POTENTIAL RISK AND LIMITATIONS OF ORTHODONTIC TREATMENT

| Orthodontic treatment for |
|---------------------------|
|---------------------------|

A requirement facing all practitioners of medicine and dentistry is that the patient, or the legal representative of the patient, give the practitioner informed consent. Informed consent indicates your awareness of the negative as well as positive aspects of orthodontic treatment.

You have my assurance that even though informed consent is a legal requirement of all practitioners of medicine and dentistry, I will endeavor to keep negative possibilities of orthodontic treatment to a minimum.

Perfection is our goal. However, in dealing with human beings and problems of growth and development, genetics and patient cooperation, achieving perfection is not always possible. Often a functionally and aesthetically adequate result must be accepted.

The length of treatment depends on a number of issues, including the severity of the problem, the patient's growth and the level of patient cooperation. The actual treatment time is usually close to the estimated treatment time, but treatment may be lengthened if, for example, unanticipated growth occurs, if there are habits affecting the dentofacial structures, if periodontal or other problems occur, or if patient cooperation is not adequate. Therefore, changes in the original treatment plan may become necessary. If treatment time is extended beyond the original estimate, additional fees may be necessary.

Throughout life, tooth position is constantly changing. This is true with all individuals regardless of whether they have had orthodontic treatment or not. Post-orthodontic patients are subject to the same subtle changes that occur in non-orthodontic patients. In the late teens or early twenties our patients may notice slight irregularities developing in their front teeth. This is particularly true if their teeth were extremely crowded prior to treatment. Minor irregularities, particularly in the lower front teeth, may have to be accepted. Some changes may require additional orthodontic treatment or in some cases, surgery. Some situations may require non-removable retainers or other dental appliance made by your family dentist.

Some cases will require the removal of deciduous (baby) teeth or permanent teeth. There are additional risks associated with the removal of teeth which you should discuss with your family dentist or oral surgeon prior to a procedure

In some instances, the enamel of the teeth may be affected during long-term orthodontic treatment if oral hygiene and diet control has been less than adequate. These soft white etched areas on the enamel surface are beginning decay. This undesirable scar can be prevented by careful brushing and avoidance of decay producing foods.

On rare occasions the nerve of a tooth may become non-vital. When this occurs, it can usually be related to trauma to the tooth from a fall, baseball or other blows to the tooth. Root canal therapy will be necessary if the loss of vitality of a tooth occurs.

A small percentage of non-orthodontic patients show evidence of root resorption (decrease in the amount of root surface or length) of some teeth. The incidence of root resorption is increased amongst patients undergoing orthodontic treatment and is considered a scar of treatment. Root resorption in the great majority of orthodontic patients does not jeopardize the health, function, longevity, or appearance of the teeth. In a very few patients, patient root resorption of over one third the length of the root can occur. This substantial decrease in size of the root can cause a problem requiring other dental procedures. In extreme cases it can result in a tooth loss. It must be remembered that this unusual decrease can occur in individuals that have never been treated by an orthodontist.

Periodontal (gum and bone) disease can develop or worsen during orthodontic treatment due to many factors, but most often due to the lack of adequate oral hygiene. You must have your general dentist, or if indicated, a periodontist monitor your periodontal health during orthodontic treatment every three to six months. If periodontal problems cannot be controlled, orthodontic treatment may have to be discontinued prior to completion

Occasionally, problems develop with the joint of the lower jaw. They may occur before, during and after orthodontic treatment. Variable symptoms include popping, clicking, restricted opening and/or discomfort, and can be present in individuals not undergoing orthodontic treatment. The variety of problems associated with the temporomandibular joint and muscles are referred to as temporomandibular joint dysfunction. Treatment is difficult and total resolution of the problem cannot be assured.

You can expect minimal imperfections in the way your teeth meet following the end of treatment. An occlusal equilibration procedure may be necessary, which is a grinding method used to fine-tune the occlusion. It may also be

necessary to remove a small amount of enamel in between the teeth, thereby "flatting" surfaces in order to reduce the possibility of a relapse.

No practitioner of medicine or dentistry can guarantee any result, but only indicate that everything possible will be done to resolve the particular problem. To this end you may have my assurance.

It is affirmed that the treatment objectives, treatment plan, alternatives, risks of adverse effect, probability of success and expected benefits have been explained to the patient/parent. Having been so informed, the patient/parent consents to the treatment.

| Patient/Parent | |
|-----------------------------|--|
| James W. Tinnemeyer, D.M.D. | Diplomate of the American Board of Orthodontics Specialist in Orthodontics |