### MEMORANDUM

To: Dr. Erika Paterson

From: Tarandeep Atwal

Date: October 11, 2019

Subject: Proposal for minimizing caries risk in adolescent clients at Springdale Family Dental

### Location of study

Springdale Dental Office is a well-established general practice office serving the community of Brampton, Ontario for two decades. It is owned by Dr. Harpaul Anand and constitutes of over 20 employees.

### **Background info of readers**

My report is intended for the owner, Dr. Harpaul Anand, the dental hygienists and the dental assistants. Dr. Anand and his team of hygienists and assistants are actively involved in the process of helping the clients attain optimal oral health. The dental hygienists as well as dental assistants partake the responsibility of delivering preventive dental services to the clients. Dr. Anand authorizes the implementation of new therapeutic interventions in the best interest of client.

### Introduction

The Springdale Family Dental Office owned by Dr. Anand provides a wide variety of dental services to clients of varied age groups. The office has very regular and compliant clientele. The primary focus of disease prevention sets apart this office from other dental offices in the area. Being preventive healthcare professionals, the dental hygienists take their time to assess the risk factors associated with caries (cavities) specific to each client, specifically the high-risk category of adolescents. A positive feedback entails a positive outcome of the treatment rendered and signifies the dedication of the dental team towards the oral health of their clients. Any potential problem that impede this goal should be addressed as soon as it arises.

### **Statement of Problem**

Over the past two years, an increased incidence of caries among the office's adolescent clients has been noted. It is a matter of concern as it is posing a challenge to the disease prevention goal of the office. This may further cause uncertainty in the minds of our clients regarding our preventive services and whether the treatment interventions are applied appropriately. This can significantly affect the productivity of the office.

# **Proposed Solution**

One possible solution to minimize the caries risk among adolescents is to introduce the implementation of Pit and Fissure(P&F) sealants on non-carious (cavity free) molars and premolars as a preventive treatment intervention. Reinforcing nutritional assessment along with pit and fissure sealants will yield desirable results. Recent studies have shown that long term success of P&F sealants depends on consistent follow up and repair. The dental hygienists are responsible to evaluate the integrity of sealants at the recare intervals. Moreover, there are glass ionomer sealants available that address the concern of moisture control for cases where proper isolation can be compromised.

### Scope

To assess the causative risk factors of caries among adolescents, I am planning to pursue my inquiry in the areas as follows:

- Are the adolescent clients following up on their recare interval? (The recare interval is client specific ranging from 3-9 months)
- Are these clients concerned about the cavities and its implications?
- What are the oral hygiene habits of these clients, what oral aids they use and how frequent?
- Are the dental hygienists doing nutritional assessment at <u>each</u> recare visit?
- Are only clients with poor oral hygiene are diagnosed with cavities or is this generalized?
- Why are pit and fissure sealants not utilized as a preventive measure for cavities?

### Methods

In my report, the primary data sources I will utilize include surveys of the sample group of clients (adolescents) to evaluate their level of motivation and knowledge on the risk and preventive factors of cavities. I will also include interviews with Dr. Anand and the dental hygienists since they are key members of the team interacting directly with the clients to provide care. I will be open to their suggestions on how to decrease the caries risk overall. The secondary data sources I will use is journals and articles related to dental hygiene.

# **My Qualifications**

I have been practicing dental hygiene for the last thirteen years and restorative dental hygiene for last six years at Springdale Family Dental. My experience has helped me gain an insight on the many preventive aspects of the dental field. I have confidence that my skills and experience will facilitate the research process for the report.

# Conclusion

It is concerning that there is an increased number of these clients diagnosed with caries. It necessitates the taking of action to decrease the incidence of caries amongst the vulnerable group. The addressing of the inquiries will enable the dental team to assess the areas of weakness. I will also propose that

implementation of pit and fissure sealants be looked at since they are known for their efficacy in caries prevention. With your approval, I will begin my research at once.