Imagine to Reality
Integrating Risk Assessment in the Curriculum and Clinic

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Abstract

• Risk assessment is an essential component of evidence based dentistry in dental practice.
• This program details the curricular, clinical and technological factors in the implementation of a real-time, clinic wide, web based risk assessment tool.
• Risk assessment is a critical component of evidence based dentistry, but is underutilized in dental practice and education.

• The 21st century dental school must incorporate risk assessment with dental techniques to ensure students properly employ and integrate with the clinic’s electronic health record.
• The presentation identifies considerations in:
  – Selection of an application
  – Integration into the curriculum
  – Calibration of faculty and students
  – Application in sim lab
  – Application in clinic and research settings
  – The technological tasks performed to integrate the third party application into the dental school’s electronic health record.
Objectives

- Summarize background of periodontal risk recognition and its relationship to the shift from a surgical model of dental practice to a wellness model
- Define terms related to risk
- Consider case examples by subjectively assessing risk at these different levels
- Explore the consistency of the experts in their attempts at risk assessment
- Introduce the concept of standardized risk assessment
- Introduce PreViser Risk Calculator (PRC)
- Summarize validation data for PRC
Background

• Early studies
  • Suggested periodontitis was pandemic
  • Everyone would eventually get the disease
  • Marshall-Day 1955

• Later studies
  • Susceptibility varies
    • Loe et al. 1986
  • Lower prevalence for moderate to severe periodontitis then expected
    • Brown & Loe 1993
If only part of the population develops disease...

What makes them different?
What puts them at risk?
DEFINING TERMS

• RISK
  – Probability that an individual will get a specific disease in a given period of time

• RISK INDICATOR
  – Probable or putative risk factors identified in cross sectional, but not confirmed in longitudinal studies

• RISK FACTOR
  – Local, genetic, or environmental factors that, when present, increase the likelihood of disease. They are identified through longitudinal studies.
Periodontal Risk Assessment

• Consists of weighing the relative strengths of all risk factors present in order to quantify the risk for development or progression of periodontitis
Surgical Repair vs Wellness Model

- **Surgical Repair Model**
  - Historically entrenched
  - “A chance to cut is a chance to cure”
  - Often successful
    - Serino et al 2001
  - Lack of primary prevention emphasis likely compromises long term results

5 year Post Surgical Tx
Surgical Repair vs Wellness Model

- Wellness Model
  - Focus is on primary prevention
  - Early intervention for high risk subjects
  - Reductions in periodontal disease and tooth loss could be related to this conceptual shift
    - Hugoson et al JCP 2008
Is Risk Assessment Really Important?

• “Assessment of risk is an integral part of diagnosing and treating periodontal disease”
  – AAP World Workshop 1996 Annals of Perio

• “Effective treatment of periodontitis would be enhanced through development of multifactorial models for risk assessment”
  – 5th European Workshop on Periodontology, J Clin Perio 2005
Why a multifactorial model?

• Because increased risk occurs at these multiple levels...
  – Subject Level
    • Oral Hygiene / Motivation
    • Bone Loss in Relation to Age
    • Genetics & Systemic factors
  – Tooth Level
    • Mobility / Furcation
    • Residual Periodontal Support
    • Poor Restorations
    • Tooth Position
  – Site Level
    • BOP/Suppuration
    • PD/ CAL
Case examples
Case 1

- 35 YOA male, non-smoker
- Negative Medical Hx
- CC: Uneven gums
- 5% BOP, no PD > 4mm
- No family Hx of Perio
- Plaque index 12%
- No radiographic bone loss
- Dx: Localized Gingivitis secondary to poor restoration on peg lateral #7

No subject level risk, isolated tooth/site risk
Case 2

- 27 YOA female, non-smoker
- 6 months pregnant
- CC: “lower gums swollen/tender”
- 50% BOP, General PD > 8mm
- Plaque index 40%
- Mobility / Multiple missing teeth
- Rapid, Severe bone loss
- Dx: Advanced Generalized Aggressive Periodontitis

High subject level risk: rapid bone loss, young age, poor hygiene habits & education

High tooth/site risk: mobility, exudate, BOP
Case 3

- 75 YOA male, non-smoker
- Medical Hx: High BP (HTN)
- CC: Pain lower front teeth!
- 25% BOP, Exudate #24 & 25
- Local very deep PD / CAL
- Not aware of family perio Hx
- Plaque index 65%
- Generalized 0-10% bone loss
- Localized 90% bone loss
- Dx: Localized Acute Periodontal Abscess #24 & 25 with TFO

Unremarkable Subject level risk: poor OH
Isolated but significant Tooth/Site risk?
How do the experts fare in RA?

- Variability in RA is significant
- Lack of consistency may result in over / under treatment

- Persson et al JADA 2003
Different Tools

- Schutte & Donley 1996
  - Pt questionnaire
- Fors et al. Quintessence Int 2001
  - HIDEP Model
- Lang & Bragger 2003 (Lindhe Text 4th ed)
  - Continuous multilevel risk assessment
  - Periodontal risk calculator
- Cronin et al 2008
  - Cronin/Stassen BEDS CHASM Scale
Continuous Multilevel Risk Assessment

- % BOP
- Prevalence of residual periodontal pockets
  - >5 mm
- Loss of teeth (from 28)
  - Ignore 3rd molars
- % Bone loss/Age
  - Pick worst area
- Systemic / Genetic
  - Diabetes / IL-1 genotype +
- Environmental
  - Smoking
Continuous Multilevel Risk Assessment

- High Risk vs Low Risk

The larger the shaded area the higher the risk. This model has not been validated as of 2006.
The Periodontal Risk Calculator

- PRC by PreViser
- Developed by Page & Martin
- Validated in an untreated VA population using a Retrospective Cohort study design
- Provides hand out for patient that helps with case presentation
Longitudinal Validation of a Risk Calculator for Periodontal Disease

  - Retrospective application of risk calculator to 15 year patient database from VA hospital which had complete perio exam, xrays and thorough history & medical follow-up.
Periodontal Risk Calculator

• Based on nine factors
  – Age
  – Smoking history
  – Diagnosis of diabetes
  – History of Periodontal surgery
  – Pocket depth
  – Furcation involvements
  – Restorations or calculus below gingival margin
  – Radiographic bone height
  – Vertical bone lesions

• Weighted mathematical algorithm
  – Classifies from 1 (least risk) to 5 (highest risk)
  – Quantifies Disease level 1 -100 Scale (1= health – 100 = severe disease)

• Web accessible
  – www.previser.com
  – $6/pt
PreViser Risk Assessment*

% of Subjects with Tooth Loss


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Everyone agrees susceptibility to periodontitis is variable.

Everyone agrees that assessing risk at baseline and after active therapy is crucial to success.

Experts show wide variability in assigning risk levels.
  - Persson et al JADA 2003, 134:575

Only one risk assessment tool has been validated, but only in men and only in an “untreated” population.
Technology
Two Implementation Methods

• Stand Alone Application
• Integrated with case management system
Technology Challenges

• Stand alone software for private practitioner
  – Reduce redundant entry and storage
  – HIPAA compliance
• Most applications cannot be integrated within case management system
• May not have control over upgrades by 3\textsuperscript{rd} party vendor
Technology Goals to Integrate Risk Assessment

• Efficiency
  – Reduce redundant entry and storage of information
  – Integrate with case management system
  – Work Flow

• Conform with policies and guidelines
  – HIPAA
  – Clinic operations
**Dental Info**

- Periodontal Surgery for Pockets Has Been Done
- Bleeding on Probing
- Furcation Involvements
- Subgingival Restorations
- Vertical Bone Lesions
- Calculus on Radiographs or Below the Gingival Margin

**Oral Hygiene:**

- Excellent: improvement not possible
- Acceptable: slight improvement possible
- Unacceptable: substantial improvement needed
Choose the greatest measurement per sextant (not the average).
Periodontal (Gum Disease) Risk and Disease Analysis

Prepared By:

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Email: johnm@previser.net
Date Prepared: 07/21/1979

Prepared For:

Demo Joe Demo Thompson
Age: 41
Risk Assessment ID: 0809-2030-8537-4403-8033-077C-CA800030
Patient ID: 2D467602-5035-4216-A03B-AC086EBDD0E70

Risk of Gum Disease: 4

1 2 3 4 5

Risk predicts your future disease state. Your risk is determined by risk factors, which are distinct from the signs and symptoms of disease. Preventing disease requires treatment that reduces your risk factors. With routine dental care, tooth loss is 40 times more likely for an individual who has very high (5) risk compared to an individual who has low (1) risk. However, when risk is used to guide the selection of special treatment, tooth loss can be reduced 50% to 100%.

Your risk score of 4 is reflected against the chart to the left.

Disease State: 30

Generalized Moderate Periodontitis

Your disease state reflects the amount of damage caused by gum disease. As the disease state worsens, treatment increases in amount, complexity and cost. Tooth loss and the failure rate of repair are greater for individuals with higher disease state scores. Treatment can repair the damage caused by disease, but fails to help much in preventing new disease, and may even increase the risk of new disease. Disease prevention requires treatment that reduces your risk factors. The best treatment incorporates both repair (where needed) and prevention.

Your Score: 30

Characteristics of Health and Low Risk:

- No bleeding during exam or flossing
- X-rays show no bone loss
- No tartar below the gumline

Your Characteristics of Health and Low Risk:

- Bleeding during exam
- Moderate bone loss
- No tartar below the gumline

Analysis:

Best possible observation, but this could be incorrect and misleading if pockets are deeper than 5 mm.

Significant bone loss has occurred and additional bone loss could cause you to have a tooth extracted.

Best possible observation, which could be incorrect and misleading if pockets are deeper than 5 mm.
Web Based Application

• Opportunity to integrate with existing system!
• Understand how it works
Work Flow of Risk Assessment

1. **Student/faculty view risk score on e-form.**
2. **Risk Assessment Computer obtains risk scores and saves on e-form.**
3. **Preiser**
4. **Student enters risk assessment information.**
5. **E-form, risk assessment information is saved in axiUm.**
6. **Student gathers information during exam.**

The process is cyclic, with each step leading back to the first, forming a continuous loop.
<table>
<thead>
<tr>
<th>Form Question</th>
<th>Answer</th>
<th>Date</th>
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<tbody>
<tr>
<td>Calculated Risk Assessment Score</td>
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<tr>
<td>RPE Score (1 to 5)</td>
<td></td>
<td>10/08/2008</td>
</tr>
<tr>
<td>Disease Score (0 to 100)</td>
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<td>10/08/2008</td>
</tr>
<tr>
<td>Exam Date</td>
<td></td>
<td>10/08/2008</td>
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<tr>
<td>Report for Review</td>
<td></td>
<td>10/08/2008</td>
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<tr>
<td>Print Report in Clinic</td>
<td></td>
<td>10/08/2008</td>
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<tr>
<td>Patient History and Clinic Data</td>
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<tr>
<td>Oral Hygiene</td>
<td>1-2 per year</td>
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<tr>
<td>Periosteal Surgery for Pockets Has Been Done</td>
<td>Emergency</td>
<td>10/08/2008</td>
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<tr>
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<td></td>
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<tr>
<td>Subgingival Restorations</td>
<td>N</td>
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</tr>
<tr>
<td>Vertical Bone Lesions</td>
<td>Y</td>
<td>10/08/2008</td>
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<td>Calculus or Radiographs or Below the Gingival Margin</td>
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<td>10/08/2008</td>
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<td>Deepest Pocket Per Quadrant</td>
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</tr>
<tr>
<td>Upper Right</td>
<td>&lt; 5 mm</td>
<td>10/08/2008</td>
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<tr>
<td>Upper Anterior</td>
<td>&lt; 5 mm</td>
<td>10/08/2008</td>
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<td>Upper Left</td>
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<tr>
<td>Lower Right</td>
<td>&lt; 5 mm</td>
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<td>&lt; 5 mm</td>
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<td>10/08/2008</td>
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<tr>
<td>Radiographic Bone Height From CEJ</td>
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<td>Upper Right</td>
<td>2 - 4 mm</td>
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<td>Upper Left</td>
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<td>10/08/2008</td>
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</tr>
</tbody>
</table>
Interface State: Waiting 6 seconds for next check

# Incomplete Forms: 30

Printer Configuration

Test Print

Review Errors

Perform Query

axiUm Queries

Exit
Pseudo Code

• Check to see if any completed forms exist
• For each completed form
  – Extract info from axiUm form
  – Populate XML statement
  – Login to PreViser and exchange XML statement
  – Receive report from PreViser in XML format
  – Write Disease and Risk Score into axiUm
  – Print PreViser Report
Work Flow of Risk Assessment

- Student gathers information during exam.
- Student enters risk assessment information.
- E-form, risk assessment information is saved in axiUm.
- Risk Assessment Computer obtains risk scores and saves on e-form.
- Student/Faculty view risk score on e-form.
Benefits of Custom Solution

- Information integrated into case management system
- Reports sent directly to correct clinic printer
- Easier to monitor progress
Disadvantages of Custom Solution

• Requires more work to configure and maintain
Tips for Stand-alone Application

- Use workstation management software
- Add icon within the case management software.
- Use application database on personal network drive to generate assessment.
- Store information for case record in case management system.
- Have a plan to quickly restore damaged application database files.
Tips for Integrated Application

• Monitor uptime
• Develop plans for accommodating downtime of 3rd party application
RISK ASSESSMENT

General Health

Risk

Periodontal

Caries

Oral Cancer
Curriculum Integration
Risk assessment into the MUSoD curriculum
Periodontal risk into the MUSoD curriculum

Training & Calibration
MUSoD D2 student PRC Training and Calibration
Faculty Training and Calibration
How did we integrate PRC?
D2 Year

Clinical Dental Sciences

• Dent 480 Intro CP 4
  – Departmental Rotations
  – PRC Training & Calibration
  – Sophomore Recall Appts

• Dent 481 Interim CP
  – Soph Recall w/ S/RP appts
  – 1st ‘use’ PRC w/ PM pts

• Dent 482 Cl Dent P
  – Really ‘in’ clinic
  – Full use of PRC

Surgical Sciences-Perio

• Dent 452 Cl Perio Therapy

• Collaborate w/ RDH on all prophy, PM and S/RP appts

• Collaborate w/ Periodontist on all comp exams & perio tx planning and perio consults
D3 Year

**General Dental Sciences**
- Dent 510  Comp Pt Care 1
- Dent 513  CPC 2
- Dent 517  CPC 3
- All clinic all the time!
- Comp care for all pts
- Responsible for all recall, PM, S/RP and reeval for all assigned patients
- Full use of PRC

**Surgical Sciences- Perio**
- Dent 511  SS Cl Pract 1
- Dent 514  SS CP 2
- 4 quad S/RP w/ RDH eval
- S/RP Competency
- 2 Completed Perio Cases
- Collaborate w/ RDH on all prophy, PM and S/RP appts
- Collaborate w/ Periodontist on all comp exams & perio tx planning and perio consults
D4 Year

**General Dental Sciences**
- Dent 564 Sr Cl Pract in Comp Care 1
- Dent 574 Sr. CPC 2
- All clinic all the time!
- Comp care for all
- Responsible for all recall, PM, S/RP and reeval for all assigned patients
- Full use of PRC

**Surgical Sciences- Perio**
- Dent 562 Sr Cl Pract in SS 1
- Dent 572 Sr CCP in SS 2
- Completion of Mock Boards
- 3 Completed Perio Cases — 5 total (min 2 surg + 3 nonsurg)
- Collaborate w/ RDH on all prophy, PM and S/RP appts
- Collaborate w/ Periodontist on all comp exams & perio tx planning and perio consults
D1 Year

General Dental Sciences
- Dent 401 Foundations 1
- Dent 411 Intro to Cl Pr 1
- Dent 440 Dental Rounds 1
- Dent 402 Foundations 2
- Dent 412/413 ICP 2 & ICP 3
- Dent 441 Rounds 2

Surgical Sciences- Perio
- Foundations 1 & 2
  - Perio section that includes general Risk Assessment Intro
- ICP 1
  - + 48 hours of perio lectures
  - + 48 hrs of perio sim lab
- ICP 2 & 3
  - Prophy Rotation
  - End Points Integration Project
  - Start ‘real’ patients
- Rounds 1 & 2
  - Roundtable of escalating perio cases that correlate w/ didactic topic applications
PRC in Sim Lab

• Skills are additive
• Dent 411 fall ICP
  – All perio exam evaluation
  – All instrumentation skills
• axiUm training w/ perio chart
• Caries and Perio Risk lectures
• PRC works right in
PRC in Clinic - New Patient

• All Comp Exams (D0150 / D0180) w/ FMX & BWX
  • Done after pt leaves as student has time
  • Retrieve from the printer
  • Considered in student work-up on comp tx plan
• Reviewed w/
  • Group Leader during initial comprehensive treatment planning
  • Periodontist at perio consult during initial perio tx planning or follow up appts
• Delivered to Patient
  • Presented to patient during presentation of periodontal section of comprehensive treatment plan
  • Printed information for patient - ‘take home’ reference
PRC in Clinic- Perio Maintenance Patient

• All Periodontal Maintenance Patients (D4910) at Annual Periodic Exams(D0120) appt w/ (V)BWX
  • Done after perio exam while pt is present
  • Retrieve from the printer
  • Considered by student in recall tx plan
• Reviewed w/
  • *Patient during OHI & follow up pt education
  • DDS during POE recall exam and treatment planning
  • w/ RDH during PM/recall
  • w/Periodontist during perio consult and follow up perio tx planning
• Printed information for patient as ‘take home‘ reference
Faculty Training and Calibration
D2 PRC Training and Calibration

• Scheduled as part of clinical training
• Scheduled w/ hands on computer time
• 10 students/ 3 hours
• Pod cast
• Practice time
  – Minimum 3 cases that match calibrated cases
• Calibration ‘test out’ time
  – Minimum 3 cases that match calibrated cases
• Unexpected outcomes
Clinical Assessment

A. Collect all clinical data in exam (D0150/ D0180/ D0120)

B. Important details

1. **Frequency of dental visits** in last year;
2. **History of periodontal surgery**
3. **Plaque** levels- Excellent (0-10%), acceptable (11-30%) unacceptable (>30%)
4. **Smoking history** and amount (Former, never, current smoker with amount/day)
5. Radiographic &/or explorer detected **Subgingival calculus** and/or **subgingival restorations**
6. Must know **diabetic status** based on HBA1c or FBG levels (call MD!)
7. Make note of **grade 2 furcations**
Radiographic Assessment

1. Only use Radiographs taken within **6 months**
2. **Survey** all radiographs by sextant
3. Pick the area(s) of **deepest bone loss in each sextant**
4. **Choose** the most **ideal radiograph of the deepest site** to make your **bone loss measurement** in each sextant
   - Minimal distortion and clear bone crest & PDL
   - **Vertical Bitewings** are best, PA’s can be OK, check beam geometry
5. **Measure from CEJ to first sign of PDL** along the root surface
   - For digital radiographs use measuring tool in application
   - For regular film use a UNC-15 perio probe
Radiographic Assessment: Picking the deepest site

This digital film is adequate, but not ideal.

It clearly shows bone loss beyond the 4 mm maximum measurement for this posterior sextant so no other sites in this sextant need to be measured.
Radiographic Assessment: Picking the deepest site

CEJ to first discernable PDL space.

Note vertical bone lesions between premolars.
Adjusting contrast / brightness can be done
Avoid using poor quality radiographs

Non-Diagnostic Radiographs should not be used for bone loss measurement.
Vertical rather than Horizontal BW’s are best
Poor beam geometry on PA radiograph

Radiograph is elongated as seen by cusp tips & Bone-CEJ relationship.

This digital radiograph can’t give accurate bone loss measurements in this sextant so make measurement on a better radiograph.

Bitewings usually give best beam geometry- vert BW’s usually catch the crest of bone.
Bone Height: 2-4mm

Distance between parallel lines is 2 mm

Courtesy PreViser Corporation, all rights reserved
Bone Height: >4mm
Distance between parallel lines is 2 mm

Courtesy PreViser Corporation, all rights reserved
Vertical Bone Lesion

Courtesy PreViser Corporation, all rights reserved
Furcation Involvement

Furcation involved

Furcation not involved

Courtesy PreViser Corporation, all rights
### Perio Risk Form

<table>
<thead>
<tr>
<th>Form Question</th>
<th>Answer</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculate Risk Assessment Scores</td>
<td>N</td>
<td>10/19/2006</td>
</tr>
<tr>
<td>Risk Score (1 to 5)</td>
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<td>10/19/2006</td>
</tr>
<tr>
<td>Disease Score (0 to 100)</td>
<td>15</td>
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<tr>
<td>Exam Date</td>
<td>09/14/2006</td>
<td></td>
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<tr>
<td>Patient Report</td>
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<td></td>
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<tr>
<td>Patient History and Clinical Data</td>
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</tr>
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<td>Dental Care Frequency</td>
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<tr>
<td>Smoking History</td>
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<td>Diabetic</td>
<td>Not Diabetic</td>
<td>09/14/2006</td>
</tr>
<tr>
<td>Oral Hygiene</td>
<td>Acceptable: slight improve pos</td>
<td>09/14/2006</td>
</tr>
<tr>
<td>Periodontal Surgery for Pockets Has Been Done</td>
<td>Y</td>
<td>10/19/2006</td>
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<tr>
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<tr>
<td>Deepest Pocket Per Sextant</td>
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<td>5 - 7 nm</td>
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<td>Radiographic Bone Height From CEJ</td>
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Periodontal (Gum Disease) Risk and Disease Analysis

Prepared By:
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Date Prepared: 07/21/1979

Prepared For:
Demo Joe Demo Thompson
Age: 41
Risk Assessment ID:
03000000-8E074D00-B7C70A0E0D00
Patient Previser ID:
03000000-8E074D00-B7C70A0E0D00

Risk of Gum Disease: 4

Risk predicts your future disease state. Your risk is determined by risk factors, which are distinct from the signs and symptoms of disease. Preventing disease requires treatment that reduces your risk factors. With routine dental care, tooth loss is 10 times more likely for an individual who has very high (5) risk compared to an individual who has low (2) risk. However, when risk is used to guide the selection of special treatment, tooth loss can be reduced 50% to 100%

Your risk score of 4 is reflected against the chart to the left.

Disease State: 30

Generalized Moderate Periodontitis

Your disease state reflects the amount of damage caused by gum disease. As the disease state worsens, treatment increases in amount, complexity and cost. Tooth loss and the failure rate of repairs are greater for individuals with higher disease state scores. Treatment can repair the damage caused by disease, but tends to help much in preventing new disease, and may even increase the risk of new disease. Disease prevention requires treatment that reduces your risk factors. The best treatment incorporates both repair (where needed) and prevention.

Your Score: 30

Characteristics of Health and Low Risk:
No bleeding during exam or flossing
X-rays show no bone loss
No tartar below the gumline

Analysis:
Best possible observation, but this could be incorrect
Significant bone loss has occurred and additional bone
loss could cause you to have a tooth extracted
Best possible observation, which could be incorrect and
misleading if pockets are deeper than 5 mm
Bleeding during exam
Moderate bone loss
No tartar below the gumline
Active Intervention You May Need

- Generally most effective
- May be effective
- Less likely to be effective

**REDUCE POCKETS 5-7mm**

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<th>Action</th>
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Pockets in the 5 to 7 mm depth range cannot be cleaned with a toothbrush and floss, and professional tooth cleaning tools don’t always reach the bottom of the pocket. Incomplete removal of plaque and calculus results in deeper pockets and tooth loss.

**POCKETS < 5mm**

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Pockets that are less than 5 mm deep can be thoroughly cleaned of bacteria and calculus most easily. However, all deep pockets were at one time less than 5 mm, so one should always watch for advancing disease. The optimal pocket depth is 3 mm or less.

Prevention and Maintenance

**VISIT THE DENTIST**

Symptoms are warning signs that frequently appear too late in the disease process for the simplest, most predictable, least costly treatment. Regular visits to detect disease in the early stages can prevent more complex and expensive treatment. Better still are regular visits for preventive care targeted to your risk factors.

- [ ] Four or more times per year
- [ ] Three times per year
- [ ] Less than three times per year or more than four times per year
Is Risk Assessment Really Important?

“The AAP believes the clinical use of risk assessment will become a component of all comprehensive dental and periodontal evaluations as well as a part of all periodic dental and periodontal examinations.”

Adapted from:
NEVER ASSUME!!!!!!!
Let's Talk Value

Instead of thinking about what you do
And what you buy in terms of money,
Think about them in terms of time....

Think about it..

What is worth spending your life on?
Seeing your work in that light just may
change the way you manage your
time.....
Persuasion

...is a form of social influence.

...is the process of guiding people toward the adoption of an idea, attitude, or action by rational and symbolic means.

Bring on the Students...
Methods of Persuasion

Appeal to Reason *(Tried This)*
- Logic
- Scientific Method
- Proof

Appeal To Emotion *(Starting This)*
- Imagination
- Propaganda
- Tradition
- Pity

Others: *(Hoping Not to Get to This)*
- Deception
- Brainwashing
- Coercive persuasion
- Mind Control

Students: Wiifm *(What’s in it for me) (Still under negotiation)*
Where were we?
Why?

Faculty:
- Too Hard for the patient to understand
- Clutters up my printer
- An extra step for something we already do

Students:
- Do I really need to do this
- It seems like a waste of time
- Is there a charge?
For OHIS™ assessed patients with Risk Score of 3...

20% Agreement with OHIS™

Conclusion: Clinicians can’t assess the risk of future disease

Courtesy PreViser Corporation, all rights reserved
Determining Student Participation

• Students are Smart
  – Found that if they just pressed print the computer documented that PreViser was completed.
  – Even this data was less than desired < _____ %
# Impact

## Periodontal (Gum Disease) Risk and Disease Analysis

**Prepared by:**
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**Risk of Gum Disease:** 4

- **More Risk**

1. Healthy
2. 2-3 Gingivitis
3. 4+ Beginning Gum Disease
4. 5+ Moderate Gum Disease
5. 6+ Severe Gum Disease

### Disease State: 30

**Generalized Moderate Periodontitis**

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Treatment Planning
I really enjoy color!!!!
Pictures help start the process
Types of Learning

- Spaced Learning
- Multiple Retrieval Cues
- Re-represent
I’m reluctant to change. So, I need to hear something new often enough that, at some point, it gets past my critical, distrusting mind, becomes more familiar, and touches my heart. Then it becomes a part of me.

My personal source: My student’s are impersonating me doing risk assessment.
The real voyage of discovery consists not in seeing new landscapes, but in having new eyes.

- Proust

The essence of knowledge is, having it, to use it.

- Confucius
Did you do the Risk Assessment?

FEB 09, 2009

Student: 1 “Hey Doc I think a may have a stupid question……”
Doc: “Let’s hear it”
Student: 1 “I have this patient with advanced disease and I am doing a rounds presentation tomorrow, Have any suggestions?”
Doc: “Did you do a risk assessment?”
Student: 1 “I never thought of it”
Doc: “It may give you a great place to start and give you many talking points.”
Student 1: “Great idea and I will do it now.”

Student 2 (That is over hearing this): “I have a patient like that too and I never thought about the risk assessment tool”
Doc: “Well there you go”

Patient Focused Learning
So we are back to Value

If you think it is important you have to put in the time (WE DO!)

Bring home the message in a variety of methods

Don’t just Lecture it........Live it........

Passion is the Key
Thank you!

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