Childhood fracture management

Project overview
Victorian Paediatric Orthopaedic Network

The Royal Children's Hospital Melbourne

Barwon Health

Western Health

Monash Children's Southern Health

State Government Victoria Department of Health
What this presentation covers

- Project background
- Guidelines
- Education module
- Implementing the guidelines
Misdiagnosis is a common occurrence

- Residents unable to determine if paediatric fracture present or not in 20% of cases (Ryan et al 2004)
- Management incorrect in > 50% of cases (Ryan et al 2004)

Audit of plaster casts in a Victorian tertiary hospital

- only 35% were deemed adequate
Aim of project

- Improve and standardise quality of paediatric fracture care

Developed by

- ED physicians
- Paediatric orthopaedic surgeons
Childhood fracture management

RCH Clinical Practice Guidelines website
www.rch.org.au/clinicalguide/fractures

- Guidelines
- Education module
- Fact sheets
- Casting videos
Clinical guidelines for ED

- Easy to read format
- X-rays to order
- When to refer to ortho
- Management in ED
- Follow-up
- Summary

Radius/ulna shaft guidelines link
Education module

- Bone anatomy
- Fracture patterns
- Principles of evaluation and management
- Animations
- Quiz

Paediatric education module link
Family resources

Fact sheets

- Clavicle
- Buckle injury
- Supracondylar
- Wrist
- Plaster care

www.rch.org.au/clinicalguide/fractures/#family
Steps to implementing guidelines

1. Becoming motivated to change
   • Baseline audit
   • Raise awareness

2. Changing what needs to be changed
   • Identify barriers and tailor approach
   • Monitor progress

3. Making the change permanent
   • Sustain progress

Barriers to uptake of guidelines

Knowledge

“I didn’t know there were guidelines”

“I haven’t read the guidelines”

Beliefs

“It’s all good in theory, but practice is different”

“I know what’s best for my patients”

Behaviour

“It takes time – time which I don’t have”

Adapted from Cabana MD et al. JAMA 1999; 282:1458–1465
## Overcoming barriers

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Intervention</th>
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<tbody>
<tr>
<td>Lack of knowledge</td>
<td>• Raise awareness of guidelines (e.g. Poster)</td>
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<td></td>
<td>• Interactive educational meetings to highlight key messages</td>
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<tr>
<td>Lack of motivation</td>
<td>• Obtain patient feedback</td>
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<td>• Seek support from local opinion leaders</td>
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<td>• Include in resident/registrar performance review and orientation</td>
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*Source: Modified from How to change practice. NICE. Dec 2007*
# Overcoming barriers

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<tr>
<td>Beliefs</td>
<td>• Seek peer influence &amp; support from opinion leaders</td>
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<tr>
<td></td>
<td>• Audit and feedback</td>
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<tr>
<td>Skills</td>
<td>• Run interactive education meetings</td>
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<td>• Incorporate into educational program</td>
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Further information

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