Diagnostic Codes: Beyond Billing

Moderator: Irene V. Hilton, DDS, MPH
Dental Consultant
National Network for Oral Health Access
Objectives

• Explain how diagnostic codes are currently being utilized in dental programs.
• Identify key individuals and champions in your organization who could compose a planning and implementation team.
• Describe some of the strategies to overcome challenges in implementing diagnostic codes.
• Become aware of other diagnostic code systems that could be in future use.
What Are Diagnostic Codes?

- In healthcare, **diagnostic codes** are used to group and identify **diseases**, **disorders**, **symptoms**, human response patterns, and medical signs, and are used to measure morbidity and mortality.
History of Disease Classifications

- 1869: Royal College of Physicians (England)
- 1872: Nomenclature of Diseases (AMA)
- 1963: Current Medical Information and Terminology (CMIT) (AMA)
- International Classification of Diseases (WHO)
  - 17th century: ICD developed in England
  - 18th century: ICD use began in U.S.
  - 1950s: ICD used in hospitals to classify and index disease
  - Present: ICD-9 (9th revision) in use
- 2002: Systemized Nomenclature of Medicine, Clinical Terms (SNOMED-CT)
Other Commonly Used Diagnostic Coding Systems

- ICPC-2 (Primary Care, Europe)
- ICSD (Sleep Disorders)
- NANDA International (Nursing)
- Diagnostic and Statistical Manual of Mental Disorders or DSM-IV (Psychiatric)
Coding Systems in Dentistry

- ICD-9 Mostly under GI system, 520 series & ICD-10 K00-K14
- SNODENT (Systemized Nomenclature of Dentistry)- More than diagnosis/disease. Over 6,000 terms. Owned by ADA now.
- EZ Codes- Developed for & limited to dental schools (75% axiUm). 1,158 terms
**Medicine vs. Dentistry**

**Medical**
- Payment for inpatient services is based on diagnosis
- No payment for Medicare/Medicaid outpatient visit without diagnosis (ICD-9)
- Dx code must correspond to the treatment or services

**Dental**
- Payment is based on CPT (Clinical Procedure Terminology) code
- Outpatient visit does not require Dx code
- FQHC must use to bill Medicaid visits including dental
NNOHA Interest

- Starting 2010 member queries about Dx codes
- 2011 - convene panel using HRSA cooperative agreement
- Panel recommends environmental scan
  - Assess scope of utilization
  - Identify early adopters
  - Collect & disseminate promising practices
Environmental Scan

- **Online Survey**
  - 157/1700 responses
  - Used to identify early adopters for follow up focus groups

- **Focus Groups**
  - Structured interviews with 9 individuals from organizations using Diagnostic Codes “beyond billing”
Uses for Dx Codes

Bar chart showing the uses for Dx Codes:

- Billing: 80%
- Meaningful Use: 40%
- Quality Management: 30%
- Patient Management: 30%
- Utilization: 20%
- PCHH: 10%
Focus Groups Examples
Internal Use

- Risk assessment - proper clinical protocols
- Insure specific procedures performed on specific populations
- Real or dummy codes to track specific health & disease conditions
- Common language for interaction with medical colleagues
Focus Groups Examples

External Use

• Population disease prevalence- data used for needs assessments, grant writing
• Validates staffing allocation, project deliverables
• Directs outreach
• Share data with external partners i.e. oral health coalitions
Implementing Diagnostic Codes

- Small team
- 3-4 people
  - IT
  - Billing
  - Dental director
  - Front desk
  - Dental office manager
Training Challenges

- Initially- Implementation Team
  - Certified Professional Coders Association
  - Dental software companies
  - Billing dental procedures through medical

- Providers-why

- Staff- how

- Continuous- new staff, updates
Continuous Assessment

- Multiple PDSA cycles to troubleshoot daily implementation issues
- Continuous quality assessment of entered data
- Developing systems to flag errors
Identified Needs

• Resources & references
• Training programs
• Opportunities to connect with other users
• Sharing of promising practices
DentaQuest Institute

Jay R. Anderson, DMD, MHSA
Director of Clinical Operations
DentaQuest Oral Health Center

10/3/12
Organizational Profile

- Located in Westborough, Mass
- 13 chair Multispecialty Private Dental Practice
- 17,000 Patients of Record
- We have 3.5 FTE General Dentists, 1 Orthodontist, 1 Pediatric Dentist, .2 Endodontist, 8FTE Hygienists and 3 CDO
- We use Dentrix Enterprise 6.0-->6.5
- We have used Dentrix since 2007
Leaders in Improving Oral Health Care

Mission: Promote optimal oral health through efficient and effective care and prevention.
DentaQuest Oral Health Center Oral Disease Management Care Model

Caries Present → Preliminary Risk Assessment → Treatment Plan/Routine Risk Assess. → Engagement Letters and Phone Calls → Treatment → Caries Free

if disease re-emerges

Caries Management Plan
Preventive Product Prescriptions
Routine In-Clinic Maintenance
Targeted Patient Education
Routine At-Home Oral Hygiene
Diet Modification
Other Behavior Modification
Technology to Monitor Patient Data

Re-Engineering Practice to Improve Care
Creating a Culture of Disease Management

- Calibrating providers
- Diagnostic coding
- Building a disease management registry
How Diagnostic Codes Are Used

• We have created a simple yet effective method of using diagnostic codes to better treat our patients and to improve communication amongst the clinical team.
How Diagnostic Codes Are Used

We classify and code diagnosis at the exam appointment:
• Deep dentinal/cemental caries
• Caries
• Incipient caries
• Recurring caries/surface restoration
• Restoration, poor marginal integrity
• Fractured restoration
• Fractured tooth needs restoration
How Diagnostic Codes Are Used

• These conditions are captured in the electronic dental record.
• Capturing these codes allows us to formulate a risk based treatment plan i.e. all active decay must be controlled in order to reduce the patients risk of future disease.
How Diagnostic Codes Are Used

- These codes also facilitate the creation of a disease registry. This registry is used to track completion of phase 1 treatment (control of active caries).
- On completion of a carious restoration the condition (diagnostic code) is inactivated in the EDR.
- Therefore we have an accurate record of an individuals disease burden as well as the burden of disease in our population.
Diagnostic coding allows practitioners to define the stages of active caries.

These codes also present an accurate tool to best measure outcomes of care.

When we apply prescription therapies to patients at risk for caries we should be able to measure improvement in the enamel integrity over time.

Rather than the “watch” of the past we can now actively treat the lesion and hopefully facilitate the process of remineralization.
At the DentaQuest Oral Health Center we have developed a patient registry of disease. By capturing caries diagnostic codes in our electronic record we can differentiate between active disease and other non carious conditions such as fractured teeth. Further we can optimize treatment planning to eliminate active caries in a timely fashion thereby reducing the patient’s risk of future disease. Our registry also gives the functionality of measuring outcomes of care.
Implementation Story

• We are able to track disease on a lesion specific basis monitoring its status over time.
• The registry also allows us to assess the prevalence of disease in our patient population.
Future State

• The Oral Health Center will be participating in the beta testing of Dentrix 6.5 which includes a new Cambra Disease Management module.

• We will transition from our “home made” system to the Dentrix module upon successful implementation of the new module.
Challenges

- Implementing Diagnostic Codes means rethinking how care is delivered
- Requires retraining dental professionals to document diagnostic findings in an organized manner
- Incorporate findings into an evidence-based clinical decision-making process
- Requires IT support
- Requires data management systems
- Cultural change takes time and patience
Lessons Learned

*We will partner with our patients’ to reduce their risk of future disease*

- Perception of a different kind of care
- Contracts for wellness
- Contracts to always perform the most minimally invasive procedure
Recommendations: Creating a Culture of Disease Management

- Create champions
- Empower providers
- Speak as one voice
- Engaging staff through education and empowerment
- Introduce concepts gradually
- Envision gradual change over many months
Potential Uses and Benefits of Implementing Diagnosis Codes

- Supports evidence-based dentistry.
- Diagnostic codes could be helpful in promoting Meaningful Use, if oral health specific measures are adopted that require diagnostic code data for calculation.
- Facilitate the measurement of outcomes in Health Center dental programs, leading to better tracking for Quality initiatives.
Conclusion

• We believe the use of diagnostic coding and caries risk assessment is an important step in measuring outcomes of care in caries management programs.

• This is an essential element for quality improvement in the dental practice.
Community Healthcare Network

Gregory Taddeo, DDS
Dental Director
Organizational Profile
Community Healthcare Network

Our Mission
Community Healthcare Network (CHN) is a not-for-profit organization that provides access to quality, culturally competent and comprehensive community-based primary care, mental health care and social services for diverse populations in underserved communities throughout New York City.

Our Care
CHN offers a broad selection of services and programs for people of all ages. Our community health centers, offices, and mobile unit are located in the boroughs of Bronx, Brooklyn, Manhattan and Queens. CHN serves more than 70,000 individuals a year.

Our Vision
CHN envisions a time when all people, regardless of their ethnicity, finances, beliefs and citizenship will be provided basic health care throughout their lifespan. We strive to be a leader in providing high-quality, innovative, sustainable and accessible health care that promotes the wellbeing of the entire community.

Locations
• Williamsburg Brooklyn, East New York, Jamaica Queens, Manhattan (Harlem and Chinatown), LIC (Long Island City, Queens) – School Based Program
• 3 FTE dentists and 1 PTE hygienist. (2013 will have 5 FTE dentists with the opening of 2 new clinics in Oct 2012)
• 2011 = unique patients = 7371 and unique visits = 9,700
• 2012 = unique patients YTD = 5549 and unique visits YTD = 6,903
• EHR = eCW (eClinicalWorks version 9.0.35) and EDR = Open Dental version 11.1.9.0
How Diagnostic Codes Are Used

• We use integrated health electronic health records systems to identify and alert medical providers about special populations (Pre-Natal), Diabetes, ID), that need a dental referral. A clinical pop-up global alert based on the diagnostic code will notify providers/nurses to refer patients to dental services.
How Diagnostic Codes Are Used

• Data analysis of number of treated patients, patients requiring treatments, and types of procedures/treatments provided for special populations (ID, Prenatal, Diabetes).

• Run reports to compare the outcomes of patient (“Quantitative” and “Qualitative” analysis) care. Ultimately have better outcomes for the treatment of the individual
Implementation Story

- Key implementation team members: Dental Director, IT department and our “Senior Team” (CEO, CMO, CFO).

- Piloting two weeks with eCW and creating “Dental Templates” for providers to use for the next 2.5 years until we adopted our EDR “Open Dental”. Now use Open Dental integrated with EMR eCW.

- Development and utilization of “pop up alerts” for special patient populations based on medical diagnostic code. Getting the patients to the dentist (internal vs. external referrals). We addressed the “Internal Referrals” via “clinical pop-up global alerts” within our EMR eCW.
Billing Categories:

- CPT Codes
  - All Codes
  - All Codes
  - Cardiology
  - Cast/Splint
  - CPT2007
  - CPT2009
  - CPT2010
  - ENT/Eye
  - Excisions/Debr
  - GI
  - GU/Sterilization
  - HCPCS
  - Inject/Aspirate
  - Laceration repair
  - Modifiers
  - My Favorites
  - OB/GYN
  - Ophthalmology
  - Procedures

Billing 82962, GLUCOSE BLOOD TEST

Procedure Codes:
- 82962 GLUCOSE BLOOD TEST.
**Assessments**

<table>
<thead>
<tr>
<th>P</th>
<th>CODE</th>
<th>Diagnosis</th>
<th>Specify</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>V72.2</td>
<td>DENTAL EXAMINATION</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Procedure Codes**

<table>
<thead>
<tr>
<th>CPT</th>
<th>Name</th>
<th>Units</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>M4</th>
<th>ICD1</th>
<th>ICD2</th>
<th>ICD3</th>
<th>ICD4</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>D021C</td>
<td>INTRA ORAL-COMPL</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V72.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D014C</td>
<td>Limited Oral Exam</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V72.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D111C</td>
<td>ADULT PROPHYLAXI</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V72.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Billing Notes**

- 2-3 Ds 1 W 2 W 3 W 4 W 6 W 2 M 3 W 4 M 6 M 1 Y 1 pm
- Tooth #2 (D) amalgam

**Follow up**

- N/A
- Follow up N/A

**CDSS**

- D1110, ADULT PROPHYLAXIS

**Procedure Codes:**

- 82962 GLUCOSE BLOOD TEST.
This is where we add notes regarding the treatment completed.

Procedure Notes in the Dental Module
This can be accomplished by either:

1. Selecting the procedure(s) from the main procedure list.

2. Type the procedure code in the Procedure Code box directly under Enter Treatment.

3. Click on one of the Quick buttons or click on ALL & select from the list.
Using the Procedure Code box:

If the User knows the ADA Procedure code they can

- In the Procedure Code box, type the ADA Procedure Code

- Click the OK Button. If more information is needed the procedure info screen will pop up indicating that a surface or area needs to be selected (it will be highlighted in yellow).
### Treatment Plans

<table>
<thead>
<tr>
<th>Date</th>
<th>Heading</th>
<th>Signed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Default</td>
<td></td>
</tr>
</tbody>
</table>

### Treatment Plan Details

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>resin-based composite - two surfaces, posterior</td>
<td>0.00</td>
</tr>
<tr>
<td>14</td>
<td>resin-based composite - four or more surfaces, posterior</td>
<td>0.00</td>
</tr>
<tr>
<td>21</td>
<td>resin-based composite - two surfaces, posterior</td>
<td>0.00</td>
</tr>
<tr>
<td>32</td>
<td>extraction, erupted tooth or exposed root (elevation and/or forceps removal)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Subtotal**: **0.00**  
**Total**: **0.00**
Future State

• Use diagnostic codes data to meet state, federal, and external organizations regulatory and accreditation requirements e.g. HIVQUAL Compliance.

• Diagnostic code data provides a link between providers and public health authorities to address disease and its prevention.
Challenges

• Education and training is time consuming and costly with marginal room for error and modifications.
• System/Software Updates and the “Glitches” that come along with them.
Recommendations

Auto Notes/Templates

• These are pre-made templates that increase efficiency so the user does not have to keep typing in the same information each time.

• Templates containing the correct diagnostic codes allows for data analysis.
Conclusion

• An integrated EMR and EDR facilitates using diagnostic codes to identify & track patient populations
• Diagnostic codes offer a way to track and measure outcomes such as disease prevalence, incidence and appropriateness and quality of care
Using Diagnostic Codes in CHCs

HUONG N. Le, DDS
Dental Director
Asian Health Services
October 3, 2012
ASIAN HEALTH SERVICES (AHS)

- Oakland, CA
- Comprehensive scope, except orthodontics.
- Two sites:
  - main clinic Oakland, opened 2003
  - second site co-located with dental assisting training program at community college opened two years ago
- 6,000 dental patients/yr, 14,500 visits (medical 28,000 patients with 120,000 visits)
STAFFING & IT

- 16 P/T dentists including oral surgeon, 2 periodontists, 2 pediatric dentists providing oral conscious sedation, endodontist
- EDR since opening in 2003 - EMR expected to launch April 2013
- Dental on Dentrix, Medical will be on NextGen
- Do your EHR & EDR currently talk? Demographics only - Dentrix now has eRx (Surescripts/Allscripts) and medical is already on the same Allscripts platform
ICD-9 codes have been paired up with dental CPT (Current Procedural Terminology) codes. Possible differential diagnoses are attached to each CPT code.

**Procedure code:** 04341 Root Planning & Scaling/Quad  
**Diagnostic code:** 523.9 Periodontal Disease  
**Diagnosis code 523.6** Accretions on teeth, hard or soft material deposited on a tooth surface, such as dental calculus or plaque and materia alba.  
**ICD-9-CM 523.6** is a billable medical code that can be used to specify a diagnosis on a reimbursement claim.
Procedure Code: CPT Code  D 7140-Extraction, nonsurgical

Diagnostic code: 523.3 Acute periodontitis, periodontal abscess
Diagnostic code: 521.03 Caries, extending to pulp
Diagnostic code: 522.5 Periapical abscess
Diagnostic code: 520.6 Toothache due to obstructed/impacted tooth, delayed or accelerated eruption, incomplete and difficult eruption
Diagnostic code: 521.1 Excessive wear, attrition
Diagnostic code: 521.4 Pathological resorption
Diagnostic code: 873.63 Tooth fracture
Diagnostic code: 523.9 Toothache due to other reasons
Pregnancy as primary diagnosis for periodontal treatment

Procedure code: 04341 Root Planning & Scaling/Quad
Diagnostic Code: V22.2 Pregnancy
Diagnostic Code: 523.9 Periodontal Disease
DIABETIC PATIENT DIAGNOSED WITH PERIODONTAL DISEASE
MAP ICD 9 TO CDT CODE
IMPLEMENTATION STORY

- Dental Director, 17 years experience using ICD-9 in residency, Health Centers
- Since day one Dental Director programmed Dentrix- pairing the CPT and Diagnostic codes
- Training: Staff at orientation and regular staff meetings
- Continuous data quality process: regular reports of various codes, codes continuously updated as needed and appropriate
ARE WE READY FOR FUTURE CHANGES?

- ICD 10
- SNODENT
- EZ CODES
**ICD 10- COMING OCTOBER 1, 2014**

**ICD-9**

- **Procedure code: 04341** Root Planning & Scaling/Quad
- **Diagnostic Code: 523.9** Periodontal Disease
- **Diagnostic Code: 523.6** Accretions on teeth, hard or soft material deposited on a tooth surface, such as dental calculus or plaque and materia alba.

**ICD-10**

- **Procedure code: 04341** Root Planning & Scaling/Quad
- **Diagnostic Code K05.6** Periodontal disease, unspecified
- **Diagnostic Code K03.6** Deposits [accretions] on teeth
ICD-9 TO ICD-10 SNAPSHOT

ICD 9

- 521.1 Caries, incipient
- 521.2 Caries, extending to dentin
- 512.3 Caries, extending to pulp

ICD 10

- K02.9: Dental caries, unspecified
  - Localized destruction of calcified tissue initiated on the tooth surface by decalcification of the enamel of the teeth, followed by enzymatic lysis of organic structures, leading to cavity formation that, if left untreated penetrates the enamel and dentin and may reach the pulp.
  - The decay of a tooth, in which it becomes softened, discolored, and/or porous.
- K02.63: Caries-smooth surface, coronal surface caries penetrating into pulp
Signed MOU with ADA to beta test SNODENT last year - did not work out - ready to try again.

Example:

**Procedure code: 02150** Amalgam - two surf

**ICD-9 Diagnostic code: 521.02** Caries, extending to dentin

**SNODENT D5-10111** - simple dental caries

**SNODENT T-54014** - Mesial surface of tooth

**SNODENT T-54011** - Occlusal surface of tooth
In conversations with EZ Codes Team—may beta test them also.

Example

Procedure code: 02150 Amalgam - two surf
ICD-9 Diagnostic code: 521.02 Caries, extending to dentin
EZ Diagnostic Code: Z1240 Caries DEJ
EZ Diagnostic Code: Z1250 Caries +.5 pulp
**ICD9-EZ CODES-SNODENT MAPPING**

**Procedure code: 02150** Amalgam - two surf

**ICD-9 Diagnostic code: 521.02** Caries, extending to dentin

**EZ Diagnostic Code: Z1240** Caries DEJ

**EZ Diagnostic Code: Z1250** Caries +.5 pulp

**SNODENT D5-10111** - simple dental caries

**SNODENT T-54014** - Mesial surface of tooth

**SNODENT T-54011** - Occlusal surface of tooth
CHALLENGES

- ICD-9 training: Regular training required-since they are paired up with CPT codes.
- October 1, 2014: convert to ICD 10
- SNODENT: was not compatible with Dentrix, so had to stop. Will retry soon
- Dental providers are not trained in coding, only understand procedure (CPT) codes- new language
- Need a champion / super-user
LESSONS LEARNED

- Identify a champion/super-user
- Be patient: staff do not always understand the concept or the importance
- Be ready to update codes and retrain
- EDR has to be compatible and allows updates
- Resources: www.ICD10Data.com -free
RECOMMENDATIONS

- Have to want to do it and learn it
- Make time to program and train-EHR will make it easier
- Get input from all providers even if they are initially not interested
Dentistry needs to embrace diagnostic codes for what they are, not because of billing

Evidence base

Prepare for the future: pay for performance, outcome measures, meaningful use compliance
Thank You & Questions?

Jay Anderson
jayrosamond@gmail.com

Greg Taddeo
drgregorytaddeo@yahoo.com

Huong Le
hle@ahschc.org

Irene Hilton
irene@nnoha.org