<table>
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<tr>
<th>Principal Investigator</th>
<th>Katherine W L Vig  BDS,MS,D.Orth.</th>
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<tr>
<td>Co-Investigator</td>
<td>Ana Karina Mascarenhas BDS, Dr.P.H. - statistician</td>
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| Secondary Investigators| Bo-Hoon Joo DDS, MS, PhD – orthodontist calibrated in the PAR occlusal index  
Elizabeth Bennett BA, PhD – psychologist with expertise in questionnaire constructs. Previously developed a questionnaire for parental satisfaction with orthodontic treatment |
| Award Type             | Category 1.  
Biomedical Research Award |
| Project Title          | Orthodontic Treatment Outcomes: Effectiveness and Efficiency studies |
| Project Year           | 1998 – 1999  
1999 - 2000 |
| Institution            | The Ohio State University, College of Dentistry, Department of Orthodontics |
| Summary/Abstract (250 word maximum) | The purpose of this project was to compare the delivery of orthodontic care between orthodontists in private practice, with orthodontic care delivered in a graduate orthodontic program and pediatric dentists providing orthodontic care in a private practice setting. A lack of reliable, valid and generalizable data concerning the efficacy, effectiveness and utility of orthodontic treatment was central to this study. The cohort design of this project had several advantages with case ascertainment expenses being borne by the |
treatment facility, accrual of patients reflected the actual users of the services making for greater generalizability of the results and the selected process and outcome measures could be defined and measured and had been tested for validity and reliability. The specific aims included:

1. To compare the **quality, cost and value** of care provided by orthodontists and non-orthodontists (pediatric dentists)
2. To compare the **quality** of care provided by orthodontists in two different settings; an orthodontic graduate clinic and orthodontic private practice.
3. A comparison of the **cost** of orthodontic treatment and the duration and quality of care in the three different delivery systems.
4. Determine factors affecting the **value** of care from the patient’s perspective and identify the utility and quality of life issues in the three different delivery systems.

**Were the original, specific aims of the proposal realized?**

The original Specific aims and the Null hypotheses were tested and some of the results were surprising and others simply reflected that pediatric dentists were treating younger patients and the majority of pediatric dentists performed interceptive orthodontic treatment. This resulted in a residual malocclusion and was reflected in the final PAR scores. Orthodontists in both settings were doing comprehensive orthodontic treatment in the majority of their patients which increased the duration of treatment but were reflected in the quality of outcome as measured by the post treatment PAR scores. The orthodontists in private practice had an improved PAR score and quality of outcome compared to those patients treated in the other two settings although the duration of treatment, surprisingly, was longer.

**Peer reviewed Publications:**


**Abstracts:**


A final publication is in progress to provide an overall comparison and summary of the results of this study which will be submitted to the AJO-DO.

| Have the results of this proposal been presented? If so, when and where? If not, are there plans to do so? If not, why not? | Katherine WL Vig: Doctors Scientific Program: Comparison of Quality, Value and Cost in Orthodontics, **AAO National meeting, San Diego - 1999**  
Katherine WL Vig: Doctors Scientific Program “Outcome Measures in Orthodontics to Evaluate Quality, Cost and Value of Care,” **AAO National Meeting, Orlando - 2004** |