

Oral Health Practitioner Economic Impact on Delivery of Dental Care Summary

Several Oral Health Workgroup members have provided preliminary background data to include in the economic scenarios that describe the impact Oral Health Practitioners will have on the delivery of dental care. A preview of some of the data and assumptions follows:

1. PrimeWest used their 2007 dental claims and service experience, and familiarity with dental access challenges for Minnesota Health Care Program (MHCP) members to develop an estimate of the unmet need OHPs could address if they served a mix of MHCP patients. For example, a budget of \$200,000 in payments per OHP, including all related business costs, would be consistent with 681 unique patients per year receiving preventive/diagnostic or restorative services from 10 OHPs, totaling 1,325 visits at an average cost of \$151 per visit.
2. Dr. Craig Amundson used DHS' 2004 statewide dental utilization data for age 0-20 and 20+ cohorts, as well as HealthPartners Dental Group's Relative Time Unit (RTU) measures of production as a means to assess the potential impact of OHPs on production potential and cost. Using an OHP model for this patient group, 69% of the relative time unit production that can currently be performed only by a dentist would be eligible for care by an OHP. The amount is higher for children (82%) and lower for adults (64%). If the oral health practitioner is not able to provide exams, make diagnoses and prescribe treatment within their scope of practice, then the potential outlined above decreases from 69% to 48% using the same data. A separate analysis using HealthPartners dental claims data for public program enrollees produced a similar result, 68%.
3. Apple Tree Dental envisions that adding OHPs to its oral health teams would help it deliver a full scope of services more cost-effectively. Their analysis projects that the addition of oral health practitioners to their workforce could reduce overall costs by approximately 11%, which translates into a savings of about \$50,000 per full-time equivalent oral health practitioner, per year. In addition, fewer dentists would be needed to perform an identical mix of services. Cost reductions obtained by adding oral health practitioners to their integrated team model would allow expansion of their programs to serve additional MHCP patients in need of dental care. Apple Tree's analysis concludes that MHCP operating losses could be reduced, but not eliminated with the addition of OHPs. Apple Tree's program offsets these MHCP losses with other earned income as well as by grants and gifts.
4. Community Dental Care has two clinic locations with 16 operatories (Maplewood and East St. Paul) and anticipates hiring 2 OHPs. They expect to serve 13,000 patients in 2008. Their client population includes 90%+ individuals on public programs: 50% of which are children, 80% are patients of a minority population, including 60% Asians. Their East St. Paul Clinic is in a Dental HPSA. Start-up costs per OHP in the *metropolitan area* are approximately \$20K, which includes supervising dentist time, lost dentist production time and equipment. Estimated operating costs include \$190/patient (average) for members of the dental team and clinic overhead. They estimate a typical clinic production per dentist/OHP at \$200/patient, where OHPs will serve 6 patients/day after 6 months at a wage of \$40-\$50/hour, or a percentage of production. Additional estimates of starting costs in rural areas are \$60,000

for leasehold improvements, \$100,000 for equipment for a two operatories, \$80,000 in OHP Salary/year and \$50,000 for working capital.

5. Children's Dental Services (CDS) has the capacity to hire 3-5 OHP candidates over the next 3 years. Essentially all of CDS' targeted service areas are federally designated Medically Underserved Areas (MUAs). CDS is designated as a Critical Access Provider. CDS currently employs 9 dentists, all of whom have agreed to provider supervision to OHPs and/or hygienists in collaborative practice. Employing OHPs would significantly reduce CDS' employment costs and gaps in professional personnel, as CDS currently struggles to retain a full staff of dentists because of the lack of available dentists and soaring salary costs. OHPs would assist CDS in expanding care to the more than 1,000 additional patients per year that request its care in the Twin Cities and in greater Minnesota including Duluth and St. Cloud. CDS anticipates that startup costs to work with OHPs would be approximately \$15,000 total, with the cost of startup operatories to be approximately \$25,000/OHP, however the use of OHPs would reduce CDS' costs by as much as \$100,000/year once a full complement of OHPs is hired.
6. Dr. Michael Flynn proposed two scenarios: If OHPs were paid \$30/hour salary, worked 52 weeks/year, with benefits at 28%, they would earn \$79,200/year. Collected production needed was determined to be 3 x \$79,200 or \$237,600 with a productive hour cost of $\$237,600/1840 = \$129/\text{hour}$. An OHP salary of \$40/hour with the same benefits results in a cost of 3 x \$106,496 or \$319,488 with a productive hour cost of \$174/hour. With a patient mix of 50% fee for service and 50% MHCP, revenue equals \$133/productive hour. Therefore, at \$30/hour, the OHP generates a profit of \$4/hour, whereas at \$40/hour, a loss of \$41/hour is created.
7. The University of Minnesota anticipates needing \$388,000 in facility upgrades, equipment and furnishings, as well as \$645,050 in faculty/staff recruitment costs for their two programs. Non-inflation adjusted tuition and fees for the 40-month Bachelors program is projected to be \$36,345 for residents and \$90,165 for non-residents, while the non-inflation adjusted tuition for the 28-month Masters program is projected to be \$28,395 for residents and \$70,165 for non-residents.
8. Metropolitan State University of the Minnesota State Colleges and Universities system is currently in the pre-design process for a new Health and Science building at Metropolitan State University in 2014, although the OHP program is not dependent on any foreseeable capital requests or projects. Current graduate tuition and fees are \$350.00 per credit. They anticipate charging between \$1500.00 and \$2000.00 for the five clinical courses. The total amount of money generated by 15 students for 44 credits is approximately \$380,000.00. MnSCU anticipates annual personnel costs for faculty and administrative staff to be approximately \$290,000.00 (including fringe); and anticipate that an operating budget of approximately \$30,000.00 would be required. This may be slightly higher in the start-up phase of the program to cover marketing, and other support services for students.