that they receive their rotation instructions be given via a web-based manual
- This was especially true for treatment procedures and instructions
- It should also be emphasized for programs looking to continuously improve that dental students were more comfortable submitting feedback through a webpage