Dental Therapists:
Evidence on Technical Competence

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Motivation

• Why are social workers interested?
  – access to care

• Dental therapists are one possible solution
  – common elsewhere, but not in the US
  – why?
Methodology

• Goal: identify every article on the topic
  – followed references and citations
  – keywords: U of M library data base, Google
  – contacted key informants

• 23 unique studies
  – technical competence / irreversible procedures
  – over 50 years, 6 countries
  – more than other recent reviews
Methodology, 2

- Meta-analysis not possible

- Categorized into 3 types of study
  - observational
  - experimental
  - other empirical

- Systematic presentation
Observational Studies

• 5 reports
  – 3 from early 1950s; 2 from 1972
  – based on fact-finding missions to New Zealand

• Limitations
  – 2 studies entirely impressionistic
  – 1 exhibited clear biases, methodological errors

• Findings
  – 4/5 came away with positive impressions
Experimental Studies

• 5 studies
  – all from the 1970s
  – 4 conducted in the US, 1 in the Netherlands
  – complete restorations
  – compared specially trained hygienists to dentists

• Findings
  – all found hygienists performed as well as dentists

• Limitations
  – small samples
  – Dutch study hard to assess
Other Empirical Studies

• 13 studies
  – 1960s – 2011
  – 1 from New Zealand, 3 from Canada, 3 from Australia, 2 from UK, 3 from Alaska
  – range of methodologies

• Findings
  – only 1 drew negative conclusions

• Limitations
  – some of the control groups were not perfect
  – some samples were small
  – some were not blind
  – studies of DHATs may be weakest
Conclusions

• Of nearly 2 dozen studies reviewed:
  – all but 2 conclude that dental therapists perform at an acceptable level
  – every study that directly compares their work to that of dentists finds they perform at least as well

• All but 4 studies are over 20 years old
  – suggests a consensus outside the US
Regardless of whether dental therapists would be the most effective intervention for improving access to oral health care in the US, the evidence clearly suggests they are clinically competent to safely perform the limited set of procedures that falls within their scope of practice.
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Typical Dental Therapist Training and Scope of Practice

• Training
  – originally 2 years post-HS (DHAT)
  – now combined hygienist/therapist university degree

• Scope of Practice includes:
  – restorations
  – non-surgical extractions
  – pulpotomies and pulp capping

• Supervision, Settings, and Patients
  – work under the general supervision of, or in a consultative arrangement with, a dentist
  – originally only in public settings
  – originally just children
Statement of the ADA

to the Committee on Indian Affairs and the Committee on Health, Education, Labor and Pensions, U.S. Senate

July 14, 2005

• “The dental community, including the ADA, ADS, American Association of Oral and Maxillofacial Surgeons, the Academy of General Dentistry, and the American Academy of Pediatric Dentistry unequivocally oppose dental access solutions that would put patients at risk by allowing non-dentists to perform irreversible surgical procedures such as extracting teeth, drilling cavities, or performing pulpotomies (which are similar to root canals)”
ADA Comment
on AAPHD Dental Therapist Curriculum Development
June 10, 2011

• “...the Association will not erode its unequivocal opposition to non-dentists performing surgical/irreversible procedures, or to other proposals that we believe run contrary to the public good.”
Statement of Kevin J. Robertson,

Executive Director of the Kansas Dental Association
before the Kansas State Senate Public Health and Welfare Committee
March 9, 2011

• “The KDA believes that all Kansans deserve access to safe and quality oral health care and to a dentist to provide for their diagnostic, restorative, and surgical dental needs. Dentists across Kansas believe that SB 192 jeopardizes patient health and safety.”