Sticks and Stones may Bend my Bones
A QIP for the Management of Distal Radius Buckle Fractures in Children

Dr Sarah Herbert ST7 PEM
MBBCh, MCEM, DCH
Why?

- Most common fracture
- Common presentation to ED
- Plasters get wet - reattendance rates high
- Inconvenient for child and parent
- Uncomfortable for child
Identifying the Problem

- **Scale**
  - 180 patients per year

- **Nature**
  - Process Map
  - Telephone Survey
Aims – What are we trying to accomplish?

- Improve Comfort
- Reduce Inconvenience
What change can we make that will result in improvement?

- I knew!!!!!!
- Bench Marking
- Literature Search
- Internet Search – pathways and proformas
Team

- Me
- PEM lead Consultant
- Paediatric Orthopaedic Consultants
- ENP lead
- CT3/PEM junior
What change can we make that will result in improvement?

- No fracture clinic follow up
- A removable device for immobilisation
- Safeguarding against greenstick fractures - VFC
How will we know the change is an improvement?

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Comfort Inconvenience (Satisfaction)</th>
<th>Telephone survey answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>Number of casts applied Number of splints applied</td>
<td>Data from PACS and Zylab</td>
</tr>
<tr>
<td>Balancing</td>
<td>Number of greenstick fractures</td>
<td>Data from VFC</td>
</tr>
</tbody>
</table>

The data collected was plotted on SPC Charts.
PDSA cycles

- Cycle 1
  - Pathway
  - Patient/Parent information leaflet
PDSA cycles

- Cycle 2
  - Patients over 2 weeks seen by PEM junior
  - New pathway used
  - Followed up with telephone survey
  - Worked really well
PDSA Cycles

- Cycle 3
  - Teaching
  - Information sharing – emails/posters
SPC Chart - comfort scores (outcome)
SPC Charts – Satisfaction scores (outcome)
Chart showing number of plasters and splints (process)
Balancing

- VFC

- 0 greensticks

- Their projects outcome and process measures were showing it to be a success
Sustainability

- Working along side virtual fracture clinic QIP
- Induction teaching
- Online ED guideline
- Audit and Governance
Reflection and what I learnt

- Try to have an understanding of QIP methodology before you start.
- Find the problem and then use a team to look for an aim and solution – DON’T approach the team with a preconceived solution.
- Do small, manageable PDSA cycles.
- Measure what you aimed to change and include process and balance measures.
- Use your team.
- Stick to a time frame, use a Gantt chart, keep a diary.
- Do it in the hospital you are working in.
Questions?
Thank you

It is not enough to do your best; you must know what to do, and then do your best.

If you do not know how to ask the right question, you discover nothing.

Without data you’re just another person with an opinion.

If you can’t describe what you are doing as a process, you don’t know what you’re doing.

Quality is everyone’s responsibility.