CHANGES IN HEALTH CARE: IT’S A GOOD THING

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Integrated Dental Medicine

• Is based in the fact that oral health is a vital aspect to overall systemic well being

• A partnership between all health care providers that identifies and creates a care structure with the areas of overlap that can improve the patient experience

• Sets goals to improve both oral and systemic outcomes
  • Systemic treatment with dental care

Levels of Integration

• Low (basic/simple)
• Moderate
• High
• Creative
Levels of Integration

- **Basic Level Integration**: A bi-directional cross-referral process supporting referrals from dental to medical and vice-versa; consistent appointment queries during patient encounters for appointment due dates; use of cross promotional propaganda; BMI, blood pressure, and heart rate measurements administered in the dental setting.

- **Moderate Level Integration**: All providers possess a basic understanding of complementary disease processes; appropriate application of medical and dental interventions; target population identification and understanding; achieving or nearing meaningful use; partnerships facilitating community outreach; topical fluoride application in the medical setting.

- **High Level Integration**: A high percentage of patients having seen both medical and dental providers on a regular basis; population health care coordination; implementation of a quality assurance plan; sharing of systemic disease benchmarks; high level medical and dental screenings.

- **Creative Level Integration**: A ‘wide-open’ level that should encourage innovation, allows creativity, and facilitates professional and patient development.
Target Populations

• Based on Population Health
• Assess the most at risk populations with individual practices and start by focusing on those patients
• Reach a level of success with those individual populations and move onto the next
Integration = Cost Reduction
Aetna’s Data Warehouse Analysis - 2006

- Considered the first major integration, closed-claims analysis
- 2 years of service evaluation
- 116,306 members that had continuous medical and dental coverage evaluated in study
- Evaluated three possible chronic conditions
  - Diabetes
  - Coronary Artery Disease
  - Cerebrovascular Disease
- Evaluated cost as it relates to dental diagnosis (not received treatment or no treatment comparison)
Aetna’s Data Warehouse Analysis - 2006

• Periodontitis treatment groups had a lower retrospective risk for their chronic condition than patients without periodontitis treatment.

• Recommend examination of the oral cavity for patients with diabetes, coronary artery disease, and cerebrovascular disease.

• Found a need for periodic dental visits for patients with diabetes and cardiovascular disease

• Patients with periodontitis had a higher cost per member per month than patients with gingivitis, other dental diagnosis or no dental diagnosis
United Healthcare: Medical Dental Integration Study - 2013

- Study compares the medical and pharmacy costs of individuals with six chronic medical conditions with the dental treatment they receive to determine if there is a difference in total health care costs associated with dental treatments.
  - Diabetes
  - Asthma
  - Congestive Heart Failure
  - Coronary Artery Disease
  - Chronic Obstructive Pulmonary Disease
  - Chronic Kidney/Renal Failure
United Healthcare: Medical Dental Integration Study - 2013

• Utilized 3 years of dental claims experience with 2 years of United Healthcare Evidence Based Medicine and episode treatment group claims analysis.

• Summary
  • Net medical costs (including pharmacy costs) for members who received dental care was on average $1,037 lower per individual than medical costs for members not receiving care, after adjusting for extra expense of dental care.
  • The largest medical savings ($1,849) were for members who were not medically compliant with their disease management program.
  • Biggest impact related to members who received frequent cleanings and/or periodontal maintenance.
United Healthcare: [Non-Med Compliant]
Medical Dental Integration Study - 2013

![Graph showing comparison between No Dental Care and Receiving Dental Care for various conditions like Diabetes, Asthma, CAD, CHF, COPD, and Renal Dx. The graph indicates a higher number of individuals receiving dental care for CHF and Renal Dx compared to those without dental care.]
Integrated Model (Cost Reduction)

- Cost Effective
  - Jeffcoat et al. found that $10,672 was spent for medical care for patients with diabetes who did not have periodontal treatment.
  - Revealed an average reduction of approx. 32% in cost per year of those with periodontal treatment.
Integrated Model (Cost Effective)

Reduction in Hospital Admissions: 61%
Reduction in Physician Visits: 41%
Reduction in Medical Costs: 32%

Study of individuals with diabetes who received:
- No Periodontal Treatment
- Periodontal Treatment
Medical Referral to Dental
Evaluating the Medical Referral Process

- Quality Study to evaluate pilot program of medical referrals into dental program
  - Urgent Need Appointments
- Analysis of all referrals until 50 (n=50) referrals were completed
- Total of 69 referrals evaluated with 19 no shows (27.5% no-show rate)
  - Total Division no show rate at time was approximately 4%
Evaluation of Medical Referral Process

• Completed referrals by 12 physician teams (n=50)
  • Referrals most likely completed by nursing staff and occasionally by front office
  • 2 physicians completing referral forms sent to CSCDM – 0% no show rate on these referrals
    • Add’l information – form completed in the presence of patient
Evaluation of Medical Referral Process

• Questionnaire to patients consisting of a series of care related questions
• Completed by all 50 subjects
Patient Questionnaire

• Have you been to the ER in the last year for the same oral/tooth issue that brought you here today?
  • YES: 48.0%
  • NO: 52.0%
Patient Questionnaire (Likert)

- 8 questions used the Likert scale to determine agreement with statement
  - 1- Strongly agree
  - 2- Agree
  - 3- Neither agree or disagree
  - 4- Disagree
  - 5- Strongly disagree
Patient Questionnaire (Likert)

• I found it unusual that my doctor/physician referred me directly to a dentist for care.
  • 1.16 ±1.69 (Strongly Agree)
• My teeth have a very important impact on my overall health.
  • 1.82 ±1.02 (Agree)
• It is absolutely necessary for the dentist to have knowledge of my own personal medical history or doctor treatment.
  • 1.74 ±0.99 (Agree)
Patient Questionnaire (Likert)

- Because the dentist only treats the teeth, it really is not necessary for him/her to know all of the medicine I take.
  - 3.02 ±1.62 (Neither)

- The dentist does not really need to know my entire medical history because I am being seen for an emergency/urgent care appointment.
  - 3.50 ±1.13 (Neither -to- Disagree)

- I feel it is very important for my doctor to talk with my dentist to help coordinate my complete health care.
  - 1.56 ±0.77 (Agree -to- Strongly Agree)
Patient Questionnaire (Likert)

• I prefer and enjoyed this process of my dentist and doctor/physician talking to each other during my appointments with them both.
  • 1.70 ±0.76 (Agree)
• I do not feel comfortable talking with the dentist about my medical history.
  • 4.02 ±0.98 (Disagree)
Systemic Improvement - Diabetes

- Meta analysis results propose a near 1% improvement in glycated hemoglobin (A1C)
- Some studies report higher level of improvement (10-20%) in patients that are medically non-compliant and/or considered as lower socioeconomic status
- Proposed to decrease incidence of cardiovascular risk with diabetic patients (chronic tooth pain)
Systemic Improvement – Cardiovascular Disease

• Lockhart et al. “conflicted data” / “not enough focus on missing teeth”

• Newer studies are focusing on connection of missing teeth and periodontal therapy
  • Older adults with 1 to 5 missing teeth and greater than 6 missing teeth, but not all teeth missing, were more likely to report presence of cardiovascular disease as compared with older adults who had no missing teeth.
  • Observed that adults who visited the dentist were less likely to report cardiovascular disease compared to those who did not visit dentists in the past year.
Systemic Improvement - Stroke

• Several studies have also reported a major positive association between periodontal disease and ischemic stroke, in stroke free patient populations.
• A new study completed at the Univ. of South Carolina also found periodontal disease is independently associated with recurrent vascular events in stroke/TIA patients and aortic arch thickness.
Systemic Improvements

- Late life depression
- Dementia
- Patients with Special Health Care Needs
- HIV/AIDS
- Cirrhosis
- Hormone related issues/disorders
- Asthma
- Autoimmune disease
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Questions???