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2026 BU-NHS Conference

Moving Forwards Together

Fusion Building, Talbot Campus
16th April 2026

Programme A

Objective Functional Recovery and Patient-Reported Outcomes at 12 Months Following Robot-Arm Assisted Total Hip Arthroplasty: A Prospective Cohort Study

Tom Wainwright, Tikki Immins, Shay Bahadori, Richard Matko, Robert Middleton

Background and Aim

Robot-assisted total hip arthroplasty (THA) improves accuracy of component positioning; however, evidence demonstrating whether this translates into improved recovery remains limited. Most studies rely on patient-reported outcome measures (PROMs) alone, with few incorporating objective performance-based assessments.

This study aimed to characterise objective functional recovery, muscle strength, PROMs, complications, and component positioning accuracy during the first postoperative year.

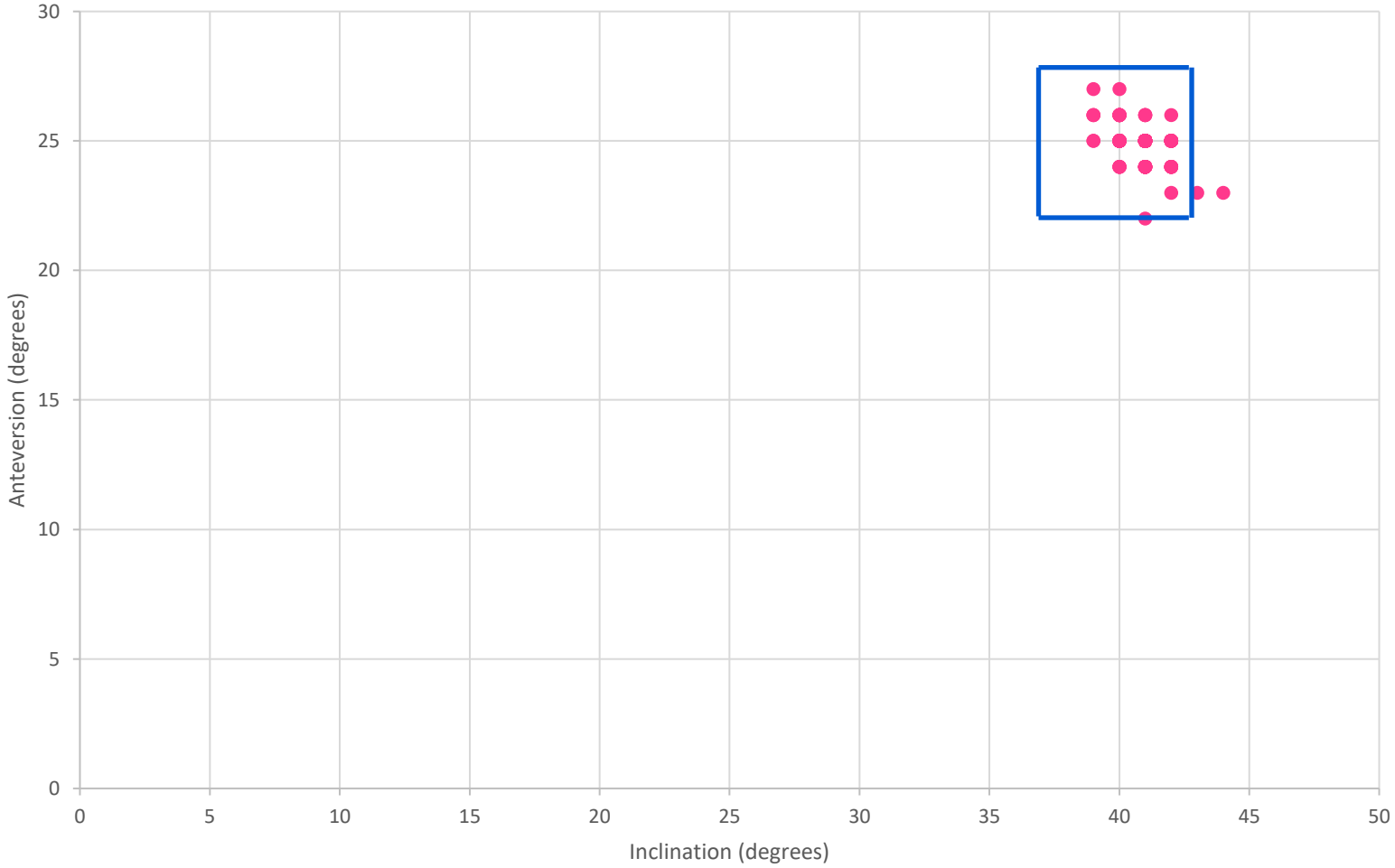
Methods

- Prospective cohort study, 200 patients undergoing robotic-arm assisted THA
- Complications and readmissions recorded for year following surgery
- Acetabular cup position compared with preoperative plan
- Assessed pre-op and at 3 and 6 weeks, 3, 6 and 12 months:
  - Performance-based functional tests (40-m fast-paced walk, 30-second chair stand, stair climb)
  - Muscle strength testing
  - PROMs (Hip Disability and Osteoarthritis Outcome Score (HOOS), EQ-5D Visual Analogue Scale)

Results

- 328 patients screened, 200 underwent surgery and were included
- 185 completed 12-month follow-up
- Median operative time was 60.0 minutes (IQR 58.0–66.0), and median length of stay was 2.0 days (IQR 2.0–3.0)
- Over 99% of cups were positioned within ±3° of the planned inclination and anteversion.
- The 12 months readmission rate was 2% and no periprosthetic joint infections or revision procedures were recorded

Acetabular cup position post-surgery (n=199)



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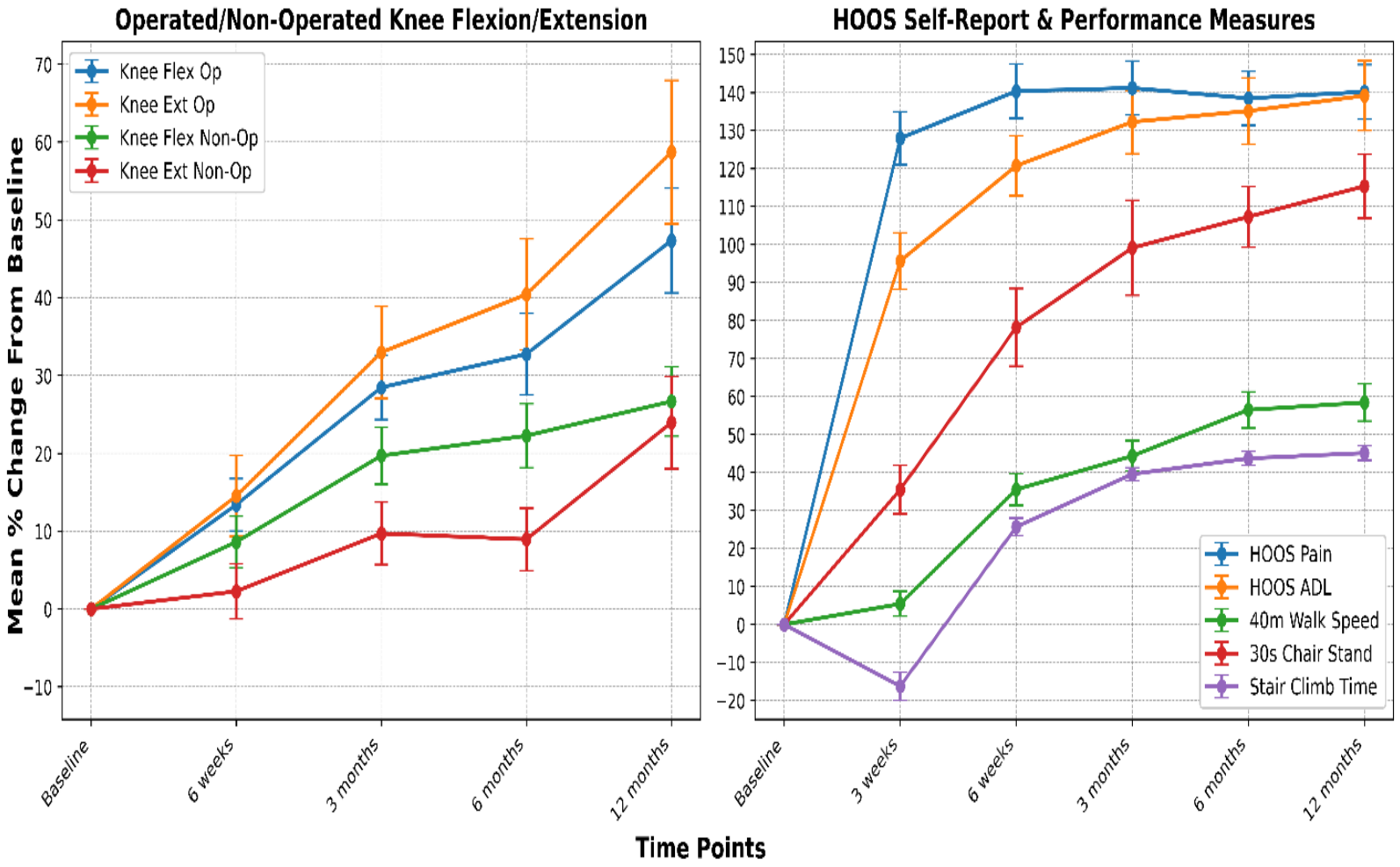
Complications within 12 months of surgery

Complication	Freq	% (of participants)	Readmission within 12 months of surgery	% (of participants)
Post-discharge falls (non-surgery related)	4	2.0	1	0.5
Haematoma	3	1.5	1	0.5
Oedema	2	1.0	0	0.0
Surgical Site Infection	2	1.0	0	0.0
Vascular injury	1	0.5	1	0.5
Cerebrovascular Accident	1	0.5	1	0.5
Mortality (Myasthenia Gravis)	1	0.5	0	0.0
Deep Vein Thrombosis	0	0.0	0	0.0
Myocardial Infarction	0	0.0	0	0.0
Pulmonary Embolism	0	0.0	0	0.0
Dislocation	0	0.0	0	0.0
Loosening	0	0.0	0	0.0
Periprosthetic Fracture	0	0.0	0	0.0
TOTAL	14	7.0	4	2.0

Results

- Objective performance measures demonstrated continued improvement
  - Mean walking speed exceeded preoperative values by 6 weeks, surpassed 1.3 m/s by 3 months, and reached 1.5 m/s at 12 months
  - PROMs improved rapidly postoperatively, with early ceiling effects
  - Muscle strength improved progressively from 6 weeks onward

Mean percentage change from baseline by visit



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Conclusion

- Robotic-Arm Assisted THA was associated with accurate component positioning, low complication rates, and sustained improvements in objective functional performance over 12 months.
- Objective recovery continued beyond the plateau of PROMs, highlighting the importance of incorporating performance-based measures when evaluating postoperative recovery following Robotic-Arm Assisted THA.

Professor Robert Middleton

Professor of Orthopaedics and Head of ORI

Consultant Orthopaedic Surgeon, University Hospitals Dorset

robert.middleton6@nhs.net

rmiddleton@bournemouth.ac.uk

Any Questions?


No Road, No Ride, No Access:
Tackling Rural Mobility and Health Inequalities
in Coastal Urgent Care Transfers
Rebecca Lovedale
Dorset HealthCare NHS Trust

Research Question

Dorset HealthCare University NHS Foundation Trust

How can patients be safely transferred from a remote Urgent Treatment Centre (UTC) to the acute hospital when they require higher-level care?

Methods/Research Plan

Mixed methods data collection

- **PDSA framework**
- **Fishbone (Ishikawa) analysis**
- **Patient survey: 100 patients approached, 99 responses received.**
- **Taxi request audit**
- **Service activity data**
- **Contextual demographic analysis**

Results / Early Findings

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- Rising Demand & Increasing Complexity
- Transport Challenges are Significant
- Systemic Factors

Next Steps

- Analyse staff survey and combine with patient data
- Engaged with ICB, who recommend submitting business plan
- Design a Safe Transfer Pathway including risk stratification tool
- Repeat the fishbone analysis/PDSA cycle

Conclusion

Dorset HealthCare University NHS Foundation Trust

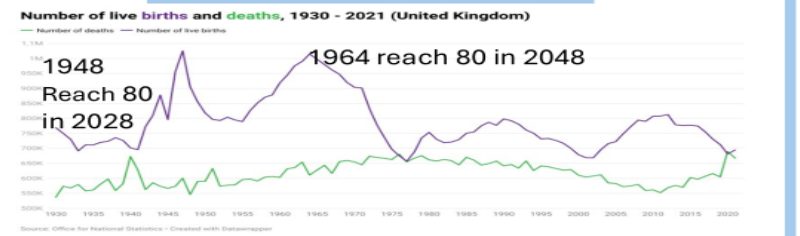
Our aim is simple:

to ensure that every patient who needs acute hospital care reaches it safely, reliably, and without avoidable delay — regardless of geography or personal circumstances

Dying well with frailty – The generalist workforce support many people at home who are dying – are we doing this well?

Dr Pippa Collins (Advanced Practitioner - Frailty) pippa.collins@nhs.net

Why is this topic important?



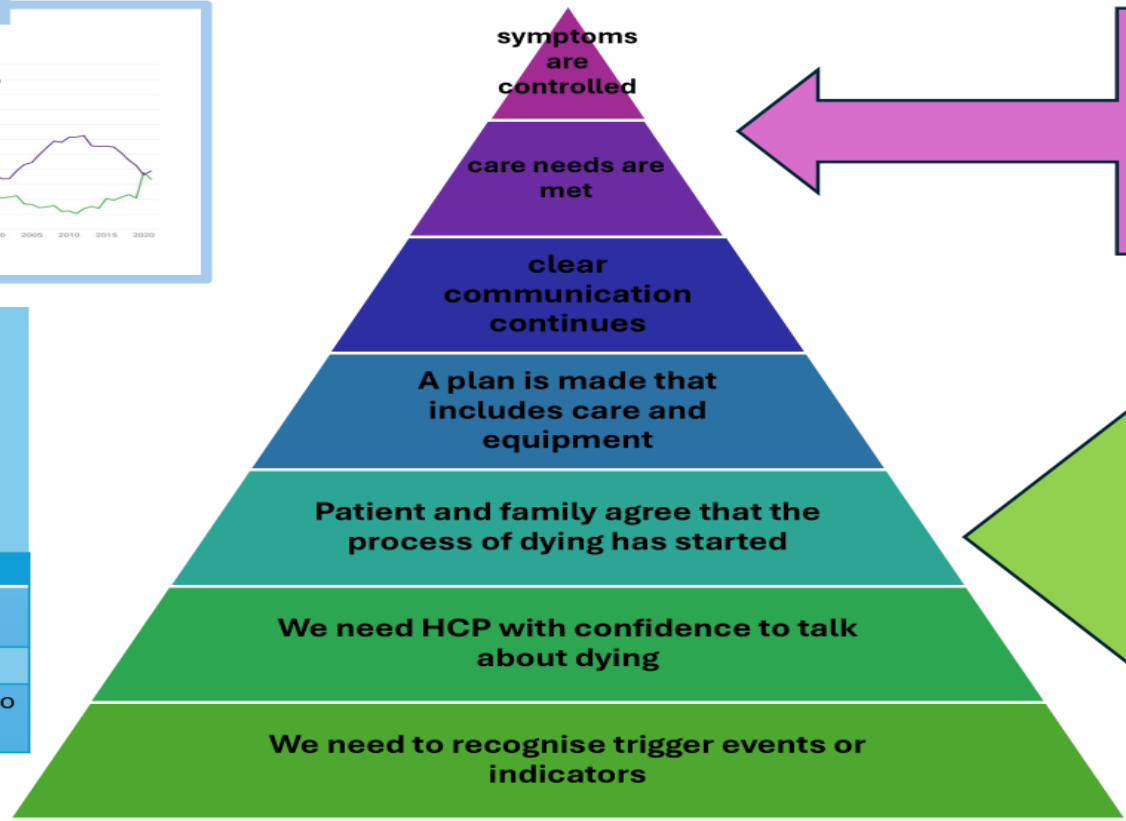
Stage 1: Understanding the problem.

What happens in the last 12 months to people 75 years and older dying of frailty?

How was this done?

Retrospective case note review including GP, community teams; acute & community hospitals; UCR; OOH GP; 111 and 999 calls

Included = 50	Excluded=45
No definitive terminal diagnosis	Clear diagnosis of terminal condition
Living in own home	Living in care home
Died in Bournemouth or Christchurch	Moved out of area prior to death



Stage 3: ACTION PLAN

1. Develop exemplar frailty and EOL team
2. Teaching trigger events and indicators
3. Develop skills in conversations & plans that are meaningful to the patient and supporters
4. Documentation in Dorset Care Plan
5. Understand patient and supporter perspective
6. Prospective case note review

Stage 2: Present & discuss findings with wide range of teams and develop model for stage 3

Forest Holme/UHD Quality and Risk meeting
British Geriatrics Society End of Life SIG
DHC Non medical prescribers
Amanda England who is working to implement the Dorset Care Plan across the Trust
Christchurch and Bournemouth Intermediate care team
Jane Ricketts and Carol Brand - End of Life Care leads
Bournemouth advanced practice team
St Brelades and Herme clinical teams
Dorset Healthcare DMG

What did we find?

23 people died in crisis: admission; uncertainty; anxiety; ED; 999 calls; poorly controlled symptoms; distress; care & equipment issues; 10 died in hospital

27 people died with no crisis: anticipated; prepared; appropriate equipment and support; symptom control; all informed; uncertainty minimised

Did having an advance care plan prevent a crisis?

19 people had an advance care plan
58% of these people did not die in crisis

31 people did not have an advance care plan
52% of these people did not die in crisis
Having an advance care plan had very little effect on avoiding a crisis

Crisis Themes

Wishes not respected and supported
Not treated as EOL until actively dying
Different perspectives from HCPs
Family not understanding dying
Poor health literacy
Care needs crisis
No clinician with clear ownership
Medical approach raising hope/expectation
Poor symptom control esp agitation

No Crisis Themes

Person or supporter strongly able to advocate for themselves
Wishes supported and not contested
Clear communication about dying from HCP over time
Trigger events led to clear plan
Family all on board and understanding
Admission not repeatedly discussed
Adequate equipment and support
Good management of agitation

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Any Questions?

Applying Patient Safety Investigation Frameworks Prospectively During Hospital Transformation

Jessica Wiggins

Jakob Rossner

Emil Siwadi

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The Royal
Bournemouth Hospital
TAXI TAXI TAXI
BORN at the BEACH

PSIRF – A systems approach to Safety

- **Patient Safety Incident Response Framework (PSIRF)** – the NHS approach to managing and learning from patient safety incidents

- Shifts focus from **individual error → system understanding**
- Recognises that incidents arise from **interactions between people, tasks, environment, equipment, and organisation**
- Emphasises **learning, improvement, and psychological safety**
- Acknowledges that **human behaviour is shaped by the system and context**

Tools & Technology
Characteristics such as:
- Usability
- Accessibility
- Familiarity
- Level of automation
- Portability and functionality
- Maintenance (outdated, malfunctioning)

Organisation
- Structures external to a person (but often put in place by people) that organise time, space, resources, and activity.
- Within institutions:
  - Work schedules/staffing
  - Workload assignment
  - Management and incentive systems
  - Organisational culture (values, commitment, transparency)
  - Training
  - Policies/procedures
  - Resource availability and recruitment
- In other settings:
  - Communication infrastructure
  - Living arrangements
  - Family roles and responsibilities
  - Work and life schedules
  - Financial and health-related resources

Tasks
- Specific actions within larger work processes
- Includes task attributes such as:
  - Difficulty
  - Complexity
  - Variety
  - Ambiguity
  - Sequence

Person
- Individual characteristics:
  - Psychological impacts (e.g., frustration, stress, burnout)
  - Cognitive factors (attention, memory, confusion)
  - Preferences, personal goals
  - Knowledge, competence, skills
  - Physiological factors (illness, dehydration)
  - Physical strength and needs
- Collective characteristics: team cohesiveness

Internal environment
Physical environment such as characteristics of
- Ambient environment: lighting, noise, vibration, temperature
- Physical layout and available space
- Housekeeping: cluttered, organisation, cleanliness

External environment
Societal, economic, regulatory and policy factors outside an organisation

The Question

Could we use simulation not just for training, but to prospectively test how a new clinical system would actually behave?

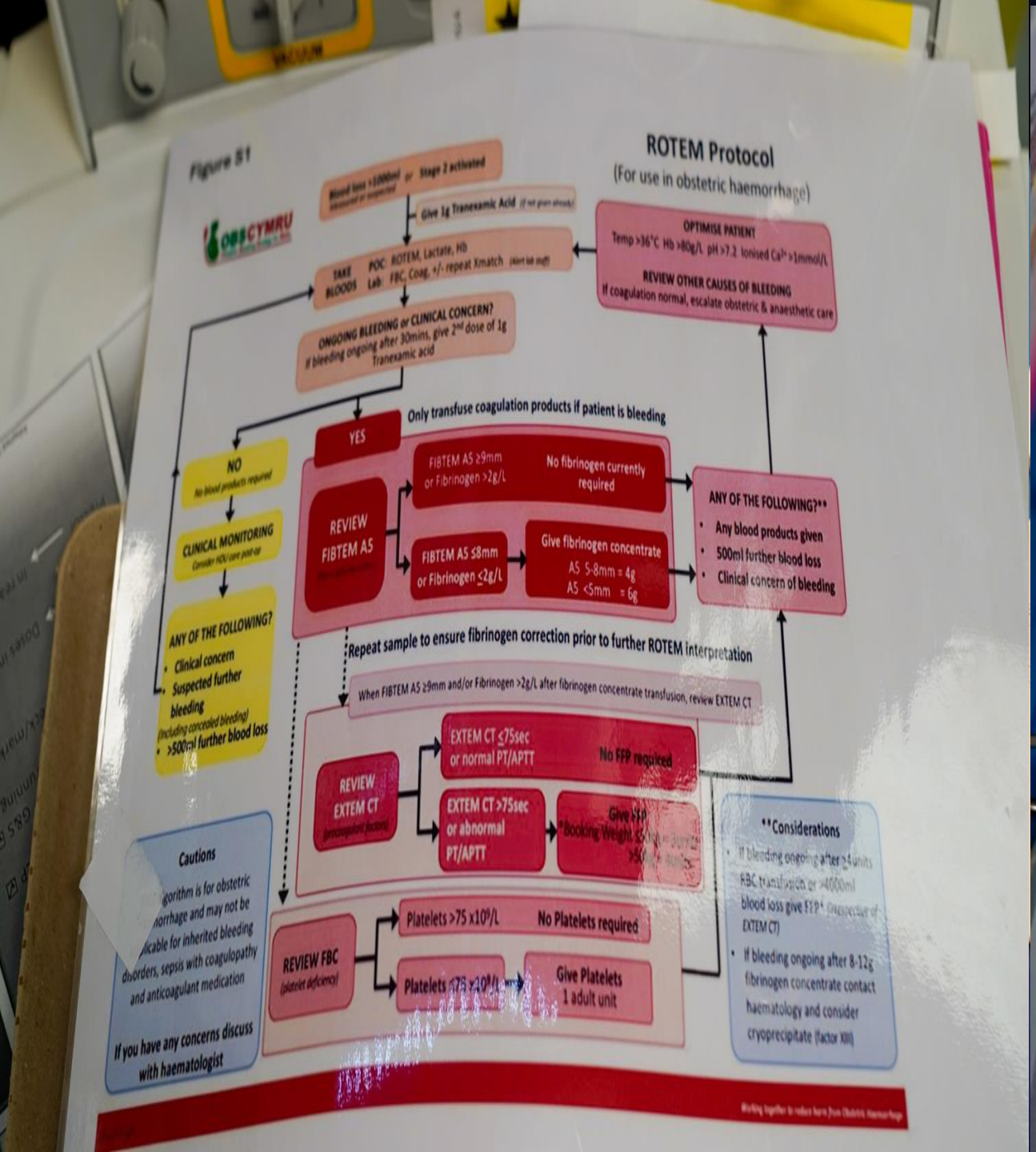
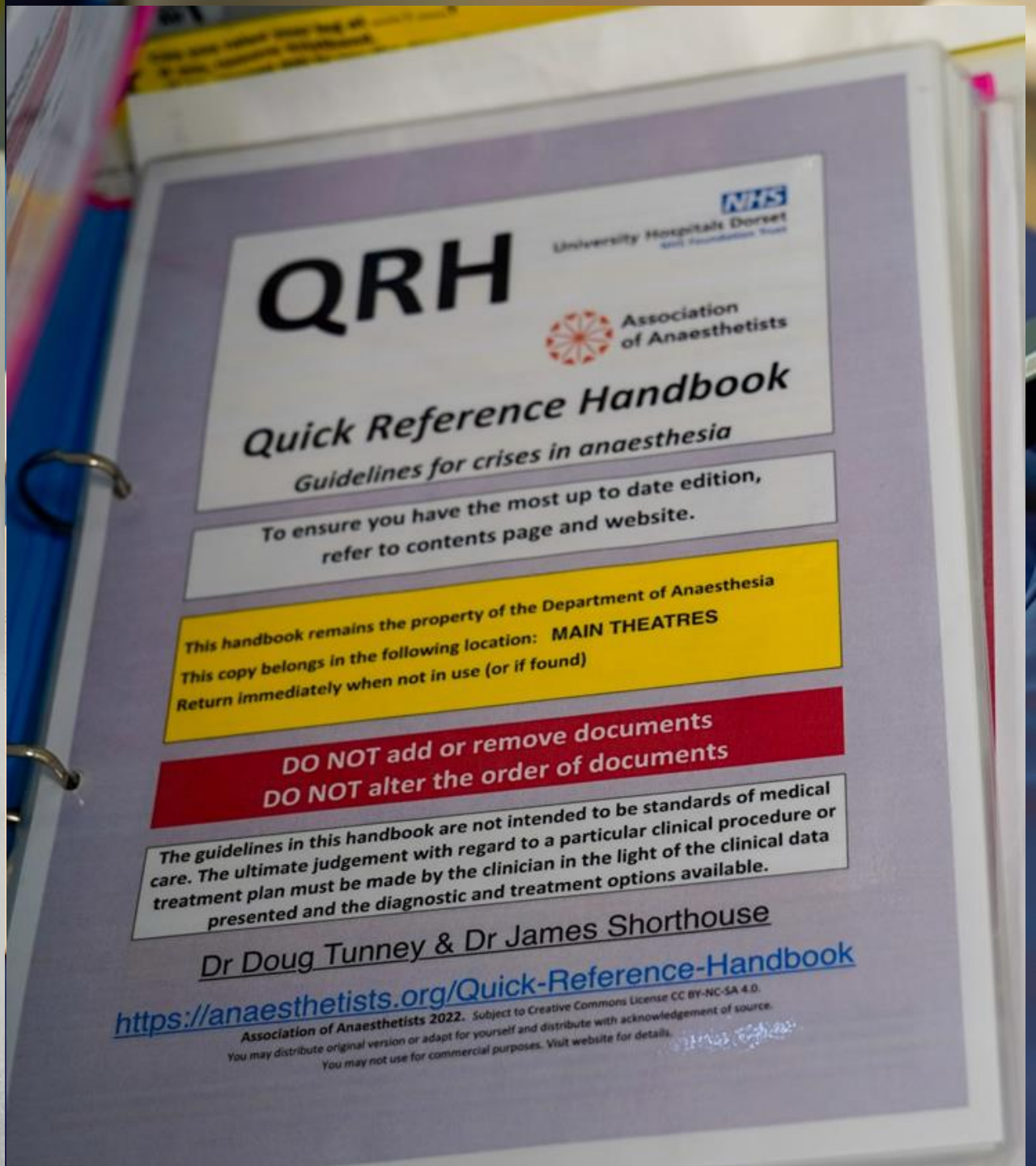


Figure S1
ROTEM Protocol
(For use in obstetric haemorrhage)
Give 1g Tranexamic Acid
TAKE BLOODS
POC: ROTEM, Lactate, Hb
Lab: FBC, Coag, +/- repeat Xmatch
OPTIMISE PATIENT
Temp >36°C Hb >80g/L pH >7.2 Ionised Ca2+ >1mmol/L
REVIEW OTHER CAUSES OF BLEEDING
If coagulation normal, escalate obstetric & anaesthetic care
ONGOING BLEEDING or CLINICAL CONCERN?
If bleeding ongoing after 30mins, give 2nd dose of 1g Tranexamic acid
YES
NO
Only transfuse coagulation products if patient is bleeding
REVIEW FIBTEM A5
FIBTEM A5 ≥9mm or Fibrinogen >2g/L
No fibrinogen currently required
FIBTEM A5 ≤8mm or Fibrinogen ≤2g/L
Give fibrinogen concentrate
A5 5-8mm = 4g
A5 <5mm = 6g
ANY OF THE FOLLOWING?**
Any blood products given
500ml further blood loss
Clinical concern of bleeding
CLINICAL MONITORING
ANY OF THE FOLLOWING?
Clinical concern
Suspected further bleeding
(including concealed bleeding)
>500ml further blood loss
Repeat sample to ensure fibrinogen correction prior to further ROTEM interpretation
When FIBTEM A5 ≥9mm and/or Fibrinogen >2g/L after fibrinogen concentrate transfusion, review EXTEM CT
REVIEW EXTEM CT
EXTEM CT ≤75sec or normal PT/APTT
No FFP required
EXTEM CT >75sec or abnormal PT/APTT
Give FFP
REVIEW FBC
Platelets >75 x10⁹/L
No Platelets required
Platelets <75 x10⁹/L
Give Platelets
1 adult unit
Cautions
algorithm is for obstetric haemorrhage and may not be applicable for inherited bleeding disorders, sepsis with coagulopathy and anticoagulant medication
If you have any concerns discuss with haematologist
**Considerations
If bleeding ongoing after 4 units FBC transfusion or >4000ml blood loss give FFP* (irrespective of EXTEM CT)
If bleeding ongoing after 8-12g fibrinogen concentrate contact haematology and consider cryoprecipitate (factor XIII)


QRH
University Hospitals Dorset
Association of Anaesthetists
Quick Reference Handbook
Guidelines for crises in anaesthesia
To ensure you have the most up to date edition, refer to contents page and website.
This handbook remains the property of the Department of Anaesthesia
This copy belongs in the following location: MAIN THEATRES
Return immediately when not in use (or if found)
DO NOT add or remove documents
DO NOT alter the order of documents
The guidelines in this handbook are not intended to be standards of medical care. The ultimate judgement with regard to a particular clinical procedure or treatment plan must be made by the clinician in the light of the clinical data presented and the diagnostic and treatment options available.
Dr Doug Tunney & Dr James Shorthouse
https://anaesthetists.org/Quick-Reference-Handbook
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The Day

- Simulation Run
- Debriefs and systems analysis
- Changes Made
- Simulation Run 2
- Debriefs and systems analysis
- Presentation to transformation team

https://youtu.be/GA_prG_fK78?si=QkN1DyehAG_ANpq5

Alternative 360 link:
https://www.youtube.com/watch?v=R6gvShuyhic&t=918s

https://youtu.be/xkT3giAMugU?si=D5_lx9mkAo3uxzkR&t=901

- On 31 March 2025 at 08:00 maternity services officially moved from Poole to the BEACH building

Lessons learned

- **Separate education and safety testing** — both are essential, but serve different purposes
- **Simulation reveals “work as done”** — critical for testing real pathways under pressure
- **Iterative process is key** — test, adapt, re-test before go-live
- **Test pathways, not just spaces** — especially where processes change with location
- **Embed in go/no-go decisions**
- **Video capture enhances analysis**
- **Future potential** — timelapse footage and AI analysis to better understand team interaction and space use

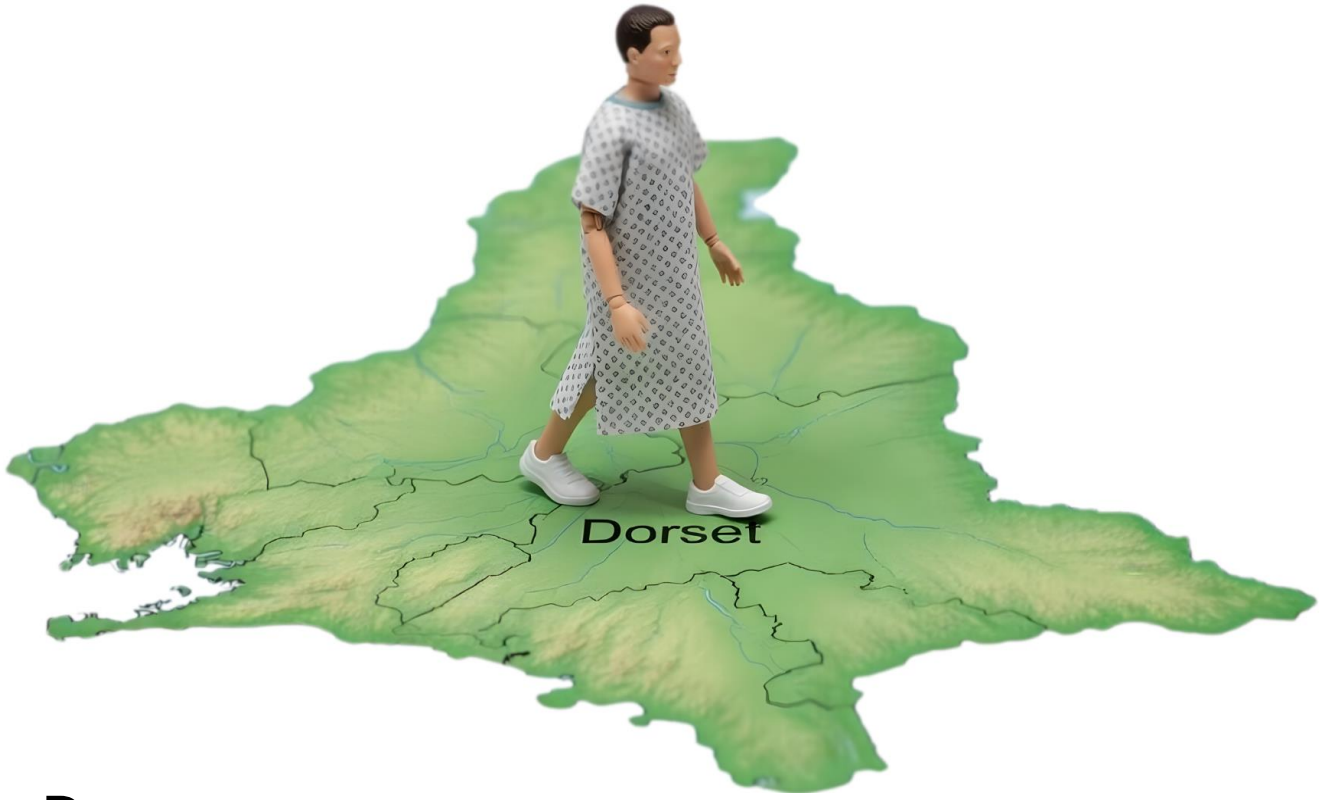
Thanks

- **Bournemouth University**
  - Jakob Rossner
  - Emil Siwadi
  - Phil McConnell
- **Bournemouth Anaesthetic Simulation Team**
  - Alex Griffin
  - Dominic Smith
  - Lynsey Woodward
  - Nick Stafford
  - Joe Kinsella
  - Laura Carter
  - Catherine Jordan
- **UHD Simulation Team**
  - Olivia Cole
  - Rose Edwards
  - Sam Boullin
  - Kirsty Duncan

https://youtu.be/xHz2ixC5TfE?si=gbmPTycp9335pwu0

Any Questions?

Interactive Live-Streamed Simulation to Deliver Collaborative Meal Support Education Across Dorset



UHD SIMULATION

University Hospitals Dorset

Olivia Cole
Kirsty Duncan
Rose Edwards

Method

UHD SIMULATION

Conclusion

UHD SIMULATION

Dorset HealthCare University
NHS Foundation Trust

TACKLING HEALTH INEQUITY:

Delivery of Learning Disability Education to Sample Takers to Improve Confidence & Knowledge that Supports Increased Uptake of Cervical Screening.

Julia Gannaway: Learning Disability Screening Practitioner: Dorset HealthCare: BU SIP

julia.gannaway@nhs.net

Healthier lives Empowered citizens Thriving communities

Aims & Methods

Dorset HealthCare University NHS Foundation Trust

Background: People with learning disabilities experience significant inequalities in access to cervical screening. In Dorset, uptake remains disproportionately low at 33% compared with 71% among the general population. Existing literature identifies gaps in practitioner knowledge and limitations in training within cancer services as key barriers preventing people with learning disabilities from accessing screening.

Aims

- Enhance the **knowledge** and **confidence** of cervical sample takers in supporting people with learning disabilities to access cervical screening.

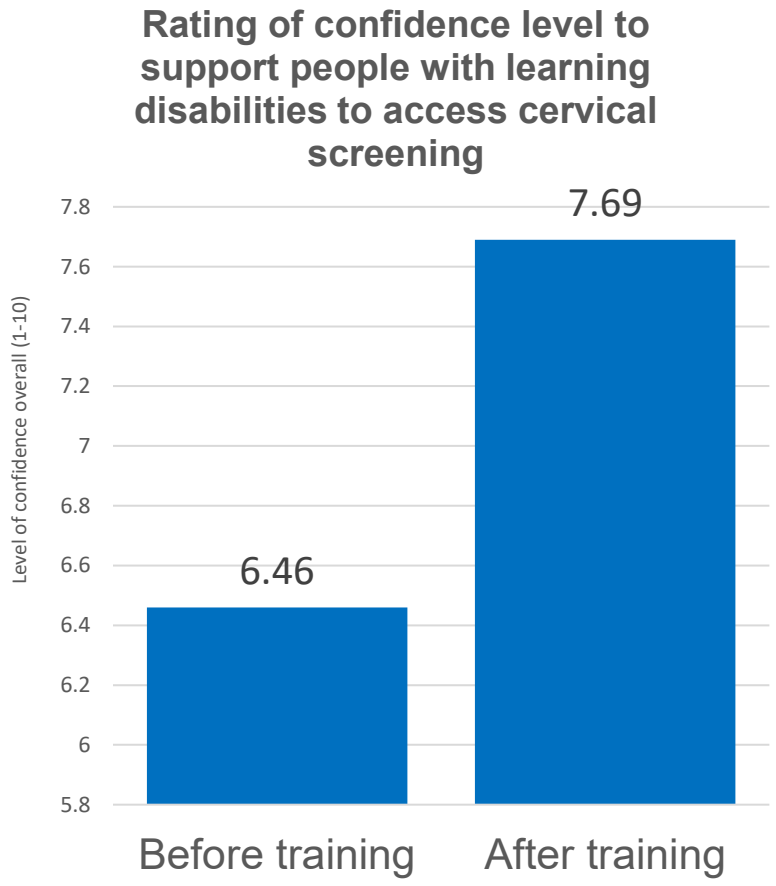
Objective

- Design and deliver a 1.5-hour, face-to-face training session to sample takers within the Primary Care Network (PCN) hosting the highest number of eligible individuals with learning disabilities in Dorset.

Methods

- A non-probability purposive sample of 14 cervical sample takers attended the protected learning session.
- An online survey, created using JISC and accessed via QR code immediately after the session, evaluated participants perceived confidence and knowledge before and after training.
- Using Likert scales and free-text responses, the survey assessed practitioners' ability to make reasonable adjustments, assess capacity, and communicate effectively with people with learning disabilities about cervical screening and potential cancer symptoms.

Results



- **Key message:** Practitioner confidence increased overall after training, rising from 6.46 to 7.49 (17.39%) on a 1–10 confidence scale.

Conclusion

- Targeted education improves practitioners' understanding and confidence in supporting people with learning disabilities to access cervical screening.
- Training sample takers represents one practical method of addressing health inequalities.

Impact

- Face-to-face training encouraged meaningful discussion among sample takers about best practice and reducing health inequity.
- **Moving Forward Together:** Further collaboration led to wider partnership with all Dorset PCNs & NHS Dorset to form a new Primary Care Learning Disability Network to improve screening uptake for people with learning disabilities.

Tanya Hart
Principal Clinical Scientist
Clinical Biochemistry
tanya.hart2@nhs.net

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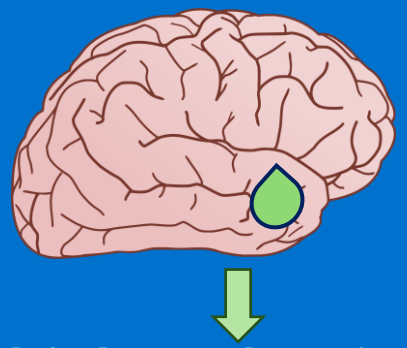
Clinical impact of interpretive comments on prolactin results

Right test, right patient, right time… right interpretation?

pituitary gland



high prolactin

- pituitary tumour?
- stress?
- medication?

Prolactin = **725** mU/L (ref 102-496)

"Secondary to medication"

"Refer to Endocrinology"

Do comments affect outcomes?

Auditing interpretation

Elevated GP prolactin results of unknown cause ***(249)***

Lab A (UHD)
Result + interpretation

Lab B
Result only

- How many referrals to endocrinology?
- How many referred patients had pituitary pathology?

Comments increase the number of referrals

With interpretation:
21% referred *(31/145)*

No interpretation:
15% referred *(16/104)*

Comments improve the appropriateness and speed of referrals

With interpretation:
29% referred had pituitary pathology
28 days to referral

No interpretation:
13% referred had pituitary pathology
64 days to referral
?missed/delayed diagnoses

UHD: 145 biochemistry tests, 4 Clinical Scientists
Per day: 3600 patients, 28,000 tests

Any Questions?

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