


**Pain Resource Nurse
Program and Impact on
Barriers to Pediatric
Pain Management**

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Significance

- Thousands of children are hospitalized each year and experience pain
- Prevalence of clinically significant pain in children may be as high as 60%

Walker and Wagner, 2003



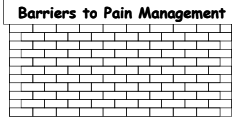
Significance

- Children are identified as a vulnerable population at risk for under treatment of pain
- Untreated or poorly treated pain impacts every body system and can lead to:
 - Impaired healing
 - Delayed recovery
 - Prolonged hospitalization
 - Exacerbation of illness or injury
 - Death

AAP & APS, 2001; Ferrell et al., 2001

Barriers to Pain Management

- Patients
 - Knowledge
 - Experience/Attitudes
- Health Care Providers
 - Knowledge
 - Experience/Attitudes
- Health Care Systems
 - Patient care unit level to global laws
 - Experience/Attitudes/Values



Program Evaluation Purposes

1. Determine the effectiveness of the Pain Resource Nurse (PRN) Program for reducing barriers to optimal pain management
2. Describe what behaviors PRNs use to influence changes in practice as they enact their role as local pain experts.

Questions of Interest

1. Does the PRN Program change nurses' perceptions of barriers to pain management?
2. What behaviors do PRNs use to influence change in practice as they enact their role as pain experts?
3. Does the PRN Program improve family pain satisfaction scores?

Program Evaluation Setting

- Doernbecher Children's Hospital
 - 150 bed, university based pediatric teaching hospital and clinic system providing tertiary care
- Pediatric Acute Care Center
 - 48 medical/surgical patient beds
 - 70 direct care nurses (RNs)
 - Budgeted for 12,300 patient days annually

Measures

- Survey
 - *Barriers to Optimal Pain Management*
 - 18 items (Cronbach's $\alpha = .85$)
 - Factor analysis
 - Institutional Commitment/Systems Barriers
 - RN Beliefs and Biases
 - Patient/Parent Barriers
 - Press Ganey pain satisfaction question
 - "How well your child's pain was controlled"

Intervention

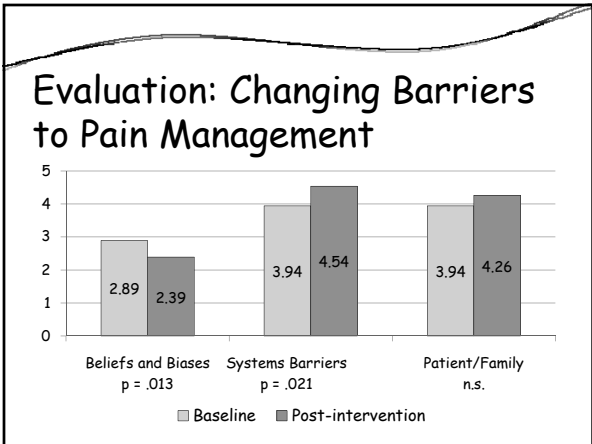
- Implementation of PRN Program
 - 2 days of pain education (January 2009)
 - Types of pain, anatomy and physiology of pain
 - Assessment
 - Pharmacological management
 - Integrative pain management therapies
 - Psychosocial impact of pain
 - Ethics and disparities in pain management
 - Empowerment, change behavior
 - Crucial conversations

Intervention

- Supporting implementation
 - Frequent face to face contact with PRNs
 - Email communication
 - Monthly meetings
 - Journal articles for discussion
 - Ongoing educational offerings/support
 - Encouraging certification

Evaluation

- Comparison of perceived barriers pre- and post-intervention (single sample t-tests)
- Content analysis of weekly PRN reports
- Trending patient pain satisfaction scores
- 8 week evaluation period



Evaluation: PRNs Role Enactment Behaviors

- Latent Content Analysis (Krippendorff, 1980)
 - 209 coded text comments
 - 78 role enactment behaviors
 - 69 challenges
 - 62 successes

PRNs Role Behaviors (cont'd)

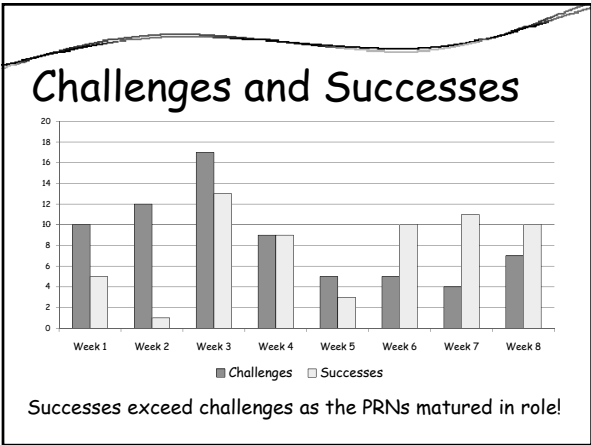
- Resource (49%)
 - Teaching
 - Helping
 - Recommending
 - Explaining
- Change Agent (3%)
 - Change minds
 - Reinforce change of practice
- Role Model (28%)
 - Review
 - Discuss
 - Anticipating pain
 - Being proactive
- Advocate (20%)
 - Working for optimal orders
 - Being persistent
 - Advocated
 - More vocal
 - Encouraged use

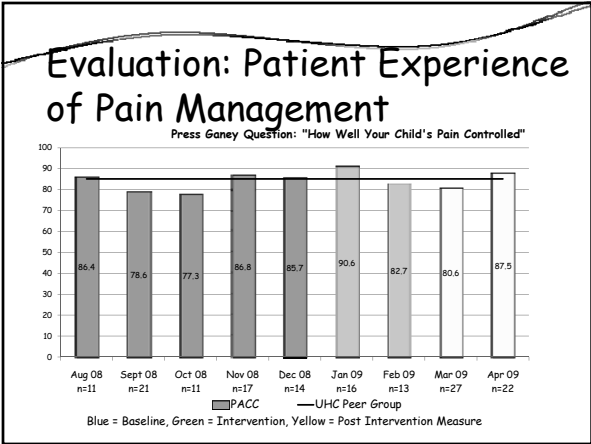
Challenges PRNs Faced

- Conflict with physicians
- Undesirable clinical practice
- Lack of time
- Stigma/attitudes/beliefs
- Knowledge
- Patient/parent
- Lack of awareness of role
- Lack of clinical hours

Successes PRNs Experienced

- Appreciative feedback
 - Patient/family
 - Peers/others
- Interdisciplinary collaboration
- Acceptable pain care
 - Effective pain relief
- Positive changes in clinical practice
 - Changes in clinical environment
- Maturation in PRN role
- Role awareness





Summary of Findings
(Q1—Impact on Barriers)

- PRN Program decreased some barriers while others increased or did not change.
 - ↓ Beliefs and Biases
 - ↑ Institutional Commitment/Systems Barriers
 - No Change in Patient/Family Barriers

Summary of Findings
(Q2Role Enactment Behaviors)

- PRNs used role enactment behaviors similar to those reported in the literature.
 - Resource, Change Agent, Role Model, Advocate
- Role maturation occurred over time.
 - More offering advice Vs waiting to be asked
 - Increased MD contacts
 - More successes than challenges!

Summary of Findings
(Q3—Patient Satisfaction)

- PRN Program did not improve patient satisfaction with pain management.
 - Trend is in a positive direction however

Limitations

- Convenience sampling
- Small sample sizes
- Short time from intervention to outcome measurement
- Patient satisfaction as outcome
- Single question for pain satisfaction outcome
- Did not control other potential variables

Implications for the Future

- Clinical practice
 - Maintaining and improving gains
 - Expansion of the program to other units
 - Physician engagement and education
- Research
 - Regular monitoring of barriers and satisfaction
 - Cost effectiveness analysis

Conclusions

- PRN Program decreased nurses' perceptions of barriers related to their own beliefs and biases.
- Physician engagement will be necessary to decrease Institutional Commitment/Systems barriers.
- Efforts must be made to decrease patient and family barriers.



Questions ? ? ?
