Staying up-to-date …
for the next 35-40 years

Oral Health Care Delivery
October 13, 2004
Session 3. Part II

What is a profession?
- A monopoly
- How do we get this privilege?

What is a profession?
- Expertise –
- Code of ethics
- What do we get in return?
- Autonomy

Challenge of the profession/al
- Challenge of maintaining expertise
- Staying up-to-date in your field

Types of information directed at clinicians
- 1) Info that describes available treatments
  – without providing a basis for choosing among them
- 2) Info that describes biomedical/dental research results
  – without exploring their clinical implications

Types of information directed at clinicians
- 3) Info designed to deliver practice-relevant information
  - Effectiveness and outcomes research
  - Information concerning which practices lead to better outcomes
Effectiveness and outcomes research
- **Goal** is to improve the quality of health care provided to patients
  - Especially health outcomes
- How to reach the clinician and make this happen?

Effectiveness and outcomes research
- **Dissemination issues**
  - Need to reach practitioners
  - Crucial role in determining whether goal is realized
- **Behavior change issues**
  - Effectiveness/outcomes research will not have an impact if...
  - It does not convince practitioners to comply

Dissemination of information
- **Process of communicating information**
- **Sources**
  - Biomedical/dental research
  - NIH panels
  - Professional associations

Dissemination of information
- Transmitted through various media
  - Journals
  - Conferences
  - Word of mouth
  - Popular press

Dissemination of information
- Reaches various audiences
  - Policymakers
  - Health care providers
  - Payers
  - Consumers

Does dissemination of information change behavior?
- It is assumed
- That when providers encounter new information
- Suggesting they should change the way they treat their patients
- That they are willing to change
### Does dissemination of information change behavior?
- Quality of care likely to be achieved
  - Only if relevant research findings and guideline recommendations
  - Appropriately incorporated into practice

### How does profession influence behavior?
**Modes of professional influence**

1) **Regulatory influence**
   (Threat of punishment/prospect of reward)
   - Third-party reimbursement policies
   - Threat of malpractice
   - Sanctions by peer review or other authoritative bodies

2) **Normative influence**
   Impressions of what the profession expects you to do
   - What your colleagues expect you to do
   - What the “experts” expect you to do
   - What your patients expect you to do
   - What the professional leadership expects you to do

3) **Informational influence**
   Factual influence
   - Providing information that leads to belief that should change your practice

### Informational influence

- Informational influence – mode of influence that characterizes dissemination efforts
  1. Randomized clinical trials
  2. Consensus recommendations
  3. Clinical practice guidelines
  4. Continuing education courses

### 1) Randomized clinical trials
- Results of randomized clinical trials reported by scientific investigators
  - Seek to document their methods and results for the scientific community
  - May have no specific intent to shape practitioner’s behavior
Systematic reviews in dentistry


Use of the “systematic review” as alternative in dentistry

- 1) Identify questions to be answered
- 2) Define study inclusion/exclusion criteria
- 3) Conduct literature search
- 4) Abstract the articles
- 5) Evaluate the evidence

RCT’s – influence clinician’s behavior?

Fineberg reviewed many studies of effects of clinical evaluations on physicians’ behaviors
- Despite difficulty in discerning long-term effects of RCTs – clear that physicians do not respond rapidly or in large numbers to newly published findings of RCTs
- In many cases, little or no change in practice even after a considerable amount of time

2) NIH consensus conferences

- One of the most visible activities aimed at disseminating information on state-of-the-art therapy
- National Institutes of Health (NIH) Consensus Development Program
  - conducts evaluations of biomedical/dental technologies
  - produces and disseminates consensus statements
  - aimed at health care providers, the public, and the scientific community

NIH consensus conferences

- Consensus statements prepared by a nonadvocate, non-Federal panel of experts based on:
  - 1) presentations by investigators working in areas relevant to question
  - 2) presentations made during 2-day public session

NIH consensus conferences

- 3) questions and statements from conference attendees during open discussion periods are part of the public session
- 4) closed deliberations by the panel during the remainder of the second day and morning of the third
NIH consensus conferences

- 5) statement is an independent report of the panel and not a policy statement of the NIH or the Federal Government
- 6) statement reflects the panel’s assessment of knowledge at the time written
  - Provides a “snapshot in time” of the state of knowledge
  - When reading the statement, keep in mind that new knowledge is inevitably accumulating through research

NIH Consensus Conferences pertaining to dentistry

- Dental implants: benefit and risk – June 1978
- Removal of third molars – Nov 1979
- Dental sealants in the prevention of tooth decay – Dec 1983
- Dental implants – June 1988
- Oral complications of cancer therapies: diagnosis, prevention, and treatment – April 1989
- Diagnosis and management of dental caries throughout life – March 2001

NIH consensus conferences

- Study evaluating the NIH Consensus Development program – Rand Corporation – David Kanouse
  - Used medical record review (behavior) to examine changes in hospital-based procedures that were subject of conference
  - Physician’s self-reported preferred practices were strongly related to what actually did
  - Although program’s dissemination effort was moderately successful at reaching the appropriate target audience
  - the conferences mostly failed to stimulate changes in physicians’ practices.

Clinical practice guidelines (CPG)

- Systematically developed statements
  - to assist practitioner and patient decisions
  - about appropriate health care for specific clinical circumstances
- Their successful implementation should improve quality of care
  - by decreasing inappropriate variation
  - and expediting the application of effective advances to everyday practice

Clinical practice guidelines (CPG)

- Despite wide dissemination
  - guidelines have had limited effect on changing clinician behavior
- Little is known about the process and factors
  - responsible for how clinicians change their practice standards
  - when they become aware of a guideline

Barriers to CPG adherence

- Adherence to guidelines may be hindered by a variety of barriers
  - A theoretical approach can help explain these barriers
  - possibly help target interventions to specific barriers
Barriers to CPG adherence


- Barrier defined as “any factor that limits or restricts complete physician adherence to a guideline”
- Focus on those that could be changed
- As a result did not consider age, sex, ethnic background, or specialty of the clinician

Knowledge-related barriers

- Lack of awareness
  - The inability to correctly acknowledge a guideline’s existence
- Lack of familiarity
  - Included the inability to correctly answer questions about a guidelines content as well as self-reported lack of familiarity

Attitudinal barriers

- Lack of agreement
  - Differences in interpretation of the evidence
  - Belief that benefits not worth patient risk, discomfort, or cost
  - Applicability to the practice population
  - Guidelines oversimplified or “cookbook”
  - Guidelines reduce autonomy
  - Authors’ lack of credibility, bias

Attitudinal barriers

- Lack of self-efficacy
  - Belief that s/he cannot perform guideline recommendation
- Lack of outcome expectancy
  - Belief that performance of guideline recs will not lead to desired outcome

Attitudinal barriers

- Lack of motivation/
- Inertia of previous practice
  - Habit
  - Routine

External barriers

- Patient factors
  - Inability to reconcile patient preference with guideline recs
- Guidelines
  - Guideline characteristics
    - Difficult to use
    - Not convenient
    - Cumbersome
    - Confusing
    - Presence of contradictory guidelines
External barriers

- Environment
  - Lack of time
  - Lack of resources – insufficient staff or consultant support
  - Lack of reimbursement
  - Perceived increase in malpractice liability