Open Access Scheduling in Community Health Dentistry

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Executive Director
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Conference: Dental management Coalition
November 2005
Three Learning Objectives

- Understand compelling reasons for redesigning ambulatory care processes and scheduling methods
- Understand the basic design and use features of AAS
- Understand how to apply AAS to general dentistry.
Critical factors for Process Redesign

- Compelling Reason
- Model
- Redesign Tools
“You Cannot Cross the Sea Merely by Staring at the Water”

Rabindranath Tagore
“If We are to be the best at what we do, we must have the will to change ourselves rapidly, eliminate waste, reduce waste, and improve measurable results dramatically.

ThedaCare motto
We Truly are Insane:

“If We Keep doing things in the same way and expect a different result”
So What is the Problem?

- In most systems only 5% of activities add value
- 35% of systems are necessary but do not add value
- 60% of systems are both necessary and add value
- Therefore, elimination of waste (MUDA) is a major cost reduction strategy
Our We Happy with 99.9% Quality Levels?

- 22,000 checks are deducted from the wrong bank accounts every day
- 16,000 pieces of mail are lost by the Postal Service every hour
- 2000 unsafe airplane landings are made every day
- 500 incorrect surgeries are completed every week
- 2,000,000 loss IRS documents every year
- Ambulatory care, 30-50% patients miss appointments
7 Forms of Waste

- Waiting Times
  - Bottlenecks to accessing care
- Overproduction
  - Staff waiting, too many supplies
- Inventory
  - Excessive or unnecessary storage
- Motion
  - Unnecessary staff or patient motion
- Defects
  - Process errors
- Transportation
  - Unnecessary movement of patient
Common Customer Concerns in Primary Care

- long waits on the phone
- long waits for lab results
- inability to get a timely appointments
- complicated system to access care
Common Provider Concerns in Primary Care

- Inefficient Scheduling
- Inefficient Flow
- Demand exceeds Supply
- Inefficient Office Processes
You Must Have a Framework

Community Resources and Policies

Health System
- Health Care Organization
  - Self-Management Support
  - Delivery System Design
  - Decision Support
  - Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

Functional and Clinical Outcomes

You Must Have a Framework
Integration of Three Redesign Models

IDCOP Redesign

Performance Improvement

Comprehensive Care Model
IDCOP Redesign Strategies

- Organizational Transformation
- Team (Micro-System) Development
- Advance Access Scheduling
- Demand-Supply Management
- Cycle Time Process Flow
Effective Microsystems Are Aware of Their Practice

• They know their patients
• They know their common diagnosis
• They know their staff
• They know their processes
• They Monitor their Performance
National data indicates that 75-80% of patients contacting a clinic are interested in a same day or week appointment.
Backlog appointments result from pent up demand that is created by a system that cannot meet the same day or week demand for appointments. Therefore, patients are required to postpone care for a future date.
What is Advance Access Scheduling?

• More visits?.........Usually not
• More care?.........Usually yes
• More Charges...... Usually yes
• Better patient flow.. Usually yes
• Satisfied Providers.. Usually yes
• Satisfied Patients.... Usually yes
• Care continuity........ Usually yes
Advanced Access Scheduling Model Is:

- Seeing most patients on the day or week they request
- Giving most patients a planned future appointment within two weeks
- Giving most patients an appointment with their assigned provider
- Allowing patients to make their appointment at their convenience
Aims of Open Access Scheduling

- Decrease no show rate
- Increase access
- Increase care continuity
- Increase telephone scheduling
- Increase RVU or charges per visit
- Increase patient self-management
- Increase staff and patient satisfaction
Open Access Scheduling

“Basic Rules”

- Simplify scheduling templates
- Limit scheduling to two weeks
- Increase appointment interval
- Max-pack visits
- Increase role of non-traditional providers
- Increase non-traditional visits
- Promote call-in appointments
- Promote telephone management
### AAS Template Model

#### One Week View

<table>
<thead>
<tr>
<th>Day</th>
<th>Return</th>
<th>OPEN</th>
<th>OPEN</th>
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<th>OPEN</th>
<th>OPEN</th>
<th>OPEN</th>
<th>OPEN</th>
<th>OPEN</th>
<th>OPEN</th>
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</thead>
<tbody>
<tr>
<td>M</td>
<td>FV's</td>
<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
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<td>RV's</td>
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<tr>
<td>T</td>
<td>FV's</td>
<td>RV's</td>
<td>RV's</td>
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<tr>
<td>W</td>
<td>FV's</td>
<td>RV's</td>
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<tr>
<td>TH</td>
<td>FV's</td>
<td>RV's</td>
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<td>RV's</td>
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<tr>
<td>F</td>
<td>FV's</td>
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<td>RV's</td>
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<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
<td>RV's</td>
</tr>
</tbody>
</table>

**Future Visits - “FV’s”**

**“good backlog”**

**70-80%**

**20-30%**
Advanced Access Scheduling

“Sustainability Factors”

- Comply with Scheduling rules
- Implement Demand and Supply Management Approaches
- Monitor scheduling measures and No Show Rate
- Repeatedly educate staff and patients
Demand-Supply Analysis

- Appointment request vs. Supply of appointment slots

- Telephone Appointment calls vs staff to book appointments

Goal: Demand-Supply Balance
Demand - Supply Imbalance

**Demand**
- Appointments
- Telephone Calls
- Nurse Visits
- Prescriptions

**Supply**
- Appointment Slots
- Providers
- Staff FTEs

**Wait Times**
- 3 wks
- 2 wks
- 1 wk

**Backlog**
Appointment
Demand

Provider
Supply

Backlog
Demand-Supply Daily Mismatch
Telephone
“Demand Analysis

Total Incoming Calls for the Week

Assumptions: 3 min per call, 1 FTE
Telephone Demand Analysis

“Types of Calls”

Total Incoming Calls

- Talk with Provider: 4%
- Needs Information: 14%
- Message for Provider: 1%
- Personal Calls: 5%
- Prescription: 5%
- Nurse Care: 12%
- Test Results: 1%
- Today’s Appointment: 19%
- Other: 39%
Supply Management

- Staffing
- Provider clinic time
- Provider expected productivity
Demand Management

- Increase re-appointment interval
- Expanded role of support staff
- Telephone management
Process Flow Improvement

Cycle Time for La Casa

Value Added Time

Registration Time
Clinical Check-In
Provider Time

Non-Value Added Time

Registration Wait
Waiting Room Time
Exam Room Wait Time

Pre Open Access Summary:
Total Time: 88 min
Value Added Time: 37.0 min
Non-Value Added Time: 53 min
% of Non-Value Added Time: 60.0%

Post Open Access Summary:
Total Time: 58.4 min
Value-Added Time: 27.5 min
Non-Value Added: 30.9 min
% of Non-Value Added Time: 54.8%
Advanced Access Scheduling

“Sustainability Factors”

- Comply with Scheduling rules
- Monitor scheduling measures and No Show Rate
- Standardize Appointment Templates
- Implement Demand and Supply Management Approaches
- Repeatedly educate staff and patients
Open Access is not a subtle shift but a major paradigm shift in the way we do business. Therefore, our communication needs to say this in a way that is loud and clear to Staff and patients.
Eastside Family Health Center
Dental Clinic

- 2 FTE Dentist
- 4 FTE Dental Assistants (1 community outreach)
- 2 FTE Front Desk Clerks
- 6 Operators
- 6,205 annual visits in 2004
PDSA WORK PLAN
Goal: Improve access targeting children.

Objective: Redesign appointment system, including phone access.

Project Title: Advanced Access Scheduling at ENHC Dental. (Pilot site)

CHS Manager: Yvonne Castillo
<table>
<thead>
<tr>
<th>Plan: Main Objective</th>
<th>Responsible Party</th>
<th>Do: Actions/Tasks</th>
</tr>
</thead>
</table>
| 1. To decrease our patient no show rate by implementing two week advanced access scheduling. | Yvonne Castillo PM ENHC Dental. ENHC Dental front desk staff. ENHC Dental providers. (Dentists and dental assistants.) | To decrease our patient no show rate we:  
| | | a. Create additional scheduling templates and redesign current template(s) for each provider,  
| | | b. Rename/redefine use of timeslots to insure proper scheduling,  
| | | c. Educate all staff regarding template-scheduling guidelines.  
| | | Eliminate appointment call-in day(s)  
| | | a. By verbally educating staff & parents how to utilize our new system of appointment scheduling.  
<p>| | | b. Reprioritization of front desk daily duties. |</p>
<table>
<thead>
<tr>
<th>Study Results</th>
<th>Subsequent Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closely monitor ENHC Dental NS rate. Monitor the volume of calls made into</td>
<td>Create and implement a no show policy. Make confirmation/reminder calls to patients</td>
</tr>
<tr>
<td>the clinic for appointments via the Meridian Mail report. Measure patient/staff</td>
<td>the day prior to their appointment. Establish and maintain communications/collaborations with referring Docs. (ENHC peds, CHS managers, School based clinics.) Utilize current available programs such as EPSDT to contact Medicaid patients that have missed an appointment.</td>
</tr>
<tr>
<td>satisfaction.</td>
<td></td>
</tr>
</tbody>
</table>
The Plan: Compelling Reasons for Dental Open Access Scheduling

- 30% + no show rates
- Limited telephone access for scheduling appointments
  - 2003 management decided to improve telephone scheduling
- Excess demand from adult patients limited access for children
  - 2003 Board decided to increase access for children
- Low patient and staff satisfaction with care access
The Do: Open Access Implementation

  - Developed a new appointment template
  - Developed new scheduling rules
  - Trained staff and patients on new system
  - Eliminated once a month appointment call-in day(s).
  - Increased pediatric referrals
# The Do: Template Design

## Scheduling Key:
1. **RV** - regular or routine visits
2. **PV** - provider visits
3. **IN** - intake

<table>
<thead>
<tr>
<th>Before implementation</th>
<th>Schedule 1</th>
<th>Schedule 2</th>
<th>10 RV slots</th>
<th>6 PV slots</th>
<th>14 IN slots (DA)</th>
<th>30 total slots</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8:30 PV</td>
<td>8:30 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV = Restorative visit</td>
<td>9:30 PV</td>
<td>9:00 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:15 RV</td>
<td>9:30 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PV = Provider visit</td>
<td>11:30 RV</td>
<td>10:00 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>LUNCH</td>
<td>10:30 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN = Intake visit</td>
<td>1:30 RV</td>
<td>11:00 IN</td>
<td></td>
<td></td>
<td>Dentist complete exam. and supervise the care plan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2:15 RV</td>
<td>11:30 IN</td>
<td></td>
<td>Both DDS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3:30 PV</td>
<td>LUNCH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4:15 RV</td>
<td>1:30 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3:30 IN</td>
<td>2:00 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4:00 IN</td>
<td>2:30 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4:30 IN</td>
<td>3:00 IN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To Do: Template Design

**Scheduling Key:**
1. RV - regular or routine visits
2. PV - provider visits
3. IN - intake
4. UV - urgent visit

<table>
<thead>
<tr>
<th>After Implementation</th>
<th>Schedule 1</th>
<th>Schedule 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 UV</td>
<td>8:45 IN</td>
<td></td>
</tr>
<tr>
<td>UV = Emergency visit</td>
<td>9:30 RV</td>
<td>9:15 IN</td>
</tr>
<tr>
<td>RV = Restorative visit</td>
<td>10:15 PV</td>
<td>9:45 IN</td>
</tr>
<tr>
<td>11:15 RV</td>
<td>10:30 IN</td>
<td></td>
</tr>
<tr>
<td>LUNCH</td>
<td>11:30 RV</td>
<td>Each team of 1 dentist and 2 assistants</td>
</tr>
<tr>
<td>PV = Provider visit</td>
<td>1:30 UV</td>
<td>LUNCH share the new AAS template</td>
</tr>
<tr>
<td>2:15 RV</td>
<td>1:30 IN</td>
<td></td>
</tr>
<tr>
<td>IN = Intake visit</td>
<td>3:15 PV</td>
<td>2:00 IN</td>
</tr>
<tr>
<td>4:15 RV</td>
<td>2:30 RV</td>
<td></td>
</tr>
<tr>
<td>12 RV slots (4 for DA sched.2)</td>
<td>3:00 IN</td>
<td></td>
</tr>
<tr>
<td>4 PV slots</td>
<td>3:30 IN</td>
<td></td>
</tr>
<tr>
<td>4 UV slots broken into 15 mins</td>
<td>4:00 IN</td>
<td></td>
</tr>
<tr>
<td>20 IN slots (DA)</td>
<td>40 total</td>
<td>4:30 IN</td>
</tr>
</tbody>
</table>
To Do: Appointment Duration

BEFORE
- PV = 1 hour
- RV = 45 mins.
- IN = 30 mins.
- Emergency patients only 8:30-9:30
  1:30-2:15.
  - 1-2 patients/DDS

AFTER
- PV = 1 hour
- RV = 45 mins.
- IN = 30 mins.
- UV = 1 hour (carve out)
  - 4-5 patients/DDS seen thru out the day.
To Do: Appointment Scheduling Rules

BEFORE:

PV- Dentist to complete procedure. (endo, dentures)
RV- Dentist to begin restorative care per patients TX plan.
IN- Dental assistants to do radiographs and prophy, avail. DDS
to do intial exam and TX plan.

All 4 DA’s shared one template.
Emergency patients only 8:30-9:30 and 1:30-2:15.
   - 1 to 2 patients/DDS

BEFORE:

- Dental Assistants not paired with a dentist
- Appointment books opened for 1 month.
- Patients required to call in on assigned day to schedule appointment.
To Do: Appointment Scheduling Rules

AFTER:

- PV- Dentist to do - no change
- RV- Dentist to do – no change but change to add 2 new RV to schedule 2 for DA to place sealants & PRR’s.
- State of COLORADO law allows for DA’s to perform procedures that are not sub-gingival.
- IN- Dental assistants no change.
  - But each DA assigned a template and DDS.
- UV- Carved out time into templates to see adults with urgent care needs through out the day. Now averaging 8-10 per day.

AFTER:

- Appointment books opened for 2 week scheduling.
- Patients are scheduled to return for a follow up appointment before they leave.
- Patients needing recalls are told to call the day before they would like to come in for their 6 mo. Recall.
The Do: Educate all staff and Patients

- Provided handouts and with discussion.
- Reprioritization of front desk daily duties to provide more resources on the phones during heavier phone volume times.
- Established and maintained communication, collaboration, and a formal referral process with our CHC Pediatric and School Based Clinic practices.
The Do: Pediatric Referrals

- Established pediatric referral guidelines and process.
- Used various programs such as EPSDT to contact Medicaid patients that have missed an appointment.
The Study: Results

- A gradual decrease in monthly no show rates.
- 4% initial decrease in abandon call rate followed by 10% increase
- A 27% increase in pediatric users
- A 52% increase in Medicaid patients
- An Improved payor mix and FQHC payments
- A improvement in patient satisfaction with a decrease in patient complaints from 15 in 2003 to 3 in 2004.
- Staff are more satisfied with this new scheduling system.
Eastside No Show

Dental No Show Rates 2000-2004

Open Access Implemented

Eastside

Goal

Median
Monitor the volume of calls made into the clinic for appointments via the Meridian Mail report.
Patient Demographics
Eastside Dental

2003
- Black: 10%
- Hispanic: 6%
- White: 37%
- Other: 47%

2004
- Black: 7%
- Hispanic: 6%
- White: 33%
- Other: 54%

2005
- Black: 5%
- Hispanic: 5%
- White: 34%
- Other: 56%
Patient Demographics
% Users by Insurance
Eastside Dental

<table>
<thead>
<tr>
<th>Quarter</th>
<th>CHS</th>
<th>CICP</th>
<th>Commercial</th>
<th>Medicaid</th>
<th>Self Pay</th>
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<tr>
<td>Q1 02</td>
<td></td>
<td></td>
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<tr>
<td>Q2 02</td>
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<tr>
<td>Q3 02</td>
<td></td>
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<tr>
<td>Q4 02</td>
<td></td>
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<td></td>
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<tr>
<td>Q1 03</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>Q2 03</td>
<td></td>
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<td>Q3 03</td>
<td></td>
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<td>Q4 03</td>
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<td>Q1 04</td>
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<td>Q2 04</td>
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<td>Q3 04</td>
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<td>Q4 04</td>
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<td>Q2 05</td>
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<td>Q3 05</td>
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</tbody>
</table>
Patient Satisfaction
Recommend Clinic

ES
WS
DH
AAS
ACT: Subsequent Actions

- Create and implement a no show policy.

- Make confirmation/reminder calls to patients the day prior to their appointment.
Lessons Learned

- Pairing 2 DA’s per dentist.
- Utilization of dental assistants with expanded functions.
- ‘Carving’ time for Urgent Visits. As opposed to 1.45 hrs per day for emergent patients.
- Call demand creates challenge.
- Improved continuity of care by scheduling PV,RV and IN’s with the same provider team.
Conclusions

The basic design and rules of Advanced Access Scheduling “Open Access”, improves efficiency and care access for community health dentistry, even when demand for appointments exceeds supply of appointment slots.