Improving the Quality of Oral Healthcare through Case Management

Module 4

Process and Outcome Measurement

MSDA
MEDICAID | MEDICARE | CHIP
SERVICES DENTAL ASSOCIATION
Acknowledgements

Improving the Quality of Oral Healthcare through Case Management is a professional education and training program designed to advance the knowledge, skill, and competency of the dental workforce.

The curricula is made up of 6 training modules which have been made available through the generous support of the following organizations and agencies:

- Rhode Island Department of Health
- Rhode Island Executive Office of Health and Human Services
- Rhode Island Dental Association
- Medicaid | Medicare | CHIP Services Dental Association
- Health Resources and Services Administration
Goals of the Course

To provide professional education and training to dental personnel in an effort to:

1. Improve the quality oral healthcare services;
2. Improve the oral health outcomes of all;
3. To lower the costs of oral healthcare across the healthcare delivery system.
Overview of the Course

I. Introduction

II. Learning Modules:
   1. Principles of Quality Improvement
   2. Principles of Medicaid Dental Practice Management - Part 1
   3. Goal Setting
   4. Process and Outcome Measurement
   5. Principles of Medicaid Dental Practice Management - Part 2
   6. Principles of Case Management
   7. Module Post-tests

III. 1.5 Continuing Education Units (CEU) will be granted upon completion of each module and submission of the respective post-test.

IV. RI EOHHS Certification will be granted upon completion of all modules and post-tests and submission of all post-tests.
Advisory Team and Faculty

- Robert Bartro, DDS
- Paul Calitri, DMD
- Marty Delpapenna, RDH, MEd
- Jeff Dodge, DMD
- Mary Foley, RDH, MPH
- Deborah Fuller, DMD
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- Beth Marootian
- Timothy Martinez, DMD
- Lynn Douglas Mouden, DDS, MPH
- Joan Pillsbury
- Renee Rulin, MD
- John Verbeyst, DMD
Module 4 Learning Objectives

- Upon completion of this module, learners will understand:
  - Difference between QI and QA
  - QI Strategies for Medicaid Dental Practice Management
  - Assessing Strategies through Measurement [Plan-Do-Study-Act]
  - Measuring QI-Using data
  - Data collection
  - Dashboard development and routine data analysis
Plan-Do-Study-Act

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?
Reviewing Weekly Data

Data Dashboards
### Goal 1: Access

Office Data Dashboard

<table>
<thead>
<tr>
<th>Weekly Objective: Office Staff to Determine</th>
<th>Dec 13th</th>
<th>Dec 20th</th>
<th>Dec 27th</th>
<th>Jan 3rd</th>
<th>Jan 10th</th>
<th>Jan 17th</th>
<th>Jan 24th</th>
<th>Jan 31st</th>
<th>Feb 7th</th>
<th>Feb 14th</th>
<th>Feb 21st</th>
<th>Feb 28th</th>
<th>Quarter Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # Patients in Practice</td>
<td>921</td>
<td>927</td>
<td>934</td>
<td>826</td>
<td>826</td>
<td>842</td>
<td>837</td>
<td>837</td>
<td>837</td>
<td>837</td>
<td>837</td>
<td>837</td>
<td>Average: 858</td>
</tr>
<tr>
<td># Patients scheduled for week (Private + Medicaid)</td>
<td>47</td>
<td>60</td>
<td>65</td>
<td>37</td>
<td>40</td>
<td>33</td>
<td>28</td>
<td>43</td>
<td>24</td>
<td>56</td>
<td>19</td>
<td>50</td>
<td>502</td>
</tr>
<tr>
<td># RI Medicaid adult patients scheduled for week</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>0</td>
<td>12</td>
<td>88</td>
</tr>
<tr>
<td># RI Medicaid adult patients seen (during week)</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>0</td>
<td>12</td>
<td>82</td>
</tr>
<tr>
<td># Non Medicaid pts seen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>420</td>
</tr>
<tr>
<td>% RI Medicaid adult patients seen(during week)</td>
<td>21%</td>
<td>15%</td>
<td>14%</td>
<td>5%</td>
<td>10%</td>
<td>21%</td>
<td>29%</td>
<td>16%</td>
<td>21%</td>
<td>16%</td>
<td>0%</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>
Goal 1 - Access

Team B

- # Patients scheduled for week (Private + Medicaid)
- # Patients seen for week (Private + Medicaid)
- # RI Medicaid adult patients scheduled for week
- # RI Medicaid adult patients seen (during week)
Goal 2 - Productivity

Team A

Weeks

Total # encounters of ALL patients for week

# RI Medicaid adult patient encounters
Goal 2 - Productivity

Team B

No Show Rate

Total # no-shows in practice (public + private)

# RI Medicaid adult patient no-shows
Goal 3 - Financial

Team A

- Total gross charges of all procedures for week
- Total gross charges on all RI Medicaid adult procedures
Goal 4
Quality and Treatment  Team B

Diagram showing data for different categories (Diagnostic, Preventive, Restorative, Emergency) across various time periods (1 to 13).
Assess Billing & Collection Processes

- Accounts receivable past 90 days broken out by payer type, (i.e. Medicaid, commercial, and self pay)
  - Marker for how well the billing process is working
  - Marker for whether the dental staff are consistently collecting co-pays

- If A/R is high in any payer type, assess entire billing process to determine sources(s) of problems
  - determination eligibility process
  - registration issues
  - provider issues
  - submission of claims
  - management of denials
Review Aging Report

- If A/R is high for self-pay/SFS patients, review systems and processes.
- Review/create policy defining all aspects of payment.
- Train staff:
  - Alert front desk staff that A/R past 90 days from self-pay/SFS patients is a measure used to evaluate their performance.
- Educate patients about why payment is required at the time of the visit:
  - Develop scripting for staff to use in communicating with patients.
- Set ceiling targets for A/R.
- Monitor A/R regularly.
- Provide feedback to staff.
- Manage performance failures.
Assess Average Reimbursement by Payer Type

<table>
<thead>
<tr>
<th>Income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gross Patient Service Revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>$2,200,000</td>
</tr>
<tr>
<td>Self-Pay/Sliding Fee Scale</td>
<td>$600,000</td>
</tr>
<tr>
<td>Commercial</td>
<td>$400,000</td>
</tr>
<tr>
<td><strong>Total Gross Charges</strong></td>
<td>$3,200,000</td>
</tr>
<tr>
<td><strong>Less Contractual Adjustments</strong></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>($1,500,000)</td>
</tr>
<tr>
<td>Commercial</td>
<td>($160,000)</td>
</tr>
<tr>
<td><strong>Less Sliding Scale Adjustments</strong></td>
<td>($250,000)</td>
</tr>
<tr>
<td><strong>Net Patient Service Revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>$700,000</td>
</tr>
<tr>
<td>Self-Pay/Sliding Fee Scale</td>
<td>$350,000</td>
</tr>
<tr>
<td>Commercial</td>
<td>$240,000</td>
</tr>
<tr>
<td><strong>Total Net Patient Revenue</strong></td>
<td>$1,290,000</td>
</tr>
<tr>
<td><strong>Grant Funds</strong></td>
<td></td>
</tr>
<tr>
<td>Dental Grant (330 Award)</td>
<td>$300,000</td>
</tr>
<tr>
<td><strong>Total Grant Funds</strong></td>
<td>$300,000</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>$1,590,000</td>
</tr>
</tbody>
</table>

- 13,018 total visits
- 30% Medicaid = 3,905 Visits
- Total Net Revenue for Medicaid = $700,000
- Divide $700,000 / 3,905 visits = $179.25 per visit
## Monitor Payer Mix

### Example

<table>
<thead>
<tr>
<th>payer</th>
<th>Percentage</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>70%</td>
<td>9,157</td>
</tr>
<tr>
<td>Self-pay/Sliding Fee</td>
<td>20%</td>
<td>2,603</td>
</tr>
<tr>
<td>Commercial insurance</td>
<td>8%</td>
<td>1,041</td>
</tr>
<tr>
<td>Unreimbursed Care</td>
<td>2%</td>
<td>260</td>
</tr>
</tbody>
</table>
## Assess Payer Mix and Reimbursement Example

<table>
<thead>
<tr>
<th>Service</th>
<th>Fee</th>
<th>Volume</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>$130</td>
<td>9157</td>
<td>$1,190,410</td>
</tr>
<tr>
<td>Self-pay/Sliding Fee</td>
<td>$50</td>
<td>2603</td>
<td>$130,150</td>
</tr>
<tr>
<td>Commercial Insurance</td>
<td>$160</td>
<td>1,041</td>
<td>$156,150</td>
</tr>
<tr>
<td><strong>Total Annual Expenses</strong></td>
<td></td>
<td></td>
<td><strong>$1,764,500</strong></td>
</tr>
<tr>
<td><strong>Total Projected Revenue</strong></td>
<td></td>
<td></td>
<td><strong>$1,476,710 + $300,000 = $1,776,710</strong></td>
</tr>
</tbody>
</table>
Study Impact of Payer Mix on Sustainability

Now (7,500 visits)
35% Medicaid (avg. revenue/visit = $100)
55% Self-Pay/SFS (avg. revenue/visit = $30)
10% Commercial (avg. revenue/visit = $125)
2,625 visits x $100 = $262,500
4,125 visits x $30 = $123,750
750 visits x $120 = $90,000
Total revenue = $476,250
Total expenses = $500,000
Operating loss = ($23,750)

Better (7,500 visits)
50% Medicaid (avg. revenue/visit = $100)
40% Self-Pay/SFS (avg. revenue/visit = $30)
10% Commercial (avg. revenue/visit = $125)
3,750 visits x 100 = $375,000
3,000 visits x $30 = $90,000
750 visits x $120 = $90,000
Total revenue = $555,000
Total expenses = $500,000
Operating surplus = $55,000
## Financial Projections

### Projected Visits

<table>
<thead>
<tr>
<th></th>
<th>Projected Visits</th>
<th>Actual Visits</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>-7084</td>
</tr>
</tbody>
</table>

### Patient/Insurance mix:

<table>
<thead>
<tr>
<th></th>
<th>Yearly visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Medicaid</td>
<td>4,250</td>
</tr>
<tr>
<td>Percent Self Pay</td>
<td>2,125</td>
</tr>
<tr>
<td>Percent Commercial Insurance</td>
<td>354</td>
</tr>
<tr>
<td>Percent Other</td>
<td>354</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,084</strong></td>
</tr>
</tbody>
</table>

### Reimbursement Rate (per visit):

<table>
<thead>
<tr>
<th></th>
<th>Yearly Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>$531,300.00</td>
</tr>
<tr>
<td>Self Pay</td>
<td>$106,260.00</td>
</tr>
<tr>
<td>Commercial Insurance</td>
<td>$56,672.00</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
<tr>
<td><strong>Total Projected Revenue</strong></td>
<td><strong>$694,232.00</strong></td>
</tr>
</tbody>
</table>
Exercise #5: Determine Your Payer Mix
STOP RECORDING:

Determine Your Payer Mix and Collections

<table>
<thead>
<tr>
<th></th>
<th># of Visits</th>
<th>%</th>
<th>Gross Charges</th>
<th>Revenue Collected</th>
<th>Collection Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>#DIV/0!</td>
<td></td>
<td></td>
<td></td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Self Pay</td>
<td>#DIV/0!</td>
<td></td>
<td></td>
<td></td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Sliding Fee</td>
<td>#DIV/0!</td>
<td></td>
<td></td>
<td></td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Commercial Ins.</td>
<td>#DIV/0!</td>
<td></td>
<td></td>
<td></td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Managed Care</td>
<td>#DIV/0!</td>
<td></td>
<td></td>
<td></td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Totals</td>
<td>0</td>
<td>$</td>
<td>-</td>
<td>$</td>
<td>#DIV/0!</td>
</tr>
</tbody>
</table>
Are you over, under, or just right?

Tips:

- Expanded function dental assistants multiply dental provider hours by 2.0
- Dental students multiply by 1.0
- Low on dental assistants or support staff change to 1.5 for dentists

Use benchmarks and clinic data to determine weekly & potential visits:

- Total weekly dental provider hour ___ X 1.7=___
- Total weekly hygienist provider hours x ___1.2=___
- Total “other” provider hours ___ X 2.0=___
- Add up each providers potential visits ___
- Total weekly visits ___ x 46 weeks=___ Yearly Visits
- Compare!
Manage Success

- Keep it simple!
- Use good data to measure performance
- Set realistic and achievable goals
- Put the goals in a plan with action steps, timelines, roles, and responsibilities
- Create a culture that embraces change
- Gain buy-in, include everyone and gather feedback
- Set accountability
- Share results!
Key Practice Data and Reports

- Profit and Loss Statement
  - Gross Charges
  - Net Revenue
  - Total Expenses

- Transaction or Productivity by Procedure Report
  - Procedures by ADA code- scope of service
  - # of sealants (D1351)
  - #of completed treatments (Dummy Code)
  - New patients (D0150)
  - ER rate (D0140 or dummy code)

- Aging Report
  - Total outstanding money owed to practice by payer type past 90 days
Additional Reports (vary on PMS)
- No-Show rate
- Emergency rate
- Unduplicated patients
- New Patients
- Number of visits
- Number of FTE Providers
- Payer Patient Mix
Key Takeaways

- Capacity is based on staffing, # of operatories, and clinic hours.
- Capacity should determine the productivity goals.
- Not achieving maximum capacity reduces productivity and negatively impacts your dental program.
- Program goals (both financial & productivity) should be determined using key data reports.
- Program performance should be monitored regularly using a pro forma.*

*Pro forma*: *method by which financial results are calculated. This method of calculation places emphasis on present or projected figures.*
Process and Outcome Measurement

Take Module 4 Post-Test Now
Ms. Martha Dellapenna is the MSDA Center Director. In this role, Ms. Dellapenna provides oversight to the projects and activities of each of the five divisions within the Center. She is the former Project Manager for the Rhode Island Oral Health Access Project. Ms. Dellapenna joined the RI Department of Human Services in the Center for Child and Family Health in 2003 through its project management contractor, Xerox. Ms. Dellapenna’s primary role at that time was to manage the development of Rlte Smiles, the state’s first managed care dental program for young children. Ms. Dellapenna is also the current Chair of the Center for Medicare and Medicaid Services (CMS) Oral Health Technical Advisory Group.
Ms. Mary E. Foley is the Executive Director of the Medicaid Medicare CHIP Services Dental Association (MSDA). Ms. Foley is a dental hygienist and holds a Masters Degree in Public Health with a concentration in Epidemiology and Biostatistics from the University of Massachusetts School of Public Health and Health Policy. Earlier in her career, she served as the Director of the Massachusetts Department of Public Health, Office of Oral Health. In this role she had oversight of state dental public health programs addressing surveillance; access; prevention; and education. Just prior to her current position, Ms. Foley served as the Dean of the Forsyth School of Dental Hygiene at the Massachusetts College of Pharmacy and Health Sciences in Boston, Massachusetts. Since joining the Medicaid Medicare CHIP Services Dental Association, Ms. Foley has been instrumental in broadening national stakeholder collaboration, and advancing state program policy and protocols to improve the health, health care and costs for all Medicaid programs and their beneficiaries.
Timothy S. Martinez, DMD, is the Associate Dean of Community Partnerships and Access to Care at the UNE College of Dental Medicine. Dr. Martinez recently relocated to the New England area after spending six and a half years developing the community-based dental programs for Western University of Health Sciences College of Dental Medicine in Pomona, California. He served as program evaluator at the Forsyth Institute from 2010 to 2011; state dental Medicaid director at the Commonwealth of Massachusetts, Executive Office of Health and Human Services from 2006 to 2009; and dental consultant at the Office of Public Protection, Board of Registration in Dentistry, Massachusetts Department of Public Health from 2005 to 2009. Dr. Martinez also served as dental director for Harbor Health Services Inc. from 1999 to 2003 and dental director at Boston Healthcare for the Homeless from 1994 to 2003. He earned a Doctor of Dental Medicine degree from the Harvard School of Dental Medicine.