The Pediatric Integrative Health Home (PIHH): A Collaborative Caries Prevention Project... and More

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2013 National Primary Oral Health Conference
Denver, CO
November 13, 2013
Main Clinic – Downtown - Congress

Your HEALTH is our PASSION

www.elrio.org
El Rio Health Center Overview

• Federally Qualified Health Center

• Established:
  Medical – 1970
  Dental -1973

• Multi-specialty Primary Care

• 16 Clinic Sites
El Rio Health Center Overview

• Medical Services:
  - Family Medicine
  - Pediatrics
  - Homeless Program
  - Behavioral Health
  - Clinical Pharmacy
  - OB/GYN & Midwives
  - Internal Medicine
  - HIV/AIDS service
  - Pharmacy
  - Radiography
  - Laboratory
  - Diabetes Program
El Rio Health Center Overview

• Additional Services:
  - Eligibility screening for a variety of programs through Health-e-Arizona
  - WIC Programs
  - Transportation
  - Health promotion and education
  - Community outreach / awareness programs for asthma, diabetes, and other chronic diseases
  - Patient Advocacy
  - Immunizations
El Rio Health Center Overview

• Dental Services
  - Homeless Program
  - HIV Program (Ryan White)
  - Special Needs Program
  - Implants
  - Children’s Orthodontia
  - Crowns, Bridges, Dentures, Restorative
  - Emergency/Urgent Dental Care
El Rio Health Center Staff
Total

• Over 740 Employees

• Over 82 Medical Providers

• 327,138 Total Encounters in 2012

• 79,637 Total Patients Served in 2012
El Rio Health Center Staff
Dental

- 11 Dentists
- 10 Dental Hygienists
- 6 Specialists:
  - 2 Oral Surgeons, 2 Pediatric Dentists
  - 1 Orthodontist, 1 Endodontist
- 3 Locations; 41 Operatories
- 46,492 Encounters; 18,012 Patients in 2012

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El Rio HC-Teaching Programs - Medicine

- AT Still University (SOMA)
  - 2nd, 3rd and 4th Year Medical Students (Continuity Site)
- U of Arizona Pediatric Residency Program (Rotational Site)
- University of Arizona Clinical Pharmacy Residency Program
El Rio HC-Teaching Programs-Dentistry
Clinical Training Sites for:

• Arizona School of Dentistry and Oral Health, Mesa Arizona - 4th Year Students
• Lutheran Medical Center, Brooklyn NY- - Advanced Education in General Dentistry Residency (1997) – 3-5 Residents
  - Advanced Education in Pediatric Dentistry Residency (2010) – 10-12 Residents
  - Advanced Education In Dental Public Health Residency (Starts in 2014) – 1-2
EL Rio El Pueblo Clinic
Why Implement the Pediatric Integrative Heath Home – Rationale


• “The dental home is the ongoing relationship between the dentist and the patient, inclusive of all aspects of oral health care delivered in a comprehensive, continuously accessible, coordinated, and family-centered way. Establishment of a dental home begins no later than 12 months of age and includes referral to dental specialists when appropriate”.
Why Implement the Pediatric Integrative Health Home – Rationale

The American Dental Association - in 2006 urges parents and guardians, as a child's first tooth erupts, to consult with their dentist regarding:

• Scheduling the child's first dental visit. It is advantageous for the first visit to occur within six months of eruption of the first tooth and no later than 12 months of age, and

• Receiving oral health education based on the child's developmental needs (also known as anticipatory guidance).
El Rio Southeast Clinic
Needs, Problems, Barriers....

Solutions

• High Caries Rate – Implement Modalities to Decrease
• Limited Access to El Rio Dental Care – 38,000 Pediatric Medical Patients – Increase Access to Care
• Low comfort level amongst Staff Dentists treating the challenging Pediatric Patient – only 2 out of 12 – Implement Peds Training for Staff Dentists
Needs, Problems, Barriers...

Solutions

• Low Dental IQ of the Pediatric Medical Staff – Implement Dental In-Services to Increase Dental IQ

• Pediatrician’s perceptions that Staff Dentists were not comfortable treating children – Create a children’s dental program

• Pediatrician’s referring to outside Medicaid “Mills” - QA Concerns/Lost Revenue – Increase access to care
Goals of the Pediatric Integrative Health Home

• Eliminate/decrease the practice by MD’s of referring patients for dental care outside the health center.

• Increase the % of children treated in the dental practice to 50% or greater

• Benchmark: # of children receiving dental exam within 12 months of well child MD visit

• Improve the financial sustainability
Components of the Pediatric Integrative Health Home
Building Blocks for Success

#1 - The Project Team:

- **Chief Clinical Officer** - Dr. Arthur Martinez
- **Associate Medical Director for Pediatric Medicine** - Dr. Andrew Arthur
- **Dental Director** - Dr. Greg La Chance
- **Associate Director for Pediatric Dentistry** - Dr. Tyler Roberts
- **Dental Manager** - Nancy Wexler
- **Pediatric Clinical Coordinator** - Grace Pier
- **Staff Dental Hygienist** - Tana Liley
Components of the Pediatric Integrative Health Home
Building Blocks for Success

#2 - *Staff Education*

- In-service training sessions and mini residency for the Staff Dentists on Pediatric Dentistry to increase comfort level in treating children
- Multiple organizational meetings and in-services with the Pediatric Medical Staff regarding the PIHH and Oral Health Education.
- Pediatric Residents – Annual presentation to the Pediatric Medical Staff and Dental Staff to re-enforce the PIHH Program
#3 - Development of a Collaborative Caries Prevention Program

- Caries Screening (Form) / Fluoride Varnish Program (In the Pediatric Medical Suites)
- Staffed by Dental Hygienists
- Grant Funded by The El Rio Foundation
- “Feeder System” for the Pediatric Dental Residency Program
<table>
<thead>
<tr>
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<th>Initial Assessment</th>
<th>2nd Visit</th>
<th>3rd Visit</th>
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<td>□-Yes □-No # Teeth</td>
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<tr>
<td>EGC</td>
<td>□-Yes □-No</td>
<td>□-Yes □-No</td>
<td>□-Yes □-No</td>
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<tr>
<td>Treatment Urgency</td>
<td>□-Urgent □-Early □-None</td>
<td>□-Urgent □-Early □-None</td>
<td>□-Urgent □-Early □-None</td>
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- Recommend FV applications
  □ 2 with FSM / 2 other with dental home

<table>
<thead>
<tr>
<th>Consent Form/Health History Reviewed</th>
<th>Initial Assessment</th>
<th>2nd Visit</th>
<th>3rd Visit</th>
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<tr>
<td>□-Yes □-No</td>
<td>□-Yes □-No</td>
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<table>
<thead>
<tr>
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<table>
<thead>
<tr>
<th>Post Varnish instructions given</th>
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<td>□-Yes □-No</td>
<td>□-Yes □-No</td>
<td>□-Yes □-No</td>
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</tbody>
</table>

Comments:
_________________________________________________________________________________
_________________________________________________________________________________

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<thead>
<tr>
<th>El Rio Provider ID</th>
<th>Provider Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td></td>
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<tr>
<td>2nd</td>
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<tr>
<td>3rd</td>
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</tbody>
</table>
Components of the Pediatric Integrative Health Home Building Blocks for Success

#3 - Development of a Collaborative Caries Prevention Program

- Create a *“Warm Hand Off System”*
- Goal: Every child receives a dental exam immediately after the Medical Well Child Visit
- Medical or Dental staff brings patients to dental department for exams.
Components of the Pediatric Integrative Health Home Building Blocks for Success

#3 - Development of a Collaborative Caries Prevention Program

- The Ultimate Delivery System: Dental Operatories in the Peds Medical Suites.
- Increases types of services that can be delivered as well
Peds Building – Main Clinic
Reception Area – Peds Main
FLOOR PLAN – CONGRESS PEDS
W.I.C. = 1073 SQ. FT.
DENTAL = 390 SQ. FT.
02-14-13
Components of the Pediatric Integrative Health Home
Building Blocks for Success

#4 - *Dental Report Form For Feedback To The Pediatrician*

- Send to Peds MD’s after dental exam is completed
- Closes the “loop” in the PIHH.
- Peds MD discusses results of dental exam with Parents
- Encourages follow up with child’s dental care
- Impresses parents with the teamwork and quality of care
Dear El Rio Medical Provider:

Thank you for referring this patient to us as part of the Integrated Health Home Program (IHHP). The goal of the IHHP is to establish a collaborative physician/dentist health team in order to provide integrative medical/dental care for El Rio's pediatric patients. Your patient named above was seen by an El Rio Dental provider. The following report contains the patient's dental diagnosis, dental services provided on the day of the examination as well as the follow-up dental treatment plan recommended for your patient to achieve optimum dental health. Please review this report with your patient's parents at their next medical appointment. This will reinforce the need for good oral health as well as let the parents know that the El Rio medical/dental team is truly concerned and working together to improve the overall health of their child. If you have any questions or concerns, please feel free to contact the patient's dentist as contained in this report.

**Diagnosis**

- Caries: YES NO
- Teeth with Caries:________
- Gingivitis: YES NO
- Malocclusion: YES NO
- Other: YES NO
- If YES:________

<table>
<thead>
<tr>
<th>Treatment Provided</th>
<th>Completed</th>
<th>Proposed</th>
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<tr>
<td>Examination</td>
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<td>Caries Screening (under 3 y/o)</td>
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<tr>
<td>Radiographs</td>
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<td>Cleaning</td>
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<td></td>
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<td>Fluoride Varnish</td>
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<tr>
<td>Oral Health Education</td>
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<td></td>
</tr>
<tr>
<td>Nutritional Counseling</td>
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<td></td>
</tr>
</tbody>
</table>

**Follow-Up Treatment Plan**

Number of the following treatment/s required:

- Fillings:________
- Pulpectomies:________
- Crowns:________
- Extractions:________
- Other:________

Recommended Dentist: Pediatric Dentist:________ General Dentist:________ Orthodontist:________

Other Treatment Options:

- Oral Sedation:________ IV Sedation:________ GA:________ Ortho Consultation:________

Place of Treatment: El Rio:________ Other:________

Recall Schedule: 3 month:________ 6 month:________ 1 year:________

Comments:________

Signature of Providing Dentist:________

To reach a dental provider, please dial "0"
Components of the Pediatric Integrative Health Home Building Blocks for Success

#5 – The Caries Immunization Card

- Great Parent Education Tool
- Delineates Frequencies for Exams, Fluoride Varnish and Sealants.
- Patterned after Medical Immunization Cards.
DENTAL IMMUNIZATION RECORD

Teeth are for a Lifetime.

REMEMBER to bring your child’s dental immunization record to every visit.
<table>
<thead>
<tr>
<th>Medical Condition(s) Which Require Antibiotic Coverage or Other Modifications for Dental Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Dental Development Assessment</td>
</tr>
<tr>
<td>Caries Risk Assessment</td>
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<tr>
<td>Fluoride Varnish Application</td>
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<tr>
<td>Dental Home Established</td>
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<td>Dental Cleaning</td>
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<tr>
<td>Nutritional Education</td>
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<tr>
<td>Oral Hygiene Instructions</td>
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<tr>
<td>Dental Disease Intervention</td>
</tr>
<tr>
<td>Fluoride Education</td>
</tr>
<tr>
<td>Referral and Recall</td>
</tr>
</tbody>
</table>
Components of the Pediatric Integrative Health Home
Building Blocks for Success

#6 – Establish a Pediatric Dentistry Residency Training Program

• In conjunction with Lutheran Medical Center, Brooklyn, NY, became a clinical training site in July 2012.
• 2 year program
• 4 Residents Per Class (8 Total)-started -July 1, 2010
• Graduated first class June 30, 2012
• Expanded to 6 Residents Per Class – July 1, 2013
The Pediatric Health Home
Benefits, Results and Achievements
The Pediatric Health Home
Benefits, Results and Achievements

• Increased knowledge and comfort among Staff Dentists in treating Pediatric patients.
• Increased Dental IQ and collaboration with the Medical Staff.
• Pediatric MD’s decreased referring patients to outside dental practices.
The Pediatric Health Home

Benefits, Results and Achievements

• Increased Medical Staff satisfaction with the Dental Staff and dental services to children.

• Parents appreciate having the Medical Visit and Dental exam at the same time – saves them an extra trip to the clinic.

• Parents perceive increased Quality of Care and Teamwork amongst El Rio Providers when Pediatricians:
  - review the results of the dental exam
  - encourage planned follow up restorative care.
The Pediatric Health Home
Benefits, Results and Achievements

• Potential Decrease in Caries Rate
  - Need to implement DMF Study
  - Has Meaningful Use, Advocacy and PR implications at the constituent and state levels
  - Potential lobbying opportunities for increased funding for preventive services (if proven effective)
• Evidenced Based Practices
• MPH Extern Project
The Pediatric Health Home
Benefits, Results and Achievements

• Increased access to children’s dental care at El Rio.
  - June 2010 - % children - Low to mid 30% range
  - Jan – Sept 2013 - % children – Mid to high 40% range
  - Several months in the low 50% range

❖ Increased financial sustainability
The Pediatric Health Home
Benefits, Results and Achievements

• Benchmark: Increase the number of children receiving a dental exam within 12 months of receiving a well-child MD visit.

• 2009 – 14.9%
• 2010 – 26.6%
• 2011 – 40.4%
• 4Q 2012 – 41.1%
Oral Health - Children

**Goal**
Percentage of children 12-60 months of age with a dental evaluation and a well child visit completed at El Rio within the measurement year.

**Benchmark**
N/A

**Numerator**
2,941 children 12-60 months of age who have had a dental evaluation visit at El Rio or an outside dental provider and well-child visits within the measurement year.

**Denominator**
7,241 children age 12-60 months of age who completed a well-child visit during the measurement period.

**Quarter**
1st Quarter 2012 (January - March 2012)

**Interpretation**
Data demonstrates statistically significant quarter over quarter improvement due to:

- **Better Outreach:**
  1. The Caries Prevention/Fluoride Varnish Program has doubled in volume from previous year.
  2. The pediatricians are consistently referring patients to Dental.
  3. Pediatric Dental advertisements have been placed in all child-friendly Medical areas.

- **Improved Appointment Availability:**
  1. The addition of a pediatric residency program.
  2. Created a modified, blended Patient Driven Scheduling system for hygienists.

**Action Plan**
1. Greater Outreach to El Pueblo.
2. U of A volunteers to assist with outreach.
3. Coordinator assigned to both oral health outreach and pediatric clinic services to better facilitate appointments and referrals.

**Control Chart: Oral Health - Children**

- Oral Health - Children
- UCL = 32.161
- Average = 24.985
- LCL = 16.608

**Rule Violations**
- Less than 3 sigma
- 3 points out of the last 3 below -2 sigma
- 3 points out of the last 3 below -1 sigma
- 4 points out of the last 5 below -1 sigma
- 6 points in a row trending up
- Greater than 3 sigma
- 2 points out of the last 3 above +2 sigma
- 6 points in a row trending up
- Greater than 3 sigma
- 2 points out of the last 3 above +1 sigma
- 6 points in a row trending up
- Greater than 3 sigma
- 2 points out of the last 3 above +1 sigma
- 6 points in a row trending up
- Greater than 3 sigma
- 2 points out of the last 3 above +1 sigma
- 6 points in a row trending up
- Greater than 3 sigma
- 2 points out of the last 3 above +1 sigma
- 6 points in a row trending up

*Note: The chart shows data points from 2009 to 2012 with a trend line indicating improvement over time.*

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Strategies for Implementation
Practical “Pearls” of Wisdom

#1 - Best Location for the Caries Screening/Fluoride Varnish Program

• The Pediatric Medicine Waiting Areas
• Recruit siblings of medical patients as well.
• Generates interest. Good PR.
Strategies for Implementation
Practical “Pearls” of Wisdom

#2 - Location of Dental Operatories in the Pediatric Medical Suites

• Front door in the Peds waiting area and back door with access from the Peds Medicine Clinic Area

• Can increase scope of services from screenings and fluoride varnish to exams, x-rays, prophylaxis and sealants
Strategies for Implementation
Practical “Pearls” of Wisdom

#3 - Staff these Dental Operatories with Peds, AEGD Dental Residents, Dental Students and RDH’s.

• Schedule follow up restorative on Peds Residents Schedule

• Use as “feeder” into Pediatric Residency Training Program
Strategies for Implementation
Practical “Pearls” of Wisdom

#4 - Varnish Program Guidelines

- Hygienists screen 3-4 patients per hour (12-16 patients per 4 hour session)
- Have 1 DA for assistance
- Make Follow up appointments with dentists
- Check State Medicaid Programs for potential reimbursement.
Strategies for Implementation
Practical “Pearls”

#5 – Fund Raise

- The El Rio Foundation – Provides grant $’s for these preventive services
- Officially funded program of the Foundation
- Since 2009 has raised over $130,000 for this program.
- Donors include: Union Pacific Railroad Foundation, Arizona, Cardinals Foundation, Arizona Diamondbacks Foundation, and Delta Dental of Arizona Foundation.

www.elrio.org
Strategies for Implementation

Practical “Pearls”

#6 – Much Easier Participating in Outreach Events

• Varnish Program provides outreach everyday
• Structure and organization is culturally engrained in the Health Center
• Examples: Boys and Girls Club Health Fairs, El Rio Health Fairs and GKAS Day events
Strategies for Implementation
Practical “Pearls”

#7 - Other potential clinic services areas for Varnish Program:

• Family Practice
• WIC

#8 - Annual In-services on oral health and the PIHH to the Medical and Dental Staff provided by 1st year Pediatric Residents to re-enforce the program.

#9 - Caries Screening Form
#10– Implementing a Pediatric Dentistry Residency Training Program – Ideas for Success

- Requires 3 Staff Pediatric Dentists (multiple sites).
- Hire 2 Peds Dentists initially to treat patients and build up the patient pool for 1 year minimum.
- Hire 3rd Peds Dentist when starting program to provide adequate coverage for vacations, sick leave.
- 1.0 FTE of dental services from 3 Peds Dentists
Questions?
Thank you!

Greg La Chance, DDS
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