Scheduling by Design

NNOHA Orlando 2014

Our mission is to improve the oral health of all.

Dori Bingham
What is Scheduling by Design?

Use of the dental schedule to achieve three key strategic objectives:

1. Improved oral health status for patients
2. Maximum access to care for patients
3. Financial viability of the dental program
Key Strategic Objectives

• Completion of Phase 1 Treatments
• Maximum Access for Patients
• Financial Viability—"no margin, no mission"
Completion of Phase 1 Treatments

- Important quality indicator for all safety net dental programs
- HRSA Definition: “Prevention, maintenance and/or elimination of oral pathology that results from dental caries or periodontal disease”—diagnosis and treatment planning, preventive services, emergency treatment, restorative treatment, basic (non-surgical) periodontal therapy, basic oral surgery, non-surgical endodontic therapy and space maintenance and tooth eruption guidance for the transitional dentition
- The daily schedule is an important tool for maximizing the number of patients whose Phase 1 treatment needs are completed
Maximum Patient Access

- Understand (and document) the sociodemographic make-up of your service area
- As a safety net dental provider, your mission should be to provide access to all disadvantaged patients who have difficulty getting care
- But special populations can be designated as priorities (e.g., children, pregnant women)
- The daily schedule is an important tool in maximizing access to care
Financial Viability

• Net revenue needs to be sufficient to meet total direct and indirect expenses

• Net revenue includes patient care revenue plus any ongoing, predictable grants (such as 330 grants for FQHCs)

• The daily schedule is an important tool for ensuring the generation of sufficient revenue to at least cover direct and indirect expenses (and ideally generate a surplus)
Example 1

- 9,000 visits per year
- Federally Qualified Health Center dental program in a state where Medicaid dental benefits for adults were recently eliminated
- Payer mix was 50% Medicaid, 30% Self-Pay, 10% Commercial; now 20% Medicaid, 60% Self-Pay and 10% Commercial
- Historically, average $115 per visit for Medicaid, $50 per visit for self-pay, $100 for commercial, and $80 for other
- 10% of patients have no reimbursement
- Annual 330 grant award of $250,000
# Example 1

<table>
<thead>
<tr>
<th>9,000 visits</th>
<th>Payer Mix</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid ($115/visit)</td>
<td>20%</td>
<td>$207,000</td>
</tr>
<tr>
<td>Self-Pay ($50/visit)</td>
<td>60%</td>
<td>$270,000</td>
</tr>
<tr>
<td>Commercial ($100/visit)</td>
<td>5%</td>
<td>$45,000</td>
</tr>
<tr>
<td>Other ($80/visit)</td>
<td>5%</td>
<td>$36,000</td>
</tr>
<tr>
<td>Unreimbursed care</td>
<td>10%</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total Patient Care Revenue</strong></td>
<td></td>
<td><strong>$558,000</strong></td>
</tr>
<tr>
<td>Grants</td>
<td></td>
<td><strong>$250,000</strong></td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td></td>
<td><strong>$808,000</strong></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td></td>
<td><strong>$950,000</strong></td>
</tr>
<tr>
<td><strong>Profit/(Loss)</strong></td>
<td></td>
<td><strong>($142,000)</strong></td>
</tr>
</tbody>
</table>
What to Do?

1. See more patients (may or may not be possible given number of providers/operatories)
2. Generate more revenue per visit by providing more services per visit (fee-for-service payers) and/or increasing fees
3. Improve billing and collection processes to maximize revenue collected for services provided
4. Change the payer mix
Attaining the Required Payer Mix

• If after following Steps 1-3, the dental practice still has not achieved financial sustainability, it has justified its need to tweak the payer mix

• In all likelihood, the practice needs to increase the number of Medicaid-covered patients to help subsidize care to uninsured patients

• Children and pregnant women should be considered priority populations for dental—there are excellent clinical reasons for this AND, as a side benefit, they typically have Medicaid dental coverage

• Use designated access scheduling to ensure these priority patients have immediate access to care
## Example 2

<table>
<thead>
<tr>
<th>9,500 visits</th>
<th>Payer Mix</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid ($115/visit)</td>
<td>50%</td>
<td>$546,250</td>
</tr>
<tr>
<td>Self-Pay ($80/visit)</td>
<td>30%</td>
<td>$228,000</td>
</tr>
<tr>
<td>Commercial ($100/visit)</td>
<td>5%</td>
<td>$47,500</td>
</tr>
<tr>
<td>Other ($80/visit)</td>
<td>5%</td>
<td>$38,000</td>
</tr>
<tr>
<td>Unreimbursed care</td>
<td>10%</td>
<td>$0</td>
</tr>
<tr>
<td>Total Patient Care Revenue</td>
<td></td>
<td>$859,750</td>
</tr>
<tr>
<td>Grants</td>
<td></td>
<td>$250,000</td>
</tr>
<tr>
<td>Total Revenue</td>
<td></td>
<td>$1,109,750</td>
</tr>
<tr>
<td>Total Expenses</td>
<td></td>
<td>$950,000</td>
</tr>
<tr>
<td>Profit/(Loss)</td>
<td></td>
<td>$159,750</td>
</tr>
</tbody>
</table>
What Happened?

• By improving efficiency (esp. stronger policies to manage no-shows and emergencies), the practice was able to increase visits slightly
• Through outreach and designated access scheduling, access for children and pregnant women was increased
• By revising the fee schedule and sliding fee scale and improving the management of self-pay patients, the practice was able to collect more of what it was owed from uninsured patients
• These strategies combined took the dental program from the red to the black!
The Art of Strategic Scheduling

• Step 1 = determine daily revenue goal (gross or net)
• Step 2 = determine the number of FTE providers available each day
• Step 3 = determine the maximum capacity of the dental program for each day
• Step 4 = determine the average number of emergencies per day
• Step 5 = determine average revenue per payer type
• Step 6 = use this information to create a schedule template
Step 1: Daily Revenue Goal

• Divide your total direct and indirect expenses by the number of clinic days per year (the number of days per week the clinic is open x 46 weeks)—that is the daily net revenue goal that must be achieved to break even

• For example:
Total expenses = $950,000
5 days per week x 46 weeks = 230 clinic days per year
$950,000 ÷ 230 = daily net revenue goal of $4,131
Step 1: Daily Revenue Goal (cont.)

If you prefer to base your daily revenue goal on gross charges rather than net, you must look back historically to determine the percentage of gross charges that the program collects.

For example:

• In a typical year, the program bills out $1,500,000 in gross charges and collects $950,000 in net revenue.
• This is a 63% collection rate.
• Thus, to net the $4,131 per day in net revenue needed to cover direct and indirect expenses, dental needs to generate $6,557 in gross charges for each day (63% more than net).
• The actual collection rate should be checked regularly to make sure the underlying assumption of 63% is accurate.
### Step 2: Provider Schedule

<table>
<thead>
<tr>
<th>Provider</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. L</td>
<td>8:30</td>
<td>5:00</td>
<td></td>
<td>8:30</td>
<td>1:00</td>
</tr>
<tr>
<td>Dr. T</td>
<td></td>
<td></td>
<td>8:30</td>
<td>5:00</td>
<td>1:00</td>
</tr>
<tr>
<td>Dr. S</td>
<td></td>
<td>8:30</td>
<td>5:00</td>
<td>8:30</td>
<td>5:00</td>
</tr>
<tr>
<td>Dr. X</td>
<td></td>
<td>8:30</td>
<td>5:00</td>
<td>8:30</td>
<td>5:00</td>
</tr>
<tr>
<td>Dr. Y</td>
<td>8:30</td>
<td>5:00</td>
<td>11:00</td>
<td>8:00</td>
<td>8:30</td>
</tr>
<tr>
<td>Dr. Z</td>
<td></td>
<td></td>
<td>8:30</td>
<td>5:00</td>
<td>8:30</td>
</tr>
<tr>
<td>KD (RDH)</td>
<td>8:30</td>
<td>5:00</td>
<td>11:00</td>
<td>8:00</td>
<td>11:00</td>
</tr>
<tr>
<td>SV (RDH)</td>
<td>8:30</td>
<td>5:00</td>
<td>8:30</td>
<td>5:00</td>
<td>8:30</td>
</tr>
</tbody>
</table>

Monday: 2 FTE dentists, 2 FTE hygienists;  
Tuesday: 3 FTE dentists, 2 FTE hygienists;  
Wednesday: 4 FTE dentists, 2 FTE hygienists;  
Thursday: 4 FTE dentists, 2 FTE hygienists  
Friday: 2 FTE dentists, 1 FTE hygienist
Step 3: Determine Daily Visit Capacity, Dentists

<table>
<thead>
<tr>
<th></th>
<th># of FTE Providers</th>
<th>X 1.7 Visits/Clinical Hour</th>
<th>X # of Clinical Hours</th>
<th>Potential Visit Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>2</td>
<td>1.7</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>Tues.</td>
<td>3</td>
<td>1.7</td>
<td>22.5</td>
<td>38</td>
</tr>
<tr>
<td>Wed.</td>
<td>4</td>
<td>1.7</td>
<td>30</td>
<td>51</td>
</tr>
<tr>
<td>Thurs.</td>
<td>4</td>
<td>1.7</td>
<td>30</td>
<td>51</td>
</tr>
<tr>
<td>Fri.</td>
<td>2</td>
<td>1.7</td>
<td>15</td>
<td>26</td>
</tr>
</tbody>
</table>
### Step 3: Determine Daily Visit Capacity, Hygienists

<table>
<thead>
<tr>
<th></th>
<th># of FTE Providers</th>
<th>X 1.2 Visits/Clinical Hour</th>
<th>X # of Clinical Hours</th>
<th>Potential Visit Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon.</td>
<td>2</td>
<td>1.2</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Tues.</td>
<td>2</td>
<td>1.2</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Wed.</td>
<td>2</td>
<td>1.2</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Thurs.</td>
<td>2</td>
<td>1.2</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Fri.</td>
<td>1</td>
<td>1.2</td>
<td>7.5</td>
<td>9</td>
</tr>
</tbody>
</table>
Step 3: Determine Daily Visit Capacity

- Monday: 26 dentist visits + 18 hygienist visits = 44 visits
- Tuesday: 38 dentist visits + 18 hygienist visits = 56 visits
- Wednesday: 51 dentist visits + 18 hygienist visits = 69 visits
- Thursday: 51 dentist visits + 18 hygienist visits = 69 visits
- Friday: 26 dentist visits + 9 hygienist visits = 35 visits

Total weekly visit capacity = 273
Step 4: Determine Daily Demand for Emergency Care

• Do a retrospective study of sample days spread throughout a year’s time to determine the average number of emergency patients the practice can expect to see each day and develop a strategy for accommodating that number (many different strategies and no right way or wrong way)
Step 5: Determine Average Revenue per Visit per Payer Type

- Medicaid
- Commercial
- Self-Pay/SFS

This information helps in deciding what the optimum payer mix needs to be
Step 6: Building the Template

• How many visits per day for each provider?
• What is the daily revenue goal (gross or net)?
• How many emergencies can be accommodated? (And where can they be worked in?)
• How many new patients will be put in the schedule?
• How many designated access slots for priority patients?
• What does the optimum payer mix need to be?

These elements are unique to each practice and must be factored into the creation of the schedule template.
Sample Template

• Program with one FTE dentist and two hygienists
• 14 visits/day for dentist, 10 for each hygienist
• Daily revenue goal = $4,131
• 4 emergency blocks (others can be worked in if possible)
• 4 new patients/day (2 each for RDH, one in a.m. and one in p.m.)
• 18 priority slots (children and pregnant women)
• Optimum payer mix (min. 50% Medicaid, max. 30% self-pay, 20% commercial/other)
Sample Template (morning session, one dentist and two hygienists)—Daily Net Revenue Goal of $4,131

<table>
<thead>
<tr>
<th>Time</th>
<th>Operatory 1—DDS</th>
<th>Operatory 2—DDS</th>
<th>Operatory 3—RDH1</th>
<th>Operatory 4—RDH2</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Emergency ($50)</td>
<td></td>
<td>Adult new ($50)</td>
<td>Adult new ($50)</td>
</tr>
<tr>
<td>8:30</td>
<td></td>
<td>Priority TX ($140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00</td>
<td>TX ($140)</td>
<td></td>
<td>Priority Recall ($140)</td>
<td>Priority recall, ($140)</td>
</tr>
<tr>
<td>9:30</td>
<td></td>
<td>Priority TX ($140)</td>
<td></td>
<td>Priority recall ($100)</td>
</tr>
<tr>
<td>10:00</td>
<td>TX ($200)</td>
<td></td>
<td>Priority Recall ($140)</td>
<td>Priority Recall ($140)</td>
</tr>
<tr>
<td>10:30</td>
<td></td>
<td>Emergency ($140)</td>
<td>Priority Recall ($140)</td>
<td>Perio ($100)</td>
</tr>
<tr>
<td>11:00</td>
<td>Priority TX ($140)</td>
<td></td>
<td>Priority Recall ($140)</td>
<td></td>
</tr>
</tbody>
</table>
Designated Access Scheduling Template (afternoon session)

<table>
<thead>
<tr>
<th>Time</th>
<th>Operatory 1--DDS</th>
<th>Operatory 2--DDS</th>
<th>Operatory 3--RDH1</th>
<th>Operatory 4--RDH2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>Emergency ($50)</td>
<td>Denture interim ($0)</td>
<td>Adult new ($50)</td>
<td>Priority new ($140)</td>
</tr>
<tr>
<td>1:30</td>
<td></td>
<td>Priority TX ($140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00</td>
<td>Denture interim ($140)</td>
<td>Priority Recall ($140)</td>
<td>Priority recall ($140)</td>
<td></td>
</tr>
<tr>
<td>2:30</td>
<td></td>
<td>Priority TX ($140)</td>
<td></td>
<td>Adult recall ($100)</td>
</tr>
<tr>
<td>3:00</td>
<td>TX ($140)</td>
<td>Priority Recall ($140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30</td>
<td></td>
<td>Priority TX ($140)</td>
<td>Adult Recall ($140)</td>
<td>Priority recall ($140)</td>
</tr>
<tr>
<td>4:00</td>
<td>Emergency ($140)</td>
<td>Priority Recall ($140)</td>
<td></td>
<td>Adult recall ($50)</td>
</tr>
</tbody>
</table>
How Did We Do?

• Total direct and indirect expenses = $950,000
• Daily revenue goal to break even (230 clinic days per year) = $4,131
• Dentist’s expected net revenue for the day = $1,840
• Hygienists’ expected net revenue for the day = $2,320
• Total net revenue = $4,160
• They provided maximal access, provided care that moved patients toward optimum oral health and achieved financial sustainability = all strategic goals met!
• What if they had fallen short?
How to Tweak?

If the scheduling template isn’t working, here are some strategies to address:

• Increase the average per visit revenue:
  ✓ Increase charges, increase nominal fee, improve collections, provide more services, if possible, in each visit
  ✓ Change the payer mix slightly (more Medicaid, less self-pay, perhaps)

• Work more of the higher-revenue visits into the template
Biggest Threats to Success

• For this to work, template must be followed faithfully
• When a specific appointment type is filled for a particular day, scheduler needs to look for the next available appointment (works best if the practice doesn’t schedule out beyond 30-45 days)
• Designated slots only get filled in with other appointment types if unfilled 24 hours prior to day
• Constant vigilance is required!
Once Defined, Document the Entire Process

• Create a formal scheduling policy
• Include scheduling templates as attachments
• Review the policy with entire staff
• Make sure staff responsible for scheduling know how to use the templates
• Monitor the process closely, provide immediate feedback when staff deviate from the process and tweak the templates as needed to ensure attainment of strategic goals
The Scheduling Policy

• How far out will appointments be scheduled?
• Only one appointment at a time (exception: procedures requiring more than one appointment to complete)
• Define how operatories will be used (how many per provider)
• Define appointment lengths for various procedures (use RVUs and time studies to establish times)
• Indicate where in each appointment type the dentist is needed vs. dental assistant time
• Indicate what types of appointments can be double-booked
The Scheduling Policy (cont.)

• Start and end times for appointments each day
• Who is authorized to schedule appointments
• Providers should always be working to the top of their license (e.g., dentists being dentists, hygienists being hygienists)
• If expanded function dental assistants are available, they should also be working to the top of their ability
Schedule Busters

- Patients who cancel at the last minute
- Patients who don’t show up
- Patients who show up late
- Double- or triple-booked patients who all show up unexpectedly
- Too many emergencies/walk-ins worked into the daily schedule
- Logjams at check-in or out
- Providers run late; practice falls behind
- Patients put in wrong appointment slots (e.g., hygiene patient in dentist’s column; single restoration put in crown prep slot; multiple filling appointment put in short-procedure slot)
Address the Issues

- Implement strategies for reducing broken appointments (topic for another webinar!)
- Be strategic with double-booking
- Develop a strategy for managing emergencies/walk-ins
- Logjams at check-in/out
- Flow-chart these processes
  - Root cause analysis—why is this happening?
  - Develop and test strategies to improve patient flow (re-engineer tasks, redesign physical space, address staffing issues, etc.)
Other Operational Issues

• **Providers running late/practice falling behind**
  - Root cause analysis—why is this happening?
  - Develop and test strategies to stay on time (reconfigure operatory assignments, availability of support staff, scheduling tweaks, seating and preparing patients, workflow around x-rays, etc.)

• **Scheduling errors**
  - Root cause analysis—why is this happening?
  - Review scheduling process with current staff
  - Provide additional training if necessary
  - Review frequently to enhance accountability