Hip fracture care at Northumbria: HIPQIP and Scaling Up

Dominic Inman
Consultant Orthopaedic Surgeon
Northumbria Healthcare NHS Trust
Outline

• How it all began

• Interventions introduced and their impact

• ‘Scaling Up’ HIPQIP
  • Lianne Brkic – Project manager
Population: 500,000

690 patients with hip fractures year

**ORTHO SURGERY**
- 20 consultants doing trauma
- 20 middle grades
- 100 Hrs of trauma surgery / week

**ORTHOGERIATRICIANS**
- Hours of orthogeriatric cons 12 hours
- 80 Hours of orthogeriatric middle grade
- 3 specialist ‘TONC’ nurses

www.northumbria.nhs.uk
Since June 2015

Northumbria
Specialist Emergency Care Hospital
Now Open
30 day mortality (2010 Report)
Standardisation of care

• 2 sites treating hip fractures
• Cross-trust ‘Surgical care bundle’
• Real-time audit of peri-operative care
• Regular feedback
• Interventions targeted at all parts of patient pathway
<table>
<thead>
<tr>
<th>Interventions introduced since 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fascia iliaca blocks</td>
</tr>
<tr>
<td>Intra-operative Tranexamic acid</td>
</tr>
<tr>
<td>Copal cement</td>
</tr>
<tr>
<td>‘fast-track’ Local anaesthetic infiltration</td>
</tr>
<tr>
<td>Intra-operative fluid optimisation</td>
</tr>
<tr>
<td>Haemaccue in recovery</td>
</tr>
<tr>
<td>Routine ICU outreach support for high risk patients</td>
</tr>
<tr>
<td>Nottingham hip fracture score</td>
</tr>
<tr>
<td>Expedient surgery</td>
</tr>
<tr>
<td>Withdrawal of out-dated implants</td>
</tr>
<tr>
<td>20 minute rule</td>
</tr>
<tr>
<td>Consultant surgeon scrubs for all high risk patients</td>
</tr>
<tr>
<td>Pre-wash and position in anaesthetic room</td>
</tr>
<tr>
<td>Nutritional support</td>
</tr>
<tr>
<td>7 day working physiotherapy</td>
</tr>
<tr>
<td>Standardisation of peri-operative fluid management</td>
</tr>
<tr>
<td>Surgical care bundle</td>
</tr>
<tr>
<td>Combined assessment form</td>
</tr>
<tr>
<td>Standardised transfusion policy</td>
</tr>
<tr>
<td>Pre-written hip fracture specific drug kardex</td>
</tr>
<tr>
<td>This is me</td>
</tr>
<tr>
<td>Patient information booklet</td>
</tr>
<tr>
<td>fracture prevention treatment</td>
</tr>
<tr>
<td>High risk patient strategy</td>
</tr>
<tr>
<td>Templated xrays</td>
</tr>
</tbody>
</table>
Pain relief
Fascia Iliaca block

- Introduced in Northumbria in 2010 as opiate-sparing analgesia
- Effective pain relief
- Recognised nationally as gold standard
Fascia iliaca compartment block uptake from both hospitals from October 2010 to August 2013.

Now consistently delivered in >90% of patients
Nutrition
Using dietetic assistants to improve the outcome of hip fracture: a randomised controlled trial of nutritional support in an acute trauma ward

Donna Georgina Duncan¹, Susan Janet Beck², Kerenza Hood³, Antony Johansen²,⁴

<table>
<thead>
<tr>
<th></th>
<th>Routine nursing care (n = 157)</th>
<th>Dietetic assistant support (n = 145)</th>
<th>Significance (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths in trauma unit</td>
<td>16</td>
<td>10.1%</td>
<td>6</td>
</tr>
<tr>
<td>Deaths in hospital</td>
<td>23</td>
<td>14.6%</td>
<td>12</td>
</tr>
<tr>
<td>Deaths at 4 months</td>
<td>36</td>
<td>22.9%</td>
<td>19</td>
</tr>
</tbody>
</table>

43% reduction in mortality
>90% of patients now receive additional feeding each day.
Safer planned surgery

• More consultant involvement, shorter operations
  • High risk hip fracture protocol
  • 20 minute rule

• Pre-operative planning

• Rationalising hip hemiarthroplasty technique
  • Bone cement used
  • Theatre discipline and standardised gowns
## High risk protocol
### Nottingham Hip Fracture Score

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>66-85</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>&gt;85</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td><strong>Admission Hb</strong></td>
<td>&lt;= 10</td>
<td>1</td>
</tr>
<tr>
<td><strong>AMTS</strong></td>
<td>&lt;7</td>
<td>1</td>
</tr>
<tr>
<td><strong>Institution</strong></td>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td><strong>Comorbidities</strong></td>
<td>&gt;1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Malignancy</strong></td>
<td>Yes</td>
<td>1</td>
</tr>
</tbody>
</table>

### NHFS Score

<table>
<thead>
<tr>
<th>NHFS Score</th>
<th>30 day mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.9</td>
</tr>
<tr>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>2</td>
<td>2.4</td>
</tr>
<tr>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>4</td>
<td>6.2</td>
</tr>
<tr>
<td>5</td>
<td>9.8</td>
</tr>
<tr>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>8</td>
<td>33</td>
</tr>
<tr>
<td>9</td>
<td>47</td>
</tr>
<tr>
<td>10</td>
<td>57</td>
</tr>
</tbody>
</table>
High risk - added interventions

- Consultant surgeon scrubs in from start
- D/w ICU re. routine admission post-op
- Consultant anaesthetist prescribes post-operative fluids
  - including suggested fluid boluses if hypotensive
Does the consultant scrubbing affect operative time?
Surgical time reduced by 30 mins in arthroplasty cases if consultant scrubs

No significant effect on 30 day mortality
20 minute rule
Pre-operative planning

- Standard practice in elective arthroplasty
- Not commonly done in hip fracture
- Avoids intra-operative ‘surprises’
- Decreases intra-/ post-operative complications
  - Dislocation
  - Peri-prosthetic fracture
  - Leg length discrepancy
Templating – Hip fractures
Templating – Hip fractures
Infection following a broken hip

- Infection rate between 4-7%
- = Increased death rate
- = Increased pain and suffering
- = Decrease in quality of life for patients
Risk factors for infection following hip fracture surgery: analysis of 2,822 consecutive patients – Holleyman et al

- 2009-2015
- Hemiarthroplasty (n=1,825) or fixation (n=997)
- 39/2822 (1.4%) - deep infection within 1 year
- CNS or S Aureus commonest organisms
- Increased risk if
  - Hemi vs DHS (6x risk)
  - Blood transfusion within 30 days (3x risk)
  - Presence/development of Pressure sores (3x risk)
  - Standard vs High dose dual Abx cement (2x risk)
Hemiarthroplasty
Standard vs High dose antibiotic

gentamicin 0.5g

gentamicin 1g and clindamycin 1g

848 of 848 patients recruited

UK HPA assessment
Quasi randomised - month
### Results

<table>
<thead>
<tr>
<th></th>
<th>Palacos ®</th>
<th>Copal ®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death 90D</td>
<td>15.4</td>
<td>16.1</td>
</tr>
<tr>
<td>Deep SSI</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>Superficial SSI</td>
<td>5.3</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Copal now used for all hemiarthroplasties
In all cases...
NORTHUMBRIA GUIDELINES FOR THE PERI-OPERATIVE MANAGEMENT OF FEMORAL FRACTURES

**INTRA-OP**

**SPINAL ANAESTHESIA**
- Low dose (<10mg bupivacaine)
- No intrathecal opiate
- Avoid excessive sedation
- Avoid if INR >1.4

**PERI-OP CARE**
- Tight BP control - aim MAP >55 throughout
- Use phenylephrine infusion for all cases
- Consider goal directed fluid therapy in OR and PACU
- Use BIS to avoid excessive depth of anaesthesia - aim BIS >40
- Avoid benzodiazepines and ketamine
- Beware bone cement implantation syndrome (BCIS)

**GENERAL ANAESTHESIA**
- Consider gas induction
- Consider spontaneous ventilation - if possible use 3rd generation LMA

**ANALGESIA**
- LIA with catheter
- Avoid regular opiates and NSAIDS

**PRE-OP**
- Rapid anaesthetic assessment, avoid delays to surgery
- Risk stratify and TEP
- Inform critical care if high risk
- FIB / FNB - repeat pre-op if >8 hours since administration using SHORT ACTING agent
- Consider pre-optimising in theatres if necessary
- Plan for spinal OR GA at discretion of individual assessment

**POST-OP**
- Prescribe fluids if necessary
- Continue (and wean) vasopressor in infusion in recovery if required
- Critical care post-op if appropriate for high risk cases
- Haemocue on arrival to PACU
- Send lab sample if <90
- Ensure haemocue >80 before discharge to ward
Intra-/ post-operative pain relief

- Low dose spinal
  - minimal sedation
  - avoid intra-thecal diamorphine
    - (5 fold risk of urinary retention)
- LIA
  - 100mls 0.125% Chirocaine
- Wound catheter
  - 4 hourly boluses for 1st post-op night
Newer achievements

• Bed scales to weigh patients painlessly *
• Live theatre scheduling board on trauma ward
• Clocks displaying time, day and date in every room *

*By kind donation from T.H.U.G.
Maintaining standards
Root cause analysis of 30 day deaths

• Quarterly meeting
• Multidisciplinary
  • Orthogeriatrics
  • anaesthesics
  • nursing
  • Orthopaedics
• Feedback key learning points to teams
HIPQIP Steering group meetings

- Bimonthly
- Multidisciplinary
- Review key measures of quality
- Discuss and feedback any issues
# HipQIP – Quality Account

Fractured Neck of Femur Quality Improvement Project  
Quality Account - August 2015

Total number of Hip Fracture admissions in July 2015 = 55

<table>
<thead>
<tr>
<th>STANDARD</th>
<th>Latest</th>
<th>Target</th>
<th>NTGH</th>
<th>WGH</th>
<th>NSECH</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients will have x-ray within an hour of arrival in A&amp;E</td>
<td>July</td>
<td>90%</td>
<td>75.4%</td>
<td>75.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patients will have fascia iliaca block on admission</td>
<td>July</td>
<td>90%</td>
<td>94.5%</td>
<td>94.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance with surgical care bundle in theatres</td>
<td>August</td>
<td>90%</td>
<td>73.1%</td>
<td>73.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduce Mean Acute LOS for # NoF patients by 6 days (in arrears)</td>
<td>June</td>
<td>&lt;11%</td>
<td>0.0%</td>
<td>30.0%</td>
<td>9.9%</td>
<td>13.4%</td>
</tr>
<tr>
<td>Reduce Annual Crude Mortality (in arrears)</td>
<td>12 months ending June</td>
<td>&lt;8%</td>
<td>10.3%</td>
<td>10.1%</td>
<td>6.3%</td>
<td>10.1%</td>
</tr>
<tr>
<td></td>
<td>36 months ending June</td>
<td>&lt;8%</td>
<td>8.6%</td>
<td>8.0%</td>
<td>6.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Home to home in 30 days (in arrears)</td>
<td>June</td>
<td>55%</td>
<td>40.2%</td>
<td>71.4%</td>
<td>53.8%</td>
<td>54.5%</td>
</tr>
<tr>
<td></td>
<td>12 months ending June</td>
<td>55%</td>
<td>50.0%</td>
<td>56.8%</td>
<td>53.8%</td>
<td>53.5%</td>
</tr>
<tr>
<td>All patients to benefit from early mobilisation after surgery</td>
<td>Day 6</td>
<td>55%</td>
<td>0.0%</td>
<td></td>
<td>24.5%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Excellent patient experience consistently reported by patients and families</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Month Average</td>
<td>August</td>
<td>&gt;9</td>
<td>9.22</td>
<td>9.56</td>
<td>9.46</td>
<td></td>
</tr>
<tr>
<td>No Domains &gt; 9.0</td>
<td></td>
<td>&gt;7</td>
<td>7/10</td>
<td>8/10</td>
<td>9/10</td>
<td></td>
</tr>
<tr>
<td>Mean Promoter Score</td>
<td></td>
<td>&gt;9.0</td>
<td>10.00</td>
<td>9.38</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Improved nutritional support for patients</td>
<td>July</td>
<td>75%</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Emergency readmissions within 30 days (in arrears)</td>
<td>June</td>
<td>5%</td>
<td>8%</td>
<td>0%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 months ending June</td>
<td>11%</td>
<td>9%</td>
<td>0%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Number of patients with a hospital acquired (after 72 hours of admission) pressure ulcer (By worst grade of pressure ulcer)</td>
<td>Category 2</td>
<td>July</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Category 3, 4 or ungradable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEWS Scores - Trauma Ward</td>
<td></td>
<td></td>
<td>Ward 5</td>
<td>Ward 6</td>
<td>Ward 1</td>
<td></td>
</tr>
<tr>
<td>Documented evidence of full sets of observations</td>
<td></td>
<td></td>
<td>98%</td>
<td>88%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Correct calculation of NEWS scores</td>
<td></td>
<td></td>
<td>98%</td>
<td>94%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>% of triggered NEWS scores 1.4 with actions/decisions documented by appropriate responder</td>
<td>August</td>
<td>90%</td>
<td>20%</td>
<td>50%</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>% of triggered NEWS scores 5 or more, or 3 in one parameter, with actions/decisions documented by appropriate responder</td>
<td></td>
<td></td>
<td>90%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
NHFD 2015 - Mortality

Fig 1 Funnel plot of crude and adjusted mortality rates within 30 days (2014)
BMJ awards 2015

PATIENT SAFETY TEAM OF THE YEAR

This award recognises teams that are leading the way in working to improve patient safety and providing better outcomes

WINNER

HIP QUALITY IMPROVEMENT PROGRAMME
NORTHUMBRIA HEALTHCARE FOUNDATION TRUST

RUNNERS UP
REDUCING HOSPITAL MORTALITY
Portsmouth Hospitals Trust
@QAHospitalNews

SPSP SEPSIS COLLABORATIVE
NHS Greater Glasgow and Clyde, NES and HIS

PRE-IMPLANTATION GENETIC DIAGNOSIS CENTRE
Guy’s and St Thomas’ Foundation Trust

ENHANCED SAFETY IN PRESCRIBING
Meddygfa Canna Surgery and Cardiff LHB
NHFD 2016 report

Fig 2  Funnel plot of crude and adjusted mortality rates within 30 days (2015)
Action plan already underway

• HIPQIP Relaunch - May 2016
  • Ward cover
    • Nursing
    • Junior docs at weekend
    • Orthogeriatric cover – MG/consultant
  • Anaesthetics
  • Orthopaedic
  • Nutrition
  • Physio
Progress with last year’s goals?

✓ 3 full-time TONCs in post with aim to expand numbers to provide a 7 day service

✓ Nutrition assistants 7 day a week on 3 sites

✓ Extra F2 doctor on ward 1 at weekends

✓ 7 day TONC cover

X Weekend Orthogeriatric cover

X Weekend physio base site ward cover
HIPQIP - Working Groups

1. Pre-op care  “from fall to fix”
2. Pain relief  “safe, effective, brain-friendly”
3. Nutrition and Hydration  “Think HIP”
4. Measurement  “quality in=quality out”
5. End of life care  “dying with dignity”
6. Continuity of care  “from fix to farewell”
7. Mortality reviews  “Review - feedback - learn”
# Pain assessment

## The Pain Assessment in Advanced Dementia (PAINAD) Scale*

<table>
<thead>
<tr>
<th>Items</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative vocalization</td>
<td>None</td>
<td>Occasional moan or groan. Low-level speech with a negative or disapproving quality.</td>
<td>Repeated troubled calling out. Loud moaning or groaning. Crying.</td>
<td></td>
</tr>
<tr>
<td>Consolability</td>
<td>No need to console</td>
<td>Distracted or reassured by voice or touch.</td>
<td>Unable to console, distract or reassure.</td>
<td></td>
</tr>
</tbody>
</table>

PROTOCOL FOR PAIN RELIEF FOR FRACTURED NECK OF FEMUR PATIENTS

Pain should be assessed both at rest and on movement using a suitable pain tool.

For those patients who cannot verbalise or communicate their pain, the PAINAD Assessment Tool must be completed.

- Pain Score 0 (NONE)
  - No action required. Patient comfortable. Continue to assess pain score as per NEWS chart.

- Pain Score 1-3 (MILD)
  - No pain at rest but slight on movement.

- Pain Score 4-7 (MODERATE)
  - Intermittent pain at rest or moderate pain on movement.
  - Ensure regular analgesia has been given as prescribed. If patient has a LA AMB catheter, ensure boluses have been administered as prescribed.
  - Give Oxycodone oral solution (2.5-5mg) as prescribed for breakthrough pain.
  - Reassess the patient.
  - If patient has not received 2 doses of Oxycodone oral solution for breakthrough pain with minimal benefit, initiate IV Morphine as prescribed to effect (1-2mg with 5 minute interval up to prescribed dose).

- Pain Score 8-10 (SEVERE)
  - Continuous pain at rest or severe pain on movement.
  - Has patient received their Oxycodone MR dose?
  - Has patient received breakthrough Oxycodone oral solution?
    - If patient has LA AMB catheter in place, are they due a bolus?
    - If all of the above have been administered then:
      - Give IV morphine as prescribed. (1-2mg with 5 minute interval up to prescribed dose)
    - If increased pain is problematic then seek advice from the Acute Pain Service, ITU Call Aneuesthesist or Nurse Practitioner (if dependent).

The majority of patients undergoing surgery for fractured neck of femur will be prescribed Oxycodone Modified Release 5mg BD for up to 5 days. After 5 days, this will be reviewed on an individual basis and may be extended for a further 72 hours depending on patient requirement. Subsequent reviews are required to ensure the patient does not receive this medication indefinitely; and appropriate step-down analgesia has been prescribed. When considering step-down analgesia a pain assessment must be performed first to ensure the patient is able to move their affected limb without causing unacceptable pain or discomfort.
IV Paracetamol in hip fracture

• Equivalent analgesic effect to morphine
• Decrease opiate requirement by 70%

• Encourage use pre-hospital instead of morphine
• add to pre-printed hip fracture kardex for pre-op regular analgesia
NHFD run charts

Overall performance - NSE. Northumbria Specialist Emergency Care Hospital

- Patients (number per month)
- Hours to operation
- Hours to operation (annual)
- Hours to operation (national)
- 30 day mortality % (annual)
- 30 day mortality % (national)

Chart data is indicative status only - © Royal College of Physicians - Technology by Crown Informatics (ID: OPL3a)
HIP QIP Scaling Up Improvement Programme
What is ‘Scaling Up’?

• Large scale improvement plan
• Takes successful small scale projects and delivers them at large scale
• The HIP QIP Scaling Up Improvement programme is one of seven projects being supported over 2 years
What is HIP QIP Scaling Up?

Programme aim:
To improve safety and care for patients with hip fracture via a multidisciplinary, pathway approach across 6 NHS organisations in England and Scotland and save 100 lives by December 2018.
Our programme partners:

- British Orthopaedic Association
- Academic Health Science Network for the North East and Cumbria
- Evaluation by the Royal College of Physicians

Our funders:

- The Health Foundation
- Academic Health Science Network for the North East and Cumbria
Programme objectives

• Safer care through improved attainment of best practice tariff standards
• Increasing nutritional support
• Improved access to surgery within 36 hrs
• Improved access to nerve blocks on admissions
• Patients supported to mobilise as early as possible after surgery
Programme objectives

• Better access to specialist care for elderly patients with complex medical problems
• Better access to information to enable patients to manage their own care
• Better access to guidance that helps patients and families to know what good care looks like
• Better pain management as reported by patients
• Improved patient experience
Our NHS collaboration partners
Collaborative approach
Programme structure

6th Sept 2016

Learning event 1

Action period and BOA review

Learning event 2

Action period

Learning event 3

Nutrition assistants start

Learning event 4

Action period

6th March 2018

Project celebration event
Measurement

• Current data submission to NHFD enhanced (English sites)

• Added fields
  – Some common to all trusts in collaborative
  – Some customised fields for each Trust
  – Bespoke data collection for NHS Greater Glasgow and Clyde

• Data collation and monthly feedback by RCP
  – Individually by Trust
  – As a collaborative showing progress
## Monthly feedback from NHFD

### HIPQIP quality dashboard – February 2017

**Site: Glasgow**

<table>
<thead>
<tr>
<th>Metric</th>
<th>January</th>
<th>February</th>
<th>NHFD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>63</td>
<td>19</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of patients that have x-ray within an hour of arrival in ED</td>
<td>57.1%</td>
<td>84.2%</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of patients having a nerve block in ED or ward prior to surgery</td>
<td>42.9%</td>
<td>47.4%</td>
<td>39.9%</td>
</tr>
<tr>
<td>Percentage of patients admitted to a ward within 4 hours</td>
<td>84.1%</td>
<td>84.2%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Percentage of patients not admitted to an orthopaedic or orthogeriatric ward</td>
<td>6.3%</td>
<td>0.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Percentage of patients assessed by an orthogeriatrician within 72 hours of admission</td>
<td>84.1%</td>
<td>78.9%</td>
<td>87.8%</td>
</tr>
<tr>
<td>Percentage of operated patients assessed by an orthogeriatrician pre-operatively</td>
<td>No data</td>
<td>42.1%</td>
<td>55.6%</td>
</tr>
<tr>
<td>Percentage of patients with a documented Nottingham Hip Fracture Score</td>
<td>0.0%</td>
<td>0.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of patients with documented evidence of full sets of observations</td>
<td>100.0%</td>
<td>94.7%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Progress so far....

• BOA peer reviews completed
• Three learning events
• Local steering groups and launch events
• Nutrition assistants appointed
  – One year of nutritional assistant funding and support with recruitment and training
Progress so far....

- Patient experience workshops
- Monthly calls with local project leads
- Cross Trust networking/sharing of protocols and ideas
- Individual/group targets identified and set
  - Monthly data reporting
<table>
<thead>
<tr>
<th>AIM</th>
<th>PRIMARY DRIVERS</th>
<th>SECONDARY DRIVERS</th>
<th>MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT steering group meetings</td>
<td>Process evaluation - evidence of MDT &amp; senior leadership engagement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning events</td>
<td>Feedback questionnaires; % scores &gt; 9 satisfaction</td>
<td></td>
<td></td>
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<tr>
<td>Monthly coaching</td>
<td>% of arranged calls completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOA peer reviews</td>
<td>Number of sites received a review &amp; report by March 2017</td>
<td></td>
<td></td>
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<tr>
<td>Launch events</td>
<td>Launch events completed by all 6 sites by August 2017</td>
<td></td>
<td></td>
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<tr>
<td><strong>Collective Leadership</strong></td>
<td></td>
<td></td>
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<tr>
<td>Evidence based standardised high quality care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Warning Score</td>
<td>% documented full sets of observations, correct calculation, % triggered with appropriate actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ortho-geriatrician review</td>
<td>% of patients receiving review within 72 hours of admission. % of patients assessed post-op</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment for / promote critical care post op</td>
<td>% of patients assessed for critical care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain block in ED</td>
<td>% of patients receiving facia iliaca nerve block</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 day physiotherapy</td>
<td>% of patients receiving 7 days per week physiotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early mobilisation</td>
<td>% of patients mobilised day 0 and % on day 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nutrition &amp; Hydration</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Recruitment of a nutritional assistant for each site</td>
<td>% of patients receiving an additional meal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bespoke training package</td>
<td>Process evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-op hydration</td>
<td>Evidence of standardised operating framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>% of patients with prolonged pre-op starvation</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enhanced Patient Experience</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personalised end of life care: QUERY PROCESSES UNDERPINNING THIS</td>
<td>Patient/family experience: no.of domains over 95%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain management for people with dementia</td>
<td>Query ABBEY score or query carer report of pain</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care co-ordination/flow through pathways to base sites</td>
<td>% of patients with &gt;1 transfer?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>% of patients with a delayed discharge</td>
<td></td>
<td></td>
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<tr>
<td><strong>Real time measurement &amp; reporting</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BPT report</td>
<td>% of patients receiving BPT care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monthly quality account</td>
<td>External validation of Northumbria’s data completion &amp; quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online platform created by RCP</td>
<td>Real time reporting platform built &amp; available for teams by January 2017</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HIP QIP Northumbria

• Working groups:
  – Care coordination / flow through pathways to base site
  – A&E and pre op assessment
  – Personalised end of life care
  – Pain management
  – Real time measurement and reporting
  – Nutrition and hydration
  – Mortality
  – Patient information and mobility
HIP QIP Northumbria

• Patient leaders programme
  – Contribute directly to the improvement plans
  – Trained and supported to be equal partners
  – People with a long term health condition or people caring for someone with a long term health condition
  – Unique and valuable perspective
Scaling up project outcomes

• Have mortality rates at 6 Trusts improved?
  • Compare with data from 2015-16
• Process evaluation
• Formal feedback at BOA 2018 annual congress
• Formal report for the Health Foundation
Thank you

At every patient encounter:

THINK ‘H I P’

H — Hydration          “Are you thirsty?”
I — intake (nutrition) “Are you hungry?”
P — Pain control       “”Are you in pain?”