

Principal Investigator	Katherine W L Vig BDS,MS,D.Orth.
Co-Investigator	Ana Karina Mascarenhas BDS, Dr.P.H. - statistician
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

	<p>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:</p> <ol style="list-style-type: none"> 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.
<p>Were the original, specific aims of the proposal realized?</p>	<p>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.</p>
<p>Were the results published? If not, are there plans to publish? If not, why not?</p>	<p><u>Peer reviewed Publications:</u></p> <ol style="list-style-type: none"> 1. Mascarenhas, A.K., Vig, K.W.L. Comparison of Orthodontic Treatment Outcomes between an Orthodontic Graduate Clinic and Private Practice. J. Dent. Educ., Vol 66(1): 94-99, 2002. 2. Mascarenhas, AK, Joo B-H, Vig KWL. Parents' satisfaction with their child's orthodontic Care: A comparison of Orthodontists and Pediatric Dentists. Pediatric Dentistry 27:6 451-456 2005 <p><u>Abstracts:</u></p> <p>K. Mascarenhas, B.H. Joo, M.E. Bennett, K.W.L. Vig. Patient Satisfaction with Orthodontic Care between Orthodontists and Pediatric Dentists. J. of Dent. Res. 80: #440, 2001.</p> <p>Mascarenhas, A.K., Joo, B.H., Vig, K.W.L. Quality of Orthodontic Treatment between Orthodontists and Pediatric Dentists, J. Dent.Res., #1179, Vol. 82, 2003.</p>

	<p>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.</p>
<p>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?</p>	<p>Katherine WL Vig: Doctors Scientific Program: Comparison of Quality, Value and Cost in Orthodontics, AAO National meeting, San Diego - 1999</p> <p>Katherine WL Vig: Doctors Scientific Program: Outcomes of Orthodontic Treatment: A Comparison of Three Delivery Systems. AAO National meeting, Toronto – 2001</p> <p>Katherine WL Vig: Doctors Scientific Program “Outcome Measures in Orthodontics to Evaluate Quality, Cost and Value of Care,” AAO National Meeting, Orlando - 2004</p>