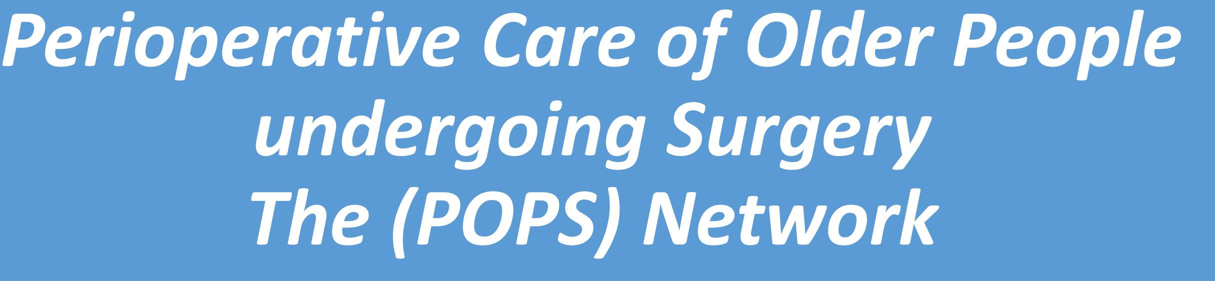
Perioperative Care of Older People undergoing Surgery
The (POPS) Network



June 2021

Launch Event
Part One

Agenda

10:00	
	Welcome and introduction to the day **Caroline Dove** CEO NHS Elect
	The POPS Model explained **Jugdeep Dhesi** Consultant GSTT and POPS Network Clinical Lead
	The POPS Network offer **Simon Griffiths** Director and QI Associate, NHS Elect
	Salford POPS **Arturo Vilches-Moraga** Consultant, Salford Royal NHS FT
BREAK (10 mins)	
	Liverpool POPS **Mark Johnston** Consultant, Liverpool University Hospitals NHS FT
	Dartford & Gravesham POPS **Anna Whittle** Consultant, Dartford & Gravesham NHS Trust
	Measurement for Improvement **Matt Tite** Director and Measurement Lead, NHS Elect
	Wants and Offers **Lisa Godfrey** Director and QI Associate, NHS Elect
	What's Next? **Simon Griffiths** Director and QI Associate, NHS Elect
	Summary and Next Steps **Jugdeep Dhesi** Consultant GSTT and POPS Network Clinical Lead
13:00 - CLOSE	

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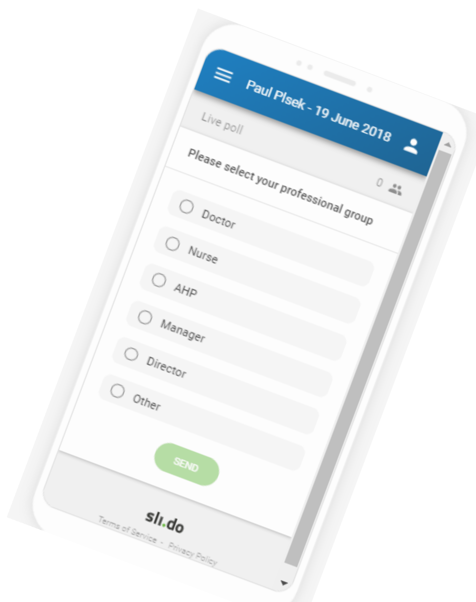


Open a browser on any laptop, tablet or smartphone

- Go to **slido.com** or scan the QR code below
- Enter the event code **#POPSLaunch1**
- Use the polls to give us feedback about the day

The POPS Model Explained

Dr Jugdeep Dhesi

Dr Jugdeep Dhesi

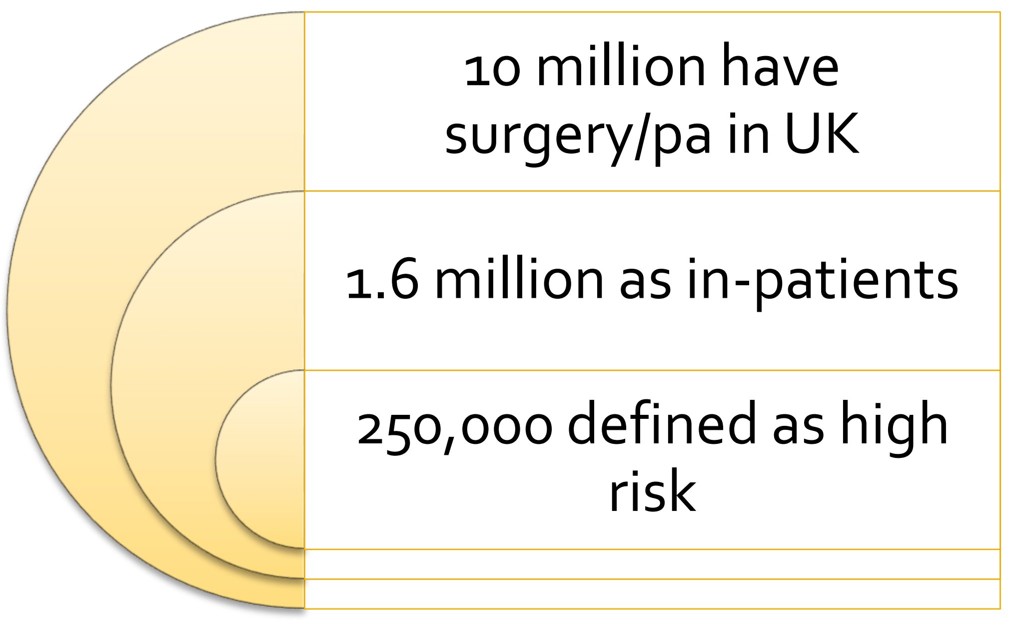
Improvement Networks ***www.popsolderpeople.org***

The NHS Elect POPS Network

Perioperative medicine for older people

Jugdeep Dhesi, Geriatrician
Perioperative medicine for older patients undergoing Surgery (POPS)
Dept of Ageing and Health
Guy's and St Thomas' NHS Foundation Trust

Where do we even start?!



Clinician reported outcomes

- Morbidity
- Mortality

Patient reported outcomes

- Recovery
- Experience, satisfaction
- Regret

Process related outcomes

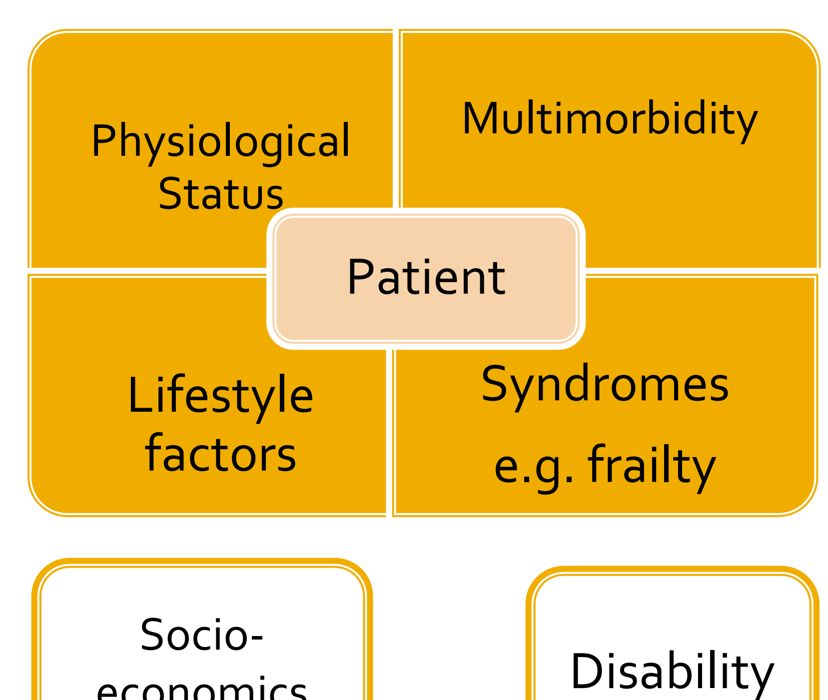
- LOS, readmissions
- Harm and complaints
- Cost to informal and/or formal sectors

Risk related to procedure & to patient

Procedure specific
Low risk
Intermediate risk
Major
Complex

Site of surgery
Intra-cavity
Non-cavity

Timing
Elective
Expedited
Emergency



Socio-economics

Disability

Recognised
versus
Unrecognised disease/syndromes

Perioperative care for 'high risk' patients

Stage of periop pathway	What should we do?
Pre-op Assessment	Assess of severity of known conditions Screen for undiagnosed issues Assess severity of newly diagnosed conditions
Pre-op Optimisation	Optimise comorbidities (eg diabetes) Optimise multimorbidity (eg PD and IHD) Optimise multifactorial conditions (eg frailty) Modify lifestyle related risk factors (eg smoking, alcohol, BMI)
Pre-op Shared decision making	Quantify risk using appropriate tools Employ Benefits, Risks, Alternatives, do Nothing approach

Perioperative care for 'high risk' patients

Stage of periop pathway	What should we do?
Pre-op Planning of hospital stay	Consider day case or admission Be clear about admission; where & when including place and day of week Plan site of postoperative care; ward, enhanced care, level 2/3
Postoperative management	Identify anticipated complications early Use EB approaches for postop medical complications (eg AF, ACS, HAP, delirium) Proactively set realistic rehabilitation goals Ensure timely, safe, effective discharge Provide effective handover to community for LTC mx

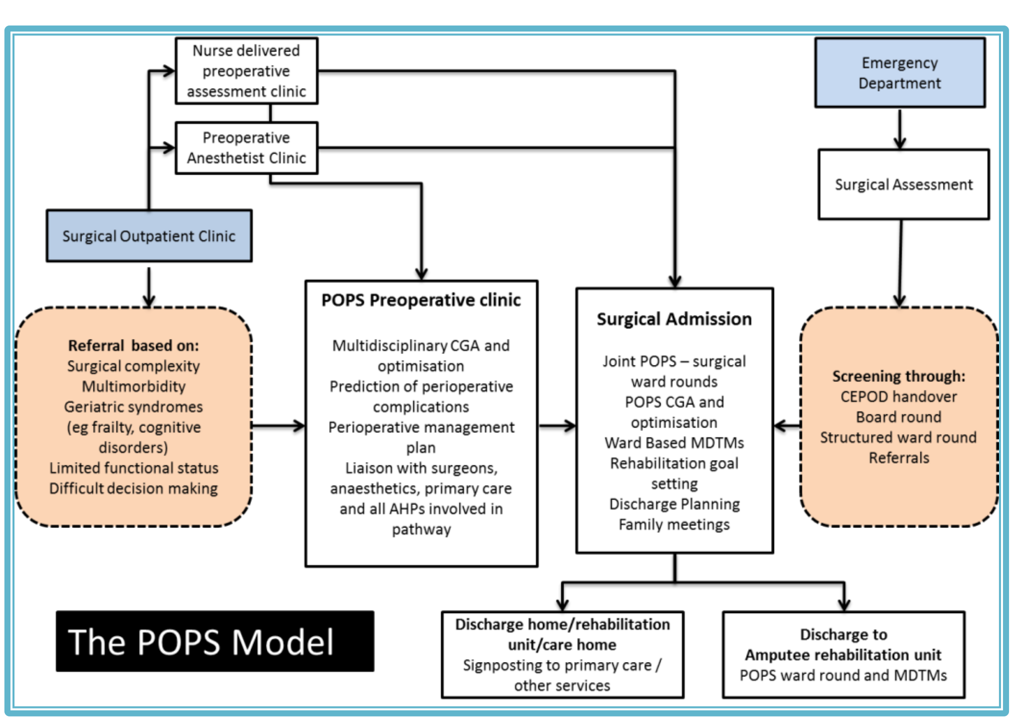
Can such approaches be put into practice?

Variety of approaches

- Traditional
- Co-management
  - Physician (eg POPS)
  - Anaesthetic (eg Exeter)
  - Hospitalist (eg US)

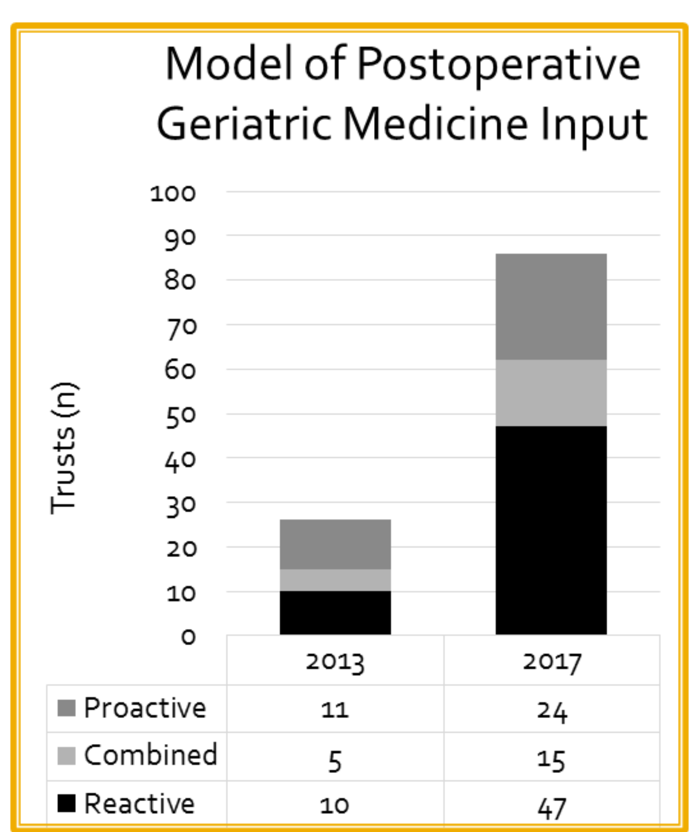
Case studies

www.CPOC.org.uk



Clearly innovation in perioperative care is happening in the UK…

- Response rate 127 of 152 NHS hospitals (88%)
- Preoperative clinics= 37
  20 existing clinics
  14 dedicated ger med
  3 jt clinics (anaes & ger med)
- Increase in
  - joint meetings
  - joint guidelines
  - surgical directorate funding



	2013	2017
Proactive	11	24
Combined	5	15
Reactive	10	47

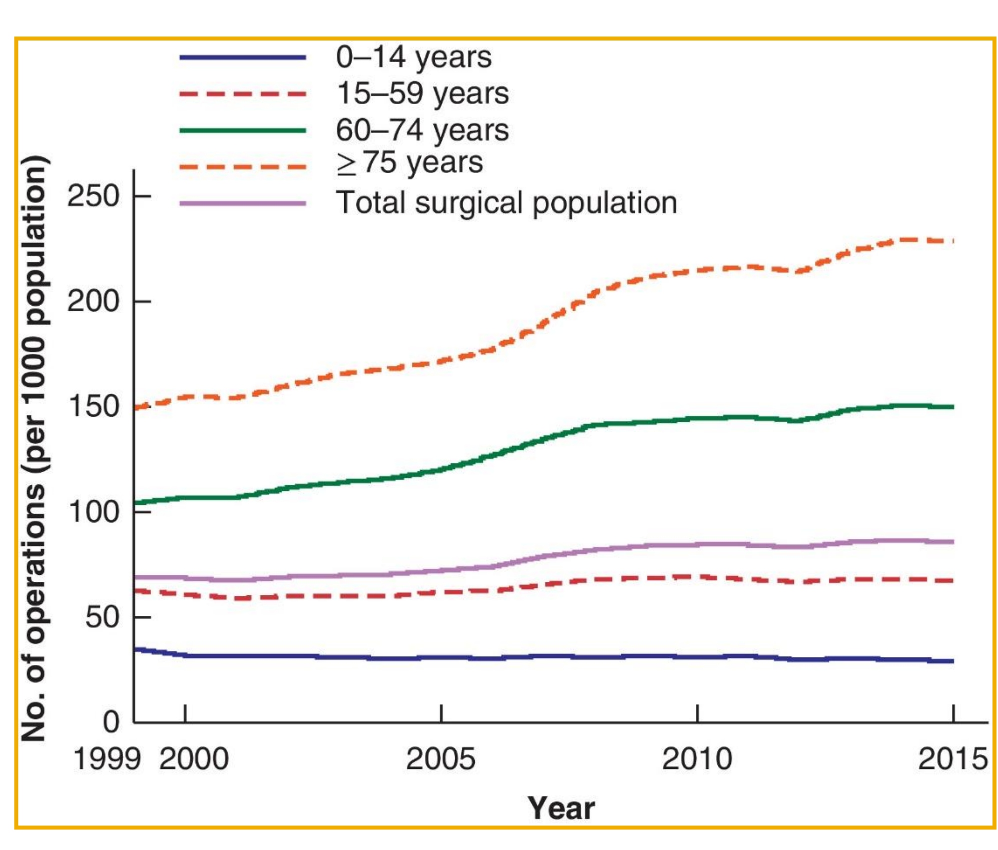
Partridge Age and Ageing 2014, Joughin et al Age & Ageing 2019

…and we are addressing change at system-level …

Aspect	Consideration	What is happening?
Pathway & Ownership	'Surgery is a punctuation' Individual *versus* team	Building across organisations to develop necessary culture, behaviours
Clinical guidelines	Specialty/professional *versus* patient centred	e.g. Diabetes Anaemia Frailty
Education and training	Curricula Resources	Work with HEE - curriculum, resources
Workforce	Insufficient Alternative workforce	Developing the workforce - Transdisciplinary - ACP
Evaluation	QI/IS +/- traditional research	Linking with national audit/big data (GIRFT, PQIP, NELA/NHFD etc)

…but we need this to happen at pace…

Twice as many people aged over 65 years have surgery compared to those under 65 years



Fowler et al, BJS 2019 : 1012-1018

…particularly now!

5 million on the waiting lists

- High volume low complexity
- Low volume high complexity

Need to turn ‘waiting lists’ into ‘preparation lists’

- Assessment
- Optimisation
- Shared decision making
- Planning
- Postoperative care

In this context, why is the NHS Elect POPS network useful?

1. Support and test systematic rollout at a 'small' number of sites

- Through provision of 'hard' resources, coaching and mentoring, advice on measurement for improvement
- Learn what works and what doesn't

2. Support early adopters to become regional centres

- Learn from stage 1 to adapt the network to the needs of other NHS units
- Build expertise and capacity to support stage 3
- Engage teams in national work

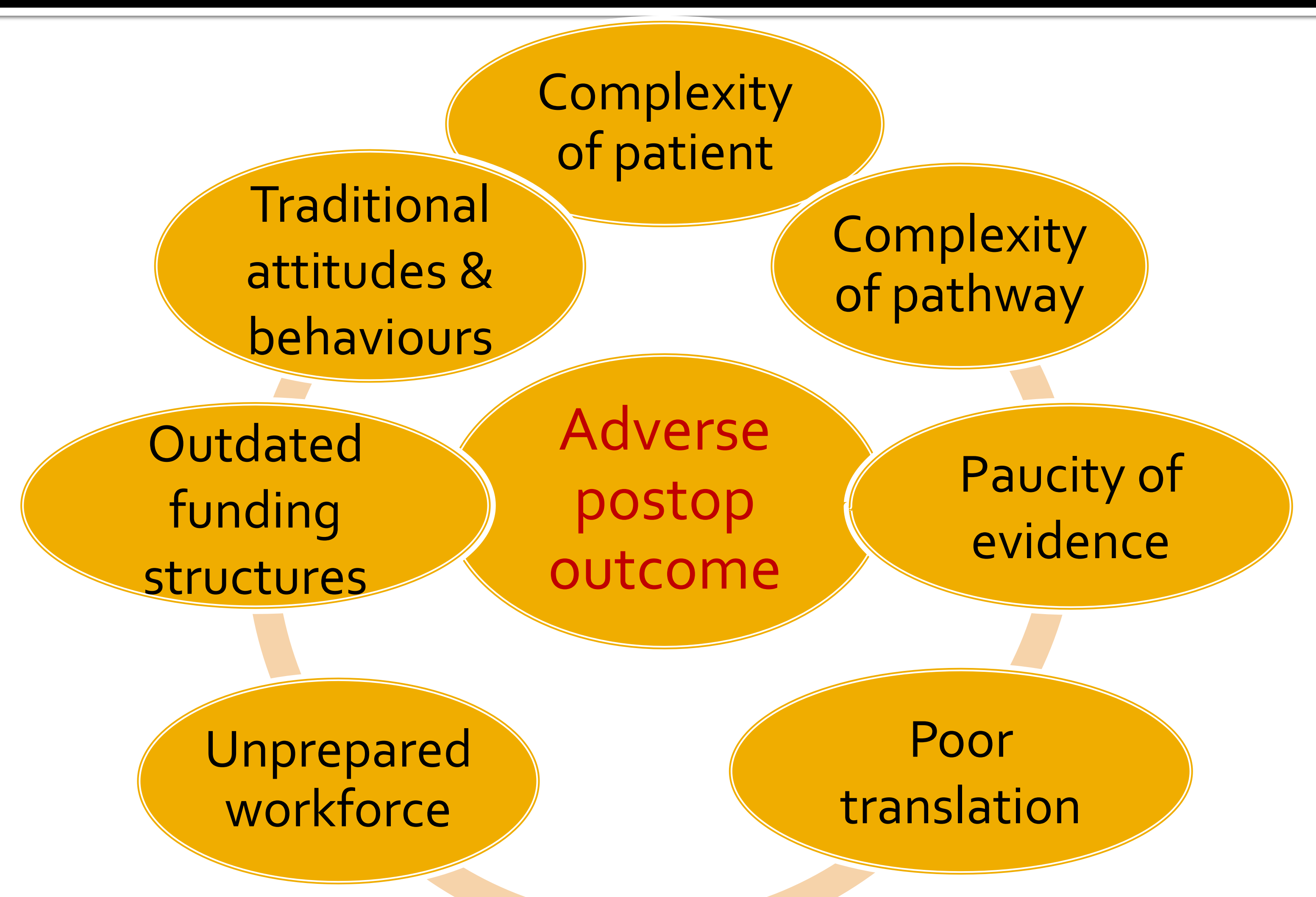
3. Support systematic scale up/spread/roll out

- At the speed at which it is required!!

What's happened so far and the questions arising?

Questions	Possibilities
Which population should we start with?	Surgical specialty (GI, vascular, urology), Pathology (cancer/non cancer) Admission route (elective/emergency)
Within those areas, how should we segment the population?	Age, frailty, multimorbidity, polypharmacy, SORT/ASA
What should be the KPIs?	Clinician reported Patient reported Process related
What is the required workforce?	Right now to deliver 6 month project In the future to deliver the service
What is the required knowledge?	Perioperative medicine Implementing change Measuring impact

The next steps…



The POPS Network Offer

Simon Griffiths

The POPS Team

Deborah Thompson
Programme Director

Dr Jugdeep Dhesi
Clinical Lead

Matt Tite
Measurement Lead

Simon Griffiths
QI Associate

Lisa Godfrey
QI Associate

Emma Backhouse
Programme Manager

Alice Clayton
Measurement Support

Kate Anley
Project Manager

Mandy Rumley-Buss
QI Associate

"Supporting teams to improve the peri-operative management of older people undergoing surgery"

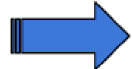
Model for Improvement

What will we accomplish?
Establishing your AIM

How do we know a change is an improvement?
Identifying your **MEASURES**

What changes can we make?
Working with the **RECOMMENDATIONS**

FIRST PHASE - introducing teams to the POPS Network approach and the Model for Improvement



MID POINT - checking in with Network teams on where you are, what data you're collecting and next steps.

FINAL PHASE - achievements over the last six months of the programme, and looking to the future.

Introduction to concepts of **Experience Based Design** and signpost to EBD Moodle to be completed by core members of project team.

Application of EBD for patients and staff; using app and planning a study

Gathering experience data from patients and staff. Submission of data for thematic analysis by the POPS team

Reviewing results and sharing with POPS, agreeing plans for improvement

Undertake improvements

Follow up study to check how improvements have made a difference

Setting up your project::
- initial 'site visit'
- Quality Improvement expertise
- support to undertake Sustainability assessment
-developing plans to implement small cycles of change aligned to the recommendations
- online learning sessions

Implementing changes: :
- implementing small cycles of change aligned to recommendations
- undertaking EBD with staff and patients
- collecting and interpreting data
- regular team calls
- clinical input and support
- spread education and training

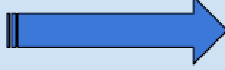
Time for reflection:
- what changes have you made?
- what improvements are you seeing?
- what is the data telling you?
- what is working well and not so well?
- continuing PDSA change cycles

Planning next steps:
- what improvements are you seeing?
- what is the data telling you?
- what have you achieved?
- what changes do you want to keep, and what do you want to get rid of?
- what becomes 'business as usual' and how?

Introduction to concepts of **Measurement for Improvement:** aims, measures, and driver diagrams.

Data diagnostics: establishing a baseline

Capacity and demand planning
Submission of mid-term data



Demonstrating improvements

Supported by calls, webinars, on-line events and Moodle online training, delivered by Measurement for Improvement experts.

Regular calls with POPS QI Associate - Regular POPS Network calls - Clinical 1:1 calls - Regular webinar series - Regular email updates - Website resources

Programme overview

- Allocation of a Quality Improvement (QI) coach to support you with improvement plans.
- A six-month learning collaborative to include a 'core' event each month and supplementary workshops and webinars.
- Access to regular monthly meetings to network with other participating sites and systems, including to provide local programme managers with an opportunity to build links with one another and learn together.
- A set of communications' support to help promote the work being taken forward and create a 'movement' for change.
- A local web-based resource to provide material and tools for you to use in your work (including a POPs toolkit).
- Specific tools to help with measurement and the experience based design approach.

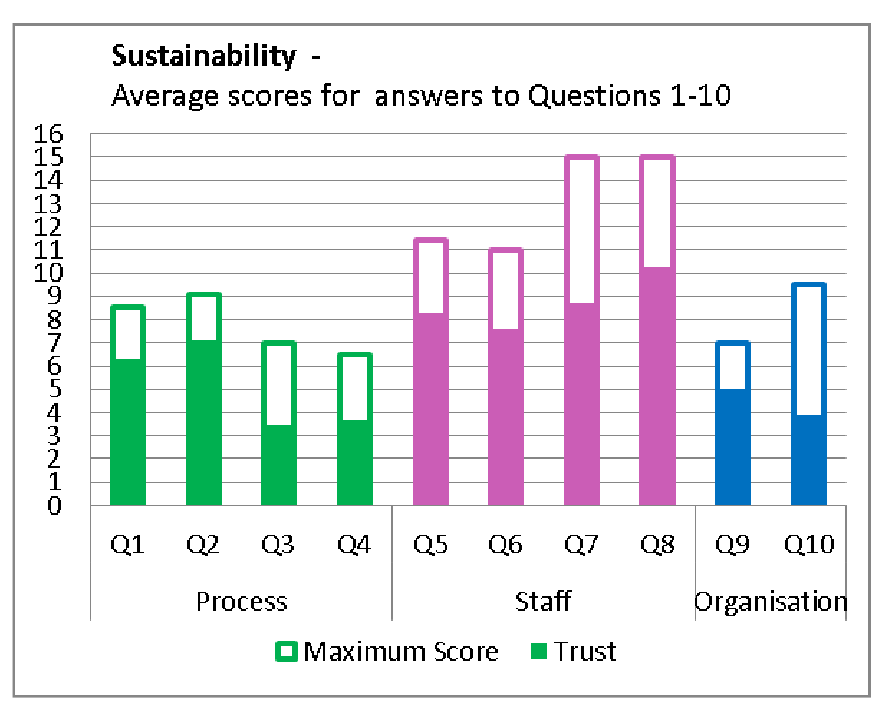
Programme core content

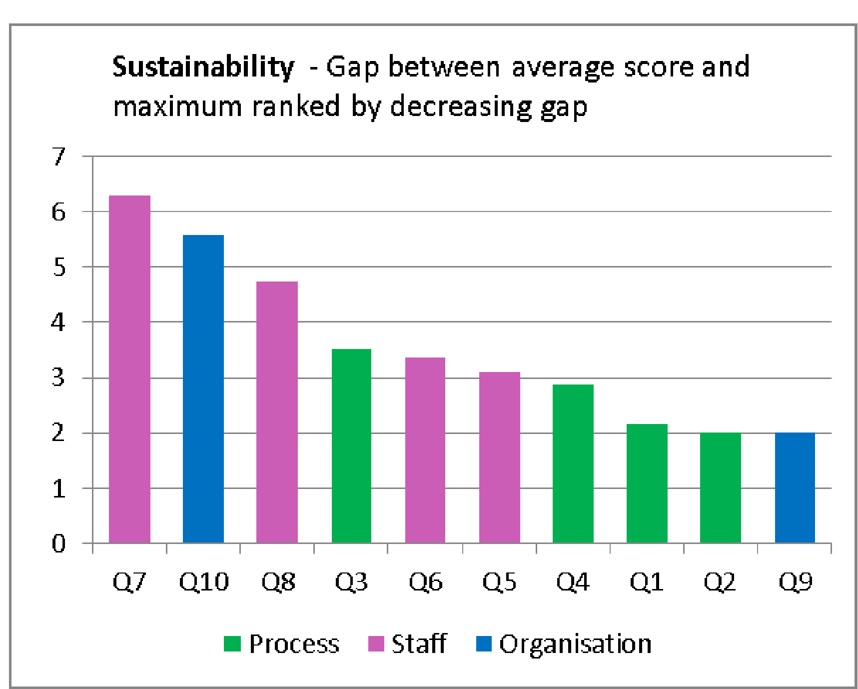
The core content each month will cover a range of topics, such as (dates to be confirmed):

- **22 June 2021** – World Café and Measurement for Improvement
- **August 2021** - What should we do about the workforce (Part One)? and Perioperative services in emergency surgery
- **September 2021** - What should we do about the workforce (Part Two)?, the EBD approach, and involving the public and patients in the co-design of services.
- **October 2021** - Clinical update/input, an update on measurement and a case study (the anaesthetist's perspective)
- **November 2021** - Research update in perioperative medicine, sharing our improvement journeys so far and a case study (changing the 'waiting list' to a 'preparation list').
- **December 2021** – The interface between primary and secondary care, QI and the 'Pixar Pitch', posters/improvement presentations from each site and a measurement update.

This programme core content runs alongside separate measurement sessions, and a webinar series.

The NHS Sustainability model and guide





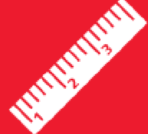
For more information click here.

The EBD approach – a service improvement method

Capture the experience

Understand the experience

Improve the experience


Measure the improvement

Don't forget to include measurement throughout.

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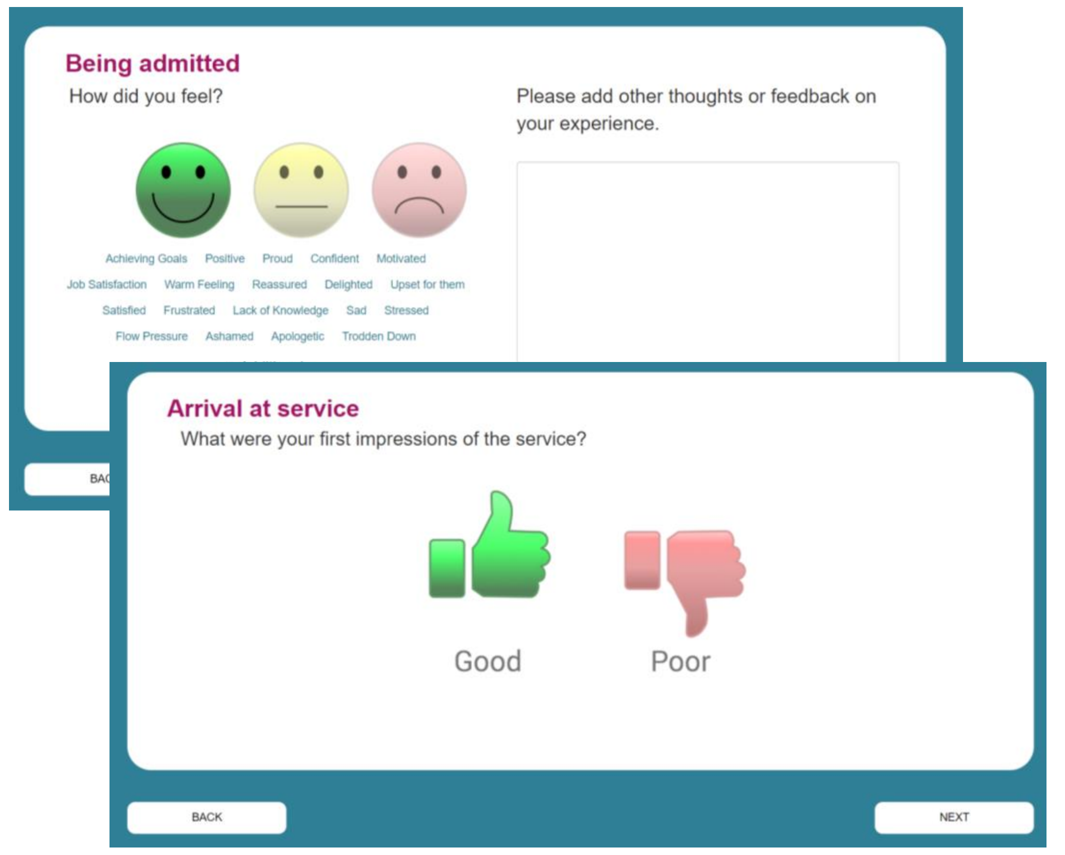
Staff and Patient Experience Based Design (EBD)



There are a number of EBD questionnaires available on our 'app':

- Outpatient patient questionnaire
- Outpatient staff questionnaire
- Inpatient patient questionnaire
- Inpatient staff questionnaire

Patient EBD and Staff EBD results

100%
80%
60%
40%
20%
0%
Being Admitted
Your Comfort
Your Treatment
Dignity & Respect

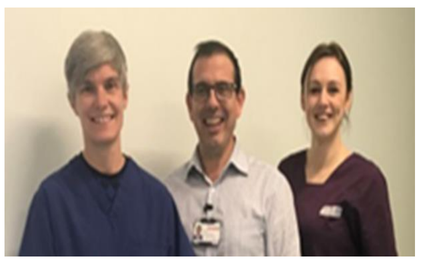
100%
80%
60%
40%
20%
0%
Being admitted
Patients first assessment
Patients comfort
Communications
Delivering treatment
Providing hygiene
Dignity and respect
Planning patients discharge

Salford POPS

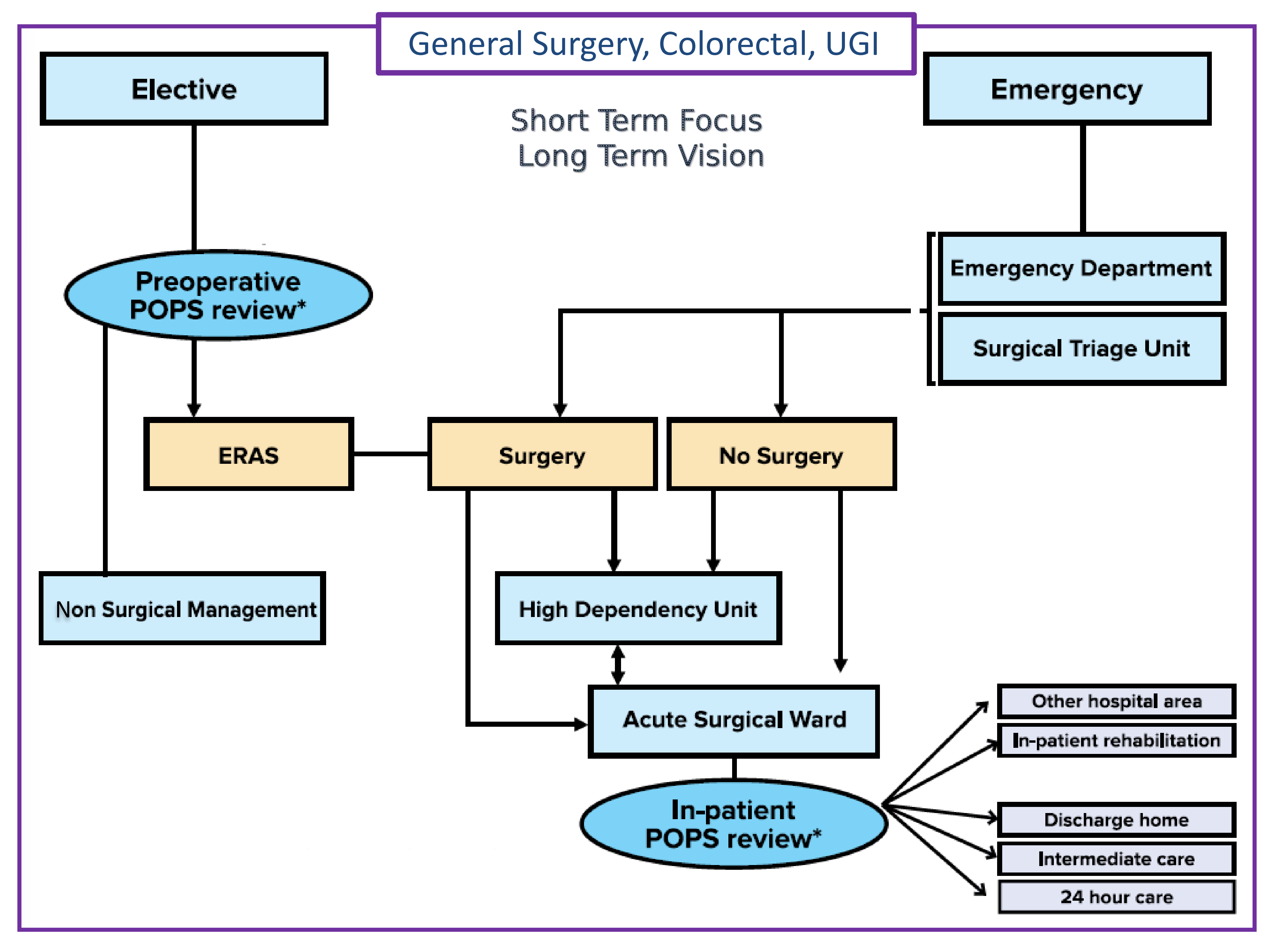
Dr Arturo Vilches-Moraga

POPS Network
Launch Event – Part One

Tuesday 8 June, 2021



Salford POPS Arturo Vilches-Moraga, Salford Royal NHS FT


General Surgery, Colorectal, UGI
Elective
Emergency
Short Term Focus
Long Term Vision
Preoperative
POPS review*
Emergency Department
Surgical Triage Unit
ERAS
Surgery
No Surgery
Non Surgical Management
High Dependency Unit
Acute Surgical Ward
In-patient
POPS review*
Other hospital area
In-patient rehabilitation
Discharge home
Intermediate care
24 hour care

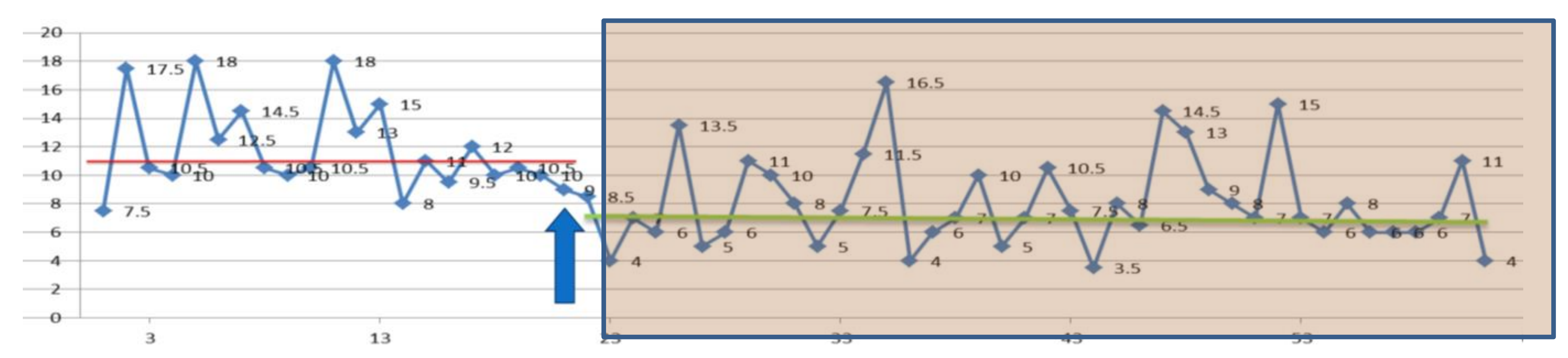
Improving surgical outcomes (Salford POP-GS)

>2000 patient-episodes

8th September 2014 – COVID-19 Pandemic

Before February 1st
11 Median

After February1st
7 Median



Improving surgical outcomes (Salford POP-GS)

- ✓ Patient and staff satisfaction
- ✓ Reduced calls to medical registrar
- ✓ Reduced referrals Cardiology, gastro, endocrine
- ✓ Improved coding (recognition of complications)
- ✓ Improved quality of discharge summaries

Improving surgical outcomes (Salford POP-GS)

- ✓ Patient and staff satisfaction
- ✓ Reduced calls to medical registrar
- ✓ Reduced referrals Cardiology, gastro, endocrine
- ✓ Improved coding (recognition of complications)
- ✓ Improved quality of discharge summaries

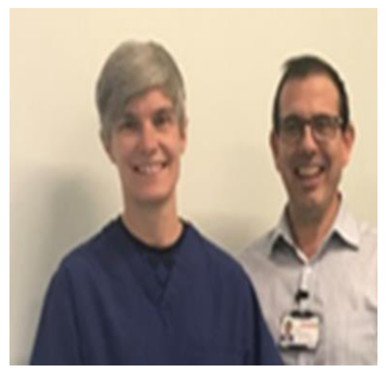
Risk-adjusted mortality
1 December 2018 - 30 November 2019

Risk-Adjusted Mortality

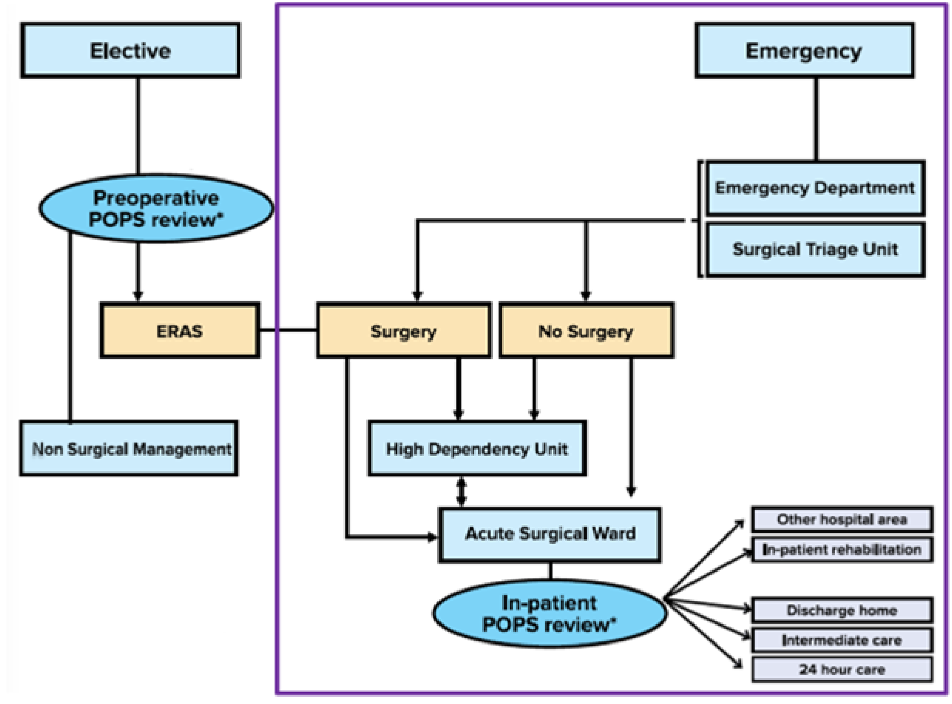
National mean 9.3%

Number of patients included 136

POPS-GS@Salford 2014-October 2018



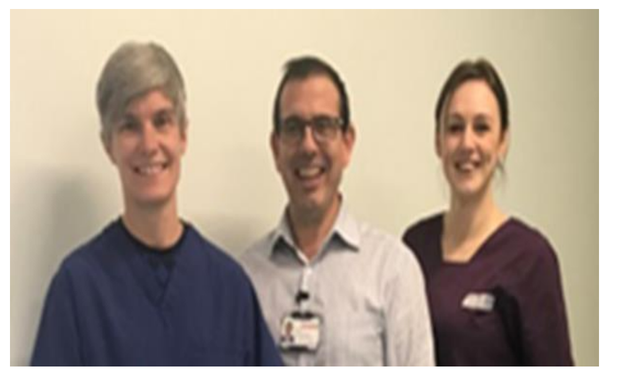
Elective/Emergency in hospital



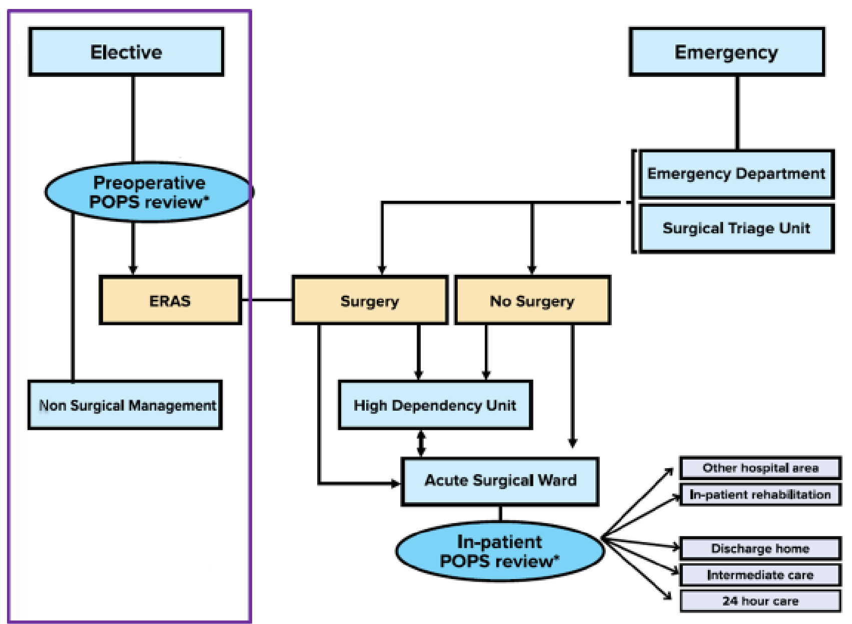
4 DCC + 1 SPA sessions = 20 hours/week

(including cover, holidays, ...)

POPS-GS@Salford October 2018- 21



Elective/Emergency in hospital
Elective 2WWL initiative & High risk UGI



4 + 4 DCC + 2 SPA sessions = 40 hours/week

(including cover, holidays, …)

Recipe for success

- Heterogeneous with complex needs and poor clinical outcomes
- Collaborative working
- Frailty is bad news but can be reverted
- Delirium identification and management

Recipe for success

- Comprehensive Geriatric Assessment
- Collaborative working
- Frailty is bad news but can be reverted
- Delirium identification and management

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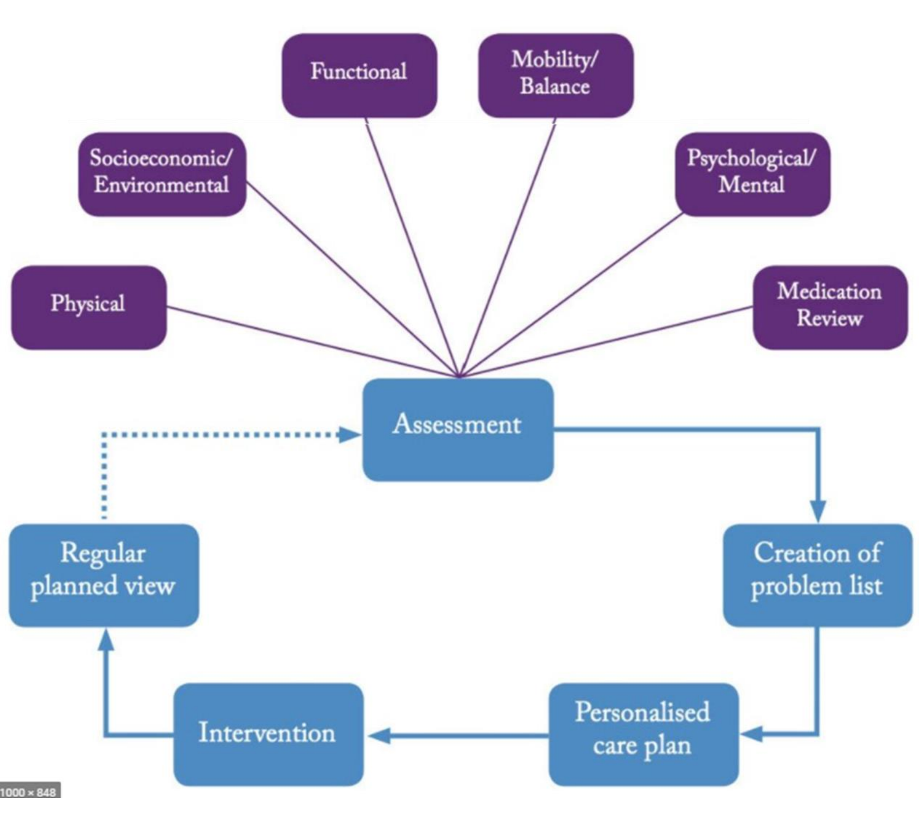
Recipe for success

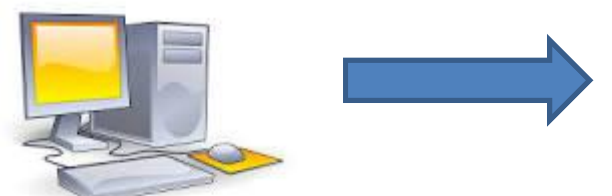
- Comprehensive Geriatric Assessment
- Collaborative working
- Frailty is bad news but can be reverted
- Delirium identification and management

- **Heterogeneous with complex needs and poor clinical outcomes**



The set up: Salford-POPS-GS in-reach Service

- Proactive, daily case finding service for frail (CFS>4) patients over 64 years of age and all over 80 years of age



- Comprehensive Geriatric Assessment

(ACM Consultant InReach)

==================

85 year old independent non smoker with a diagnosis of dementia
Hypertension, hyperlipidemia, prostatism and previous TURP
Medications (6): No Allergies

Emergency admission (abdominal pain and vomiting): small bowe obstruction (adhesive)
Clinical Frailty Scale - 3
Social: Lives with wife in a house. Independent. Mobile with no aids. Recent dementia diagnosis with no behavioural symptoms
High Dependency Care: Yes
Procedure: Emergency Laparotomy & Release of Band Adhesion
Complications: delirium, ileus, AKI, acute urinary incontinence

Current Function

Mobility: Independently mobile
Cognition: CAM Positive. 4AT 12
Urinary catheter

Today's Assessment:

DOLS to be completed
Most Recent NEWS Score: 2 SaO2 97% on 2L
Bowels NOT opened since admission (according to EPR)

HAT assessment completed. On LMWH
Devices: Urinary catheter
Ceiling of Care: Full

Diagnoses:
----

1. Acute small bowel obstruction (adhesions)
2. Acute kidney injury - prerenal (hypovolemia, iatrogenia)
3. Emergency Laparotomy & Release of Band Adhesion 29/04/2018 - abnormal looking jejunum
4. Extubated 30/04
5. Post-operative ileus 30/04
6. Post-operative acute urinary retention - difficulty catheterising
7. Post-operative mixed type delirium superimposed on dementia 01/05 - received olanzapine
8. Polypharmacy

Changes to medication

STOPPED Aspirin and Atorvastatin (no active indication in the absence of established vascular disease), Omeprazole (low dose and no longer indicated as not on antiplatelet agents), Bendroflumethiazide and Perindopril (AKI and low BP)
STARTED Trazodone 50mg at 6pm, Paracetamol 1gr up to QDS and Movicol OM
CHANGED -

RECEIVED Olanzapine (acute confusional state)

Discharge Plan:

Surgical agenda: bowels not yet opened. Reduced bowel sounds.

I do appreciate Mr suffered an episode of acute urinary retention perioperatively at the time of ileus.
He is restless and we should aim to TWOC as soon as practicable (providing he is moving his bowels regularly and mobile)

Continue to omit Bendroflumethiazide, perindopril and atorvastatin
Stop aspirin all together as there isn't a clear indication. Omeprazole can also be discontinued

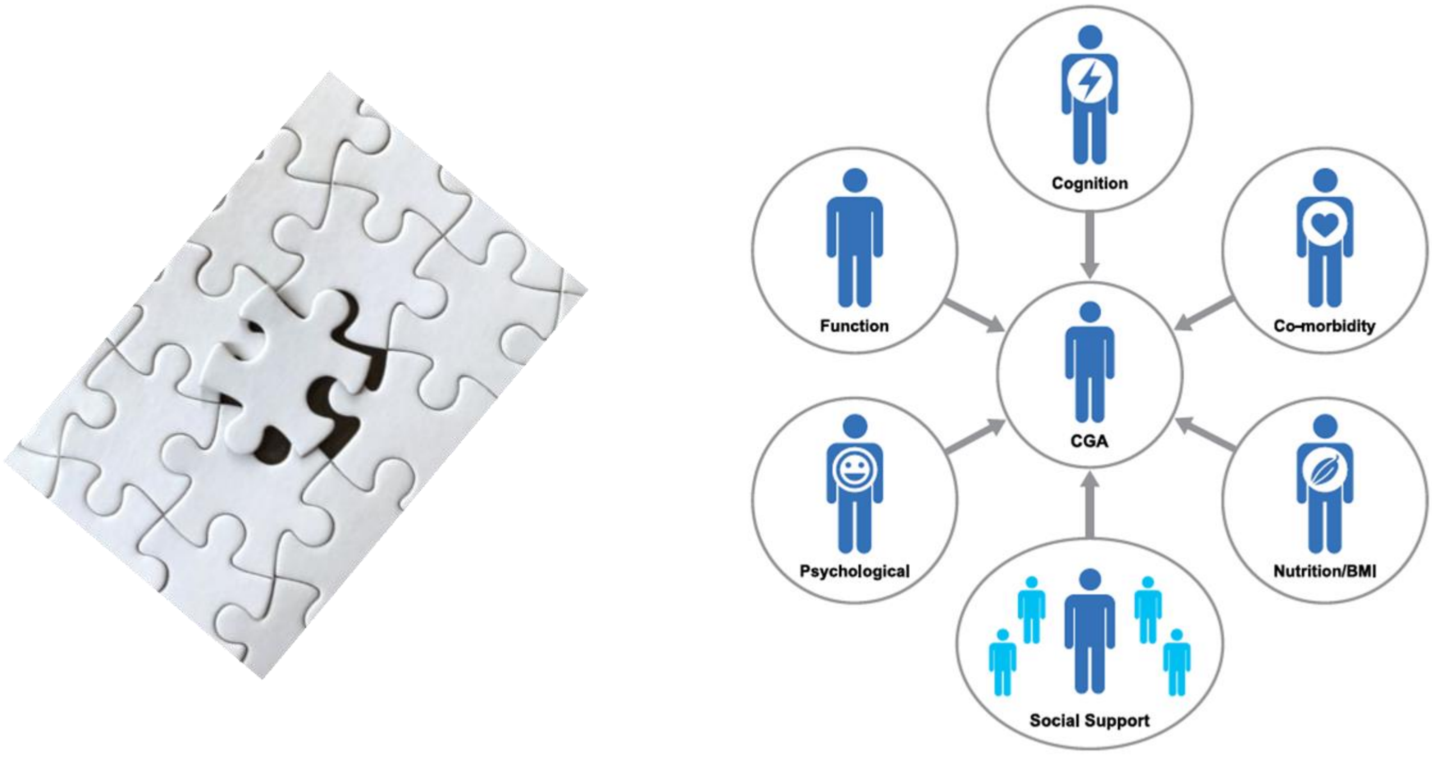
Pain appears under control (mild abdominal discomfort)
I suggest that we give Paracetamol 1g QDS & PRN Nefopam 30mg

Stop Olanzapine and add in Trazodone 50mg at 6pm (it will help his restlessness).
We will aim to stop pre-discharge
Please could ward staff continue to ensure usual delirium measures are taken, including regular re-orientation and reassurance, good hydration, regular bowel movements and monitoring of pain.

Information given to patient/carers:

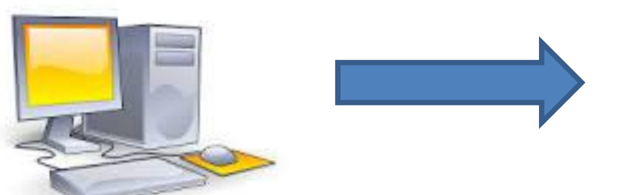
Expected Discharge Date is
Not Suitable for transfer to Pendleton Suite
Advice given to General Practitioner:
ACM Follow up: Not required

- **Collaborative working is key to success**

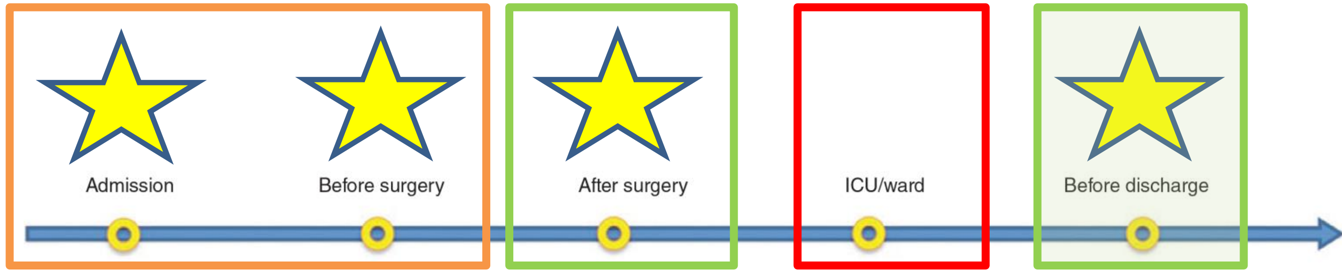


The set up: Salford-POPS-GS in-reach Service

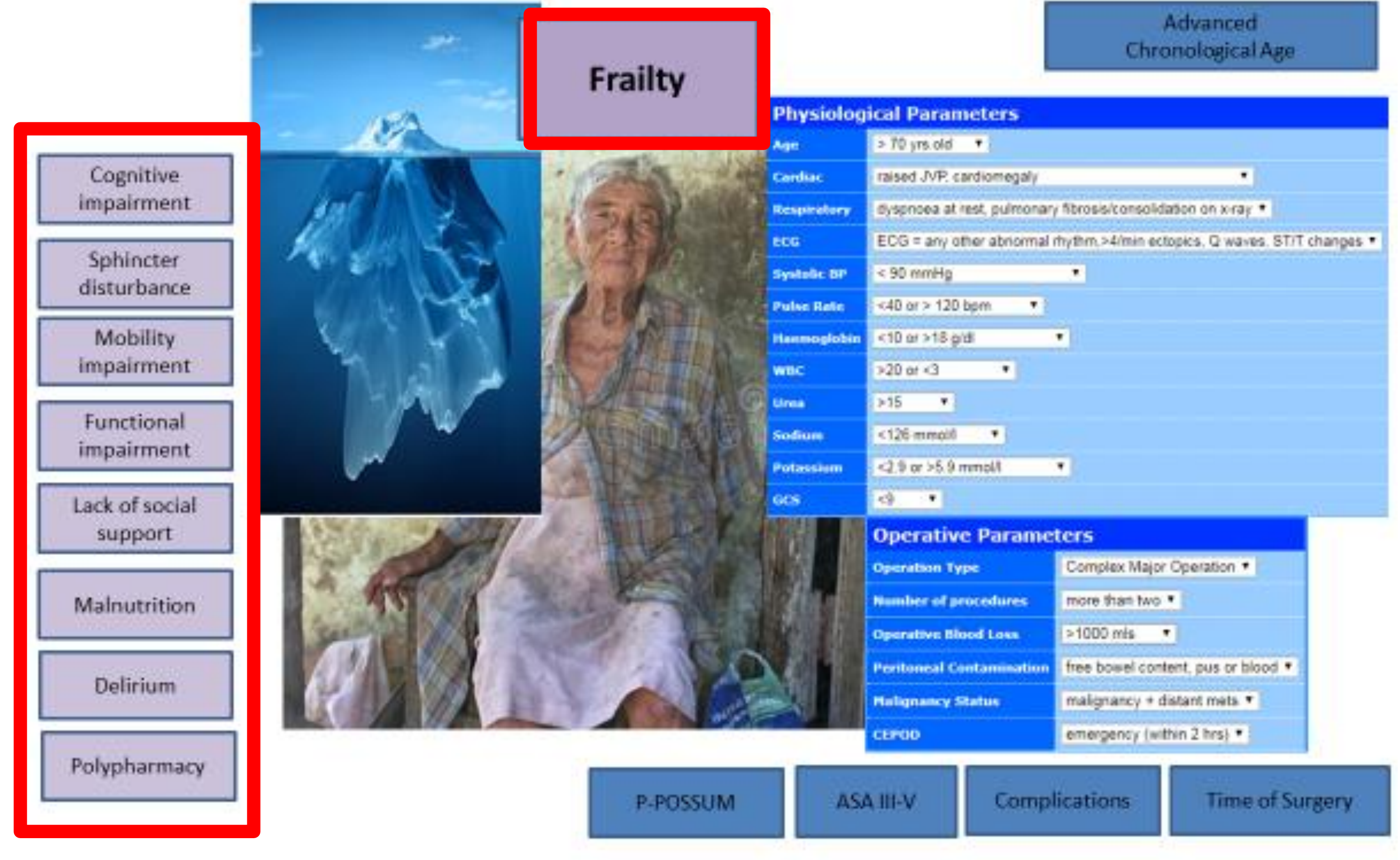
- Proactive, daily case finding service for patients over 74-years of age
- Core team: Senior nurse, physiotherapist, Occupational therapist, geriatrician/ACP



- Comprehensive Geriatric Assessment
- Targeted Multidisciplinary interventions
- Timely Discharge Planning



- **Frailty is bad news but can be reverted**



- **Frailty is bad news but can be reverted**

Clinical Frailty Scale*

1 **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 **Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

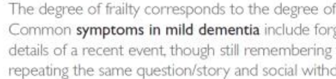
3 **Managing Well** – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 **Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 **Mildly Frail** – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 **Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 **Severely Frail** – Completely dependent for **personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



8 **Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. **Terminally Ill** - Approaching the end of life. This category applies to people with **a lif**
<6 months, who are **not otherwise**

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of
Common **symptoms in mild dementia** include forg
details of a recent event, though still remembering t
repeating the same question/story and social withd

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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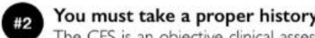
Top Tips to help you use the Clinical Frailty Scale



#1 It's all about the baseline
If the person you are assessing is acutely unwell, score how they were 2 weeks ago, not how they are today.

#2 You must take a proper history
The CFS is an objective clinical assessment tool. Frailty must be sensed, described, and measured - not guessed.

#3 Trust, but verify
What the person you are assessing says is important, but should be cross-referenced with family/carers. **The CFS is a judgement-based tool**, so you must integrate what you are told, what you observe, and what your professional clinical experience tells you from dealing with older adults

#4 Over-65s only
The CFS is not validated in people under 65 years of age, or those with stable single-system disabilities. However, documenting how the person moves, functions, and has felt about their health may help to create an individualised frailty assessment.

#5 Terminally ill (CFS 9)
For people who appear very close to death, the current state (i.e. that they are dying) trumps the baseline state.

#6 Having medical problems does not automatically increase the score to CFS 3
A person who isn't bothered by symptoms and whose condition(s) doesn't limit their lives can be CFS 1 or 2 if they're active and independent.

#7 Don't forget "vulnerable" (CFS 4)
People in this category are not dependent (though they may need assistance with heavy housework), but often complain of "slowing down". They're becoming sedentary, with poor symptom control.

#8 Dementia doesn't limit use of the CFS
Decline in function in people living with dementia follows a pattern similar to frailty, so if you know the stage of dementia (mild, moderate, severe) you know the level of frailty (CFS 5,6,7). If you don't know the stage of dementia, follow the standard CFS scoring.

#9 Drill down into changes in function
When considering more complex activities of daily living (such as cooking, managing finances, and running the home) the focus is on *change* in function. A person who has always relied on someone else to perform a particular activity should not be considered dependent for that activity if they've never had to do it before and may not know how.

- **Delirium identification and timely management**

Create | Preview

Document Info

Sections

- Delirium & Dementia Ass
  - Delirium & Dementia Assess
    - 4AT Assessment
    - ED TIME Bundle
    - TIME Bundle
    - CAM
    - Dementia Assessment
    - Capacity Assessment
    - EPR Admin use only
- DOCUMENT VERSION

Retrieve Last Charted...

Insert Default Values

Clear Unsaved Data

Acronym Expansion | Allergies/Intolerances/Adverse Events

4AT Assessment | ED TIME Bundle | TIME Bundle | CAM | Dementia Assessment | Capacity Assessment | EPR Admin use only

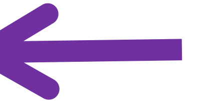
ED TIME Bundle

		Abnormality found
T - *Triggers*	NEWS	Yes No Not assessed
	Blood glucose	Yes No Not assessed
	Infection	Yes No Not assessed
	Hydration	Yes No Not assessed
	Medication changes	Yes No Not assessed
	Pain	Yes No Not assessed
	Urinary retention	Yes No Not assessed
	Constipation	Yes No Not assessed
	Metabolic	Yes No Not assessed
		Abnormality found
I - *Investigate*	Bloods	Yes No Not assessed
	ECG (ACS)	Yes No Not assessed
	Infection screen	Yes No Not assessed
Order Delirium Screen	Imaging	Yes No Not assessed
		Completed
M - *Manage*	Treat causes	
	Clinical details	
		Completed
E - *Explain*	Explain to family — Click here to view and print the leaflet	
Submit new Health Issue	Explain to team	
	Document diagnosis	

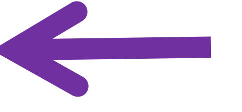
Need Help? Mark Note As: Results pending Priority Incomplete E&M Calculation Charge Capture SuperBill

Save Cancel

2018



2014



Elective

Emergency

*Comprehensive Geriatric Assessment
Informed decision making
Optimisation care and Prehabilitation

Preoperative
POPS review*

Emergency Department

Surgical Triage Unit

ERAS

Surgery

No Surgery

CGA

MDTea
@MDTea_podcast

Timely Discharge
Planning (EDD)

Non Surgical Management

High Dependency Unit

Acute Surgical Ward

Other hospital area

In-patient rehabilitation

*Comprehensive Geriatric Assessment
Targeted multidisciplinary interventions
Discharge planning meetings

In-patient
POPS review*

Discharge home

Intermediate care

24 hour care

Patient prefers to be called:

Tinzaparin training required: ☐Y ☐N

Salford Royal NHS
NHS Foundation Trust

University Teaching Trust

safe • clean • personal

Elective Colorectal Enhanced Recovery Programme Care Pathway

Affix Patient Label Here

Admission Date:

Target discharge date:

Consultant	
Length of stay	☐ Right hemicolectomy 4 days ☐ Left hemicolectomy 5 days ☐ Rectal resection 6 days ☐ Subtotal colectomy 5 days
Intended post-op bed	☐ Ward ☐ SHDU
NHS Number:	

This patient is on a care pathway. ALL DOCUMENTATION relating to this episode of care should be recorded in this document.
DO NOT MAKE ADDITIONAL ENTRIES IN THE MEDICAL RECORDS

Salford Royal
NHS Foundation Trust

Oesophagectomy
Integrated Pathway

Patient Name

....

Affix label as soon as possible

Date of surgery

................/ ..../ ....

Surgical Consultant

....

Pre-Operative Checklist *Completed by* ***Doctor*** ***Nurse***

- A pre-operative arterial blood gas on air is available ☐
- Pre-operative weight is measured ....kg ☐
- Pre-operative medications prescribed: ☐
  - 2 sachets of Preload in 750 ml at 22:00 the night before surgery (unless insulin-dependent diabetic)
  - 0.2% chlorhex.mouthwash (10mL over 1 minute after brushing teeth) 22:00 night before surgery & 06:00 morning of surgery
  - No pre-operative tinzaparin or on post-op Day 0
- Pre-operative medications given: ☐
- The patient is consented ☐
- Critical care bed is booked as Level 2 ☐
- 2 units of blood are crossmatched. If not, FY1 to take ☐
- Confirmed blood available ☐
- 08:00 Theatre team briefing in anaesthetic room time confirmed ☐

Digitised Pathways

Medicines Management

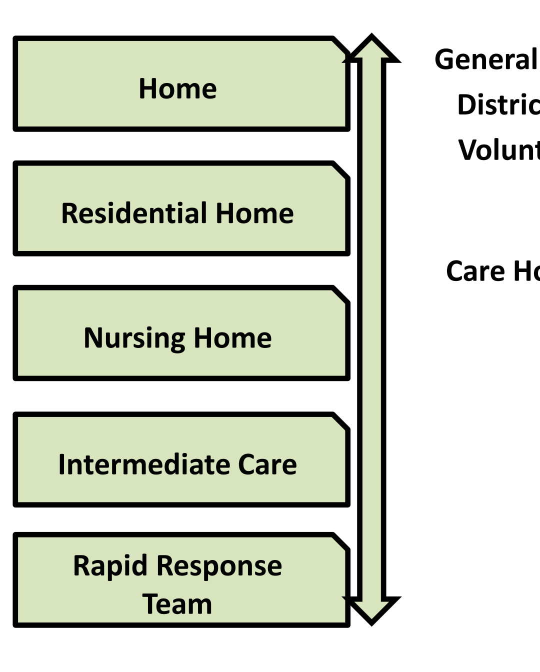
Digitised Theatres

Optimising EPR

University Teaching Trust

safe ● clean ● personal

Acute Surgical Abdominal Pain Care Pathway



General Practitioner
District Nurses
Voluntary Sector

Care Home Staff

Patient

Relative/s
Carer/s

Surgeons
Anaesthetists
Geriatricians
Specialist Nurses
Radiology Team
IV Team
Single Organ Specialists
Dieticians
Pharmacists

Occupational Therapist
Physiotherapists

Advance Nurse Practitioner
Palliative Care **Team**
Social **Worker**

Acute Physicians

Porters
Auxiliary Nurses
Nursing Staff

Bed Managers

Pathway Manager

Emergency Department

Surgical Triage Unit

Emergency Admissions Unit

ICU/ SHDU

Acute General Surgical Ward

STRENGTHS

- Existing service upon which to develop
- Respected by colleagues
- Collaborative working
- ACP/Consultant Geriatrician delivered
- Patient/Staff satisfaction
- Financial benefits
- Aligned with Trust objectives

WEAKNESSES

- Reliant on 3 individuals
- Increasing demand
- Medical pressures/priorities (COVID-19)
- Staff changeover
- Frailty/Delirium identification/management
- Data gathering
- Longer term sustainable funding/service

OPPORTUNITIES

- Increasing demand
- NELA
- 2WWL CR
- High risk UGI MDT initiatives
- Healthier Together
- Research/Publications
- Career progression

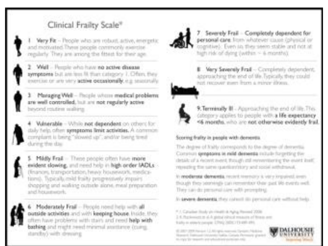
THREATS

- Staff retention/deployment
- Snowballing demand
- Clinical priorities elsewhere
- Conflicting priorities/vision
- Financial pressures
- Territorialism/defensiveness
- Complacency/ change fatigue

- Healthier together
  - Service Reestablishment/ consolidation
  - Amalgamation COTE in-reach services
  - Quality Improvement

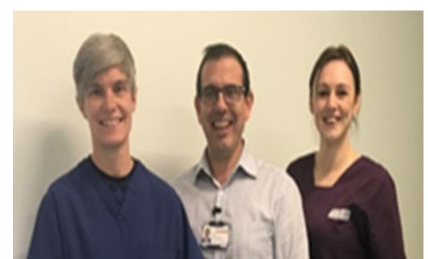
Recipe for success

- Comprehensive Geriatric Assessment
- Collaborative working
- Frailty is bad news but can be reverted
- Delirium identification and management


Clinical Frailty Scale*

POPS Network
Launch Event – Part One

Tuesday 8 June, 2021



Salford POPS **Arturo Vilches-Moraga,** Salford Royal NHS FT

@avilmor

arturo.vilches-moraga@srft.nhs.uk

Tips

- Look, listen, think (before crossing the road)
- Sell your idea (business plan/ Clinical Governance-MM meetings)
- Collect data prospectively (IM &T, excel, database,…)
- Pick and pamper your team (MDT)
- Update managers regularly (keep them on board)
- Revise, attend POPS course ….
- Make sure it works for You

ACM@Salford

Delirium

Falls

Frailty

Community Services

Dom Visits | MDG | Rapid Response | RH/NH | Clinics

IMC

GOD 1

GOD 2

Front door Services

EAU

ED

Liaison Services

Orthoger

Trauma

Gen Surgery

Back door – Rehabilitation/Step down

OP Clinics

Syncope | Complex | PD

Delirium | Falls

Acute Geriatric Units

L3

L4 | L6

L5

Education

Appraisal/CPD

Quality Imp

Academic

Digital

Salford Royal NHS
NHS Foundation Trust

University Teaching Trust

safe • clean • personal

Liverpool POPS

Dr Mark Johnston

Proactive Care for Older Patients Requiring Surgery (POPS)

LUHFT (RLB Site)

Dr Mark Johnston (Consultant Geriatrician)

POPS/OncoGeriatrics

Our Service

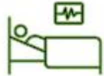
2.0 WTE Band 7 CNS POPS Nurses

0.6 WTE Consultant Geriatrician (3) Time

3 Pillars of focus:

Decision Making

Optimisation



Peri-operative care

KPI's:

1) 80% of Inpatients reviewed within 72hrs
2) 90% of Pre-op referrals to be seen within 2 weeks
3) Reduction in reactive Cons-Cons referrals from surgery

Age

<65 65-69 70-79 80-89 90+

Clinical Frailty Score (Rockwood)

100 80 60 40 20 0

1 (Very Fit) 2 (Well) 3 (Managing Well) 4 (Vulnerable) 5 (Mildly Frail) 6 (Moderately... 7 (Severely Frail) 8 (Very Severely... 9 (Terminally Ill)

Pre-op, 4%
Elective, 28%
Emergency...

NELA

Yes 14%
No 86%

Snapshot

NELA Report (Year	Date range	Hospital Site	Total Cases	Assessed by elderly medicin	Post op LoS (Median)	Post op LoS (Mean)	Adjusted Mortality rate (%
6	Dec 2018-Nov 2019	RLB	164	90	10	15.7	7.3%
5	Dec 2017-Nov 2018	RLB	144	77.4	13.8		11.60%
4	Dec 2016-Nov 2017	RLB	135	31.7	12.7		9.40%
3	Dec 2015-Nov 2016	RLB	144	43.3	13		11.10%
2	Dec 2014-Nov 2015	RLB	190	25	14.4		10.10%
1	Dec 2013-Nov 2014	RLB	181	9			

AIM | PRIMARY DRIVERS | SECONDARY DRIVERS | CHANGE IDEAS

Increase number of patients reviewed by Clinical Gerontology team after Emergency Laparotomy to 80%, with indirect improvements of reduced Length of stay and mortality in this age group.

1 linked measure

Primary drivers:
- Data captured
- Ability to review
- Aware of appropriate patient

Secondary drivers:
- Clearly Documented
- Logged on (NELA) database
- CNS available
- Geriatrician available
- Appropriate to review/Location
- Surgical team refers
- Theatre staff refers
- POPS team proactively identifies

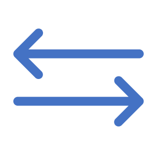
Change ideas:
- Electronic POPS NELA form
- POPS input to NELA database
- CNS rota
- Geriatrician Rota with cover
- Review within 72 hours
- Develop Critical care pathway
- POPS ICE referral form
- Theatre staff referral portal
- POPS triage tool
- Access Emergency theatre data

Generated by LifeQI

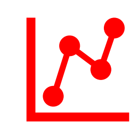
NELA
National Emergency
Laparotomy Audit

NELA

Liverpool University Hospitals
NHS Foundation Trust



Change Management



Business Intelligence

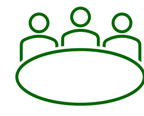
Project Management

Resource Management

Challenges

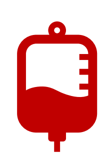
Liverpool University Hospitals
NHS Foundation Trust

Pre-op Growth

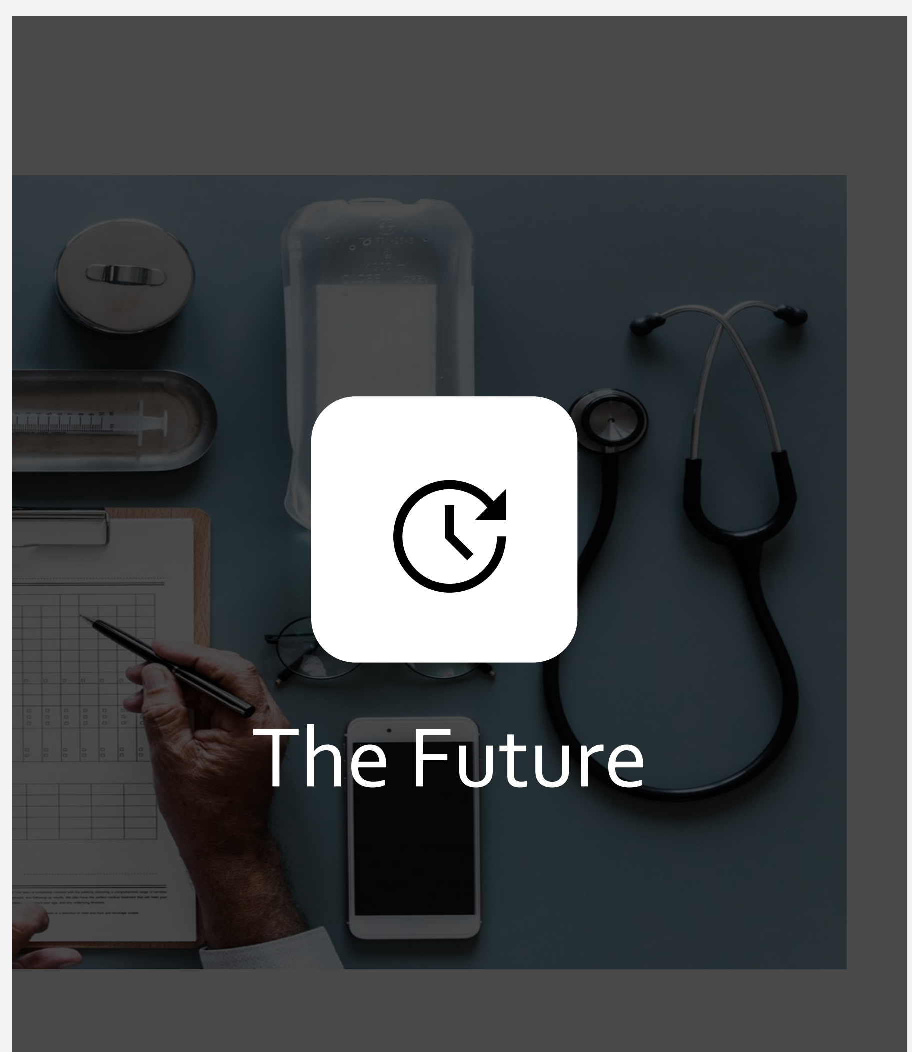


Complex MDT

Pathways



Onco-Geriatric Integration



Learning points

- Pushing on open doors
- Willingness to visit all clinical areas
- Ambassadorial role
- Focus on all 3 pillars
- Resource is precious, invest wisely
- NELA is a great starting position
- Significant appetite to develop this

Thank You

Dr Mark Johnston
Mark.Johnston @liverpoolft.nhs.uk
0151 706 2000 (PA Linda Evans)

Dartford and Gravesham POPS

Dr Anna Whittle

POPS @ a District General Hospital

Dr Anna Whittle

Darent Valley Hospital

Darent Valley Hospital

In the beginning…..

Collaborative leadership

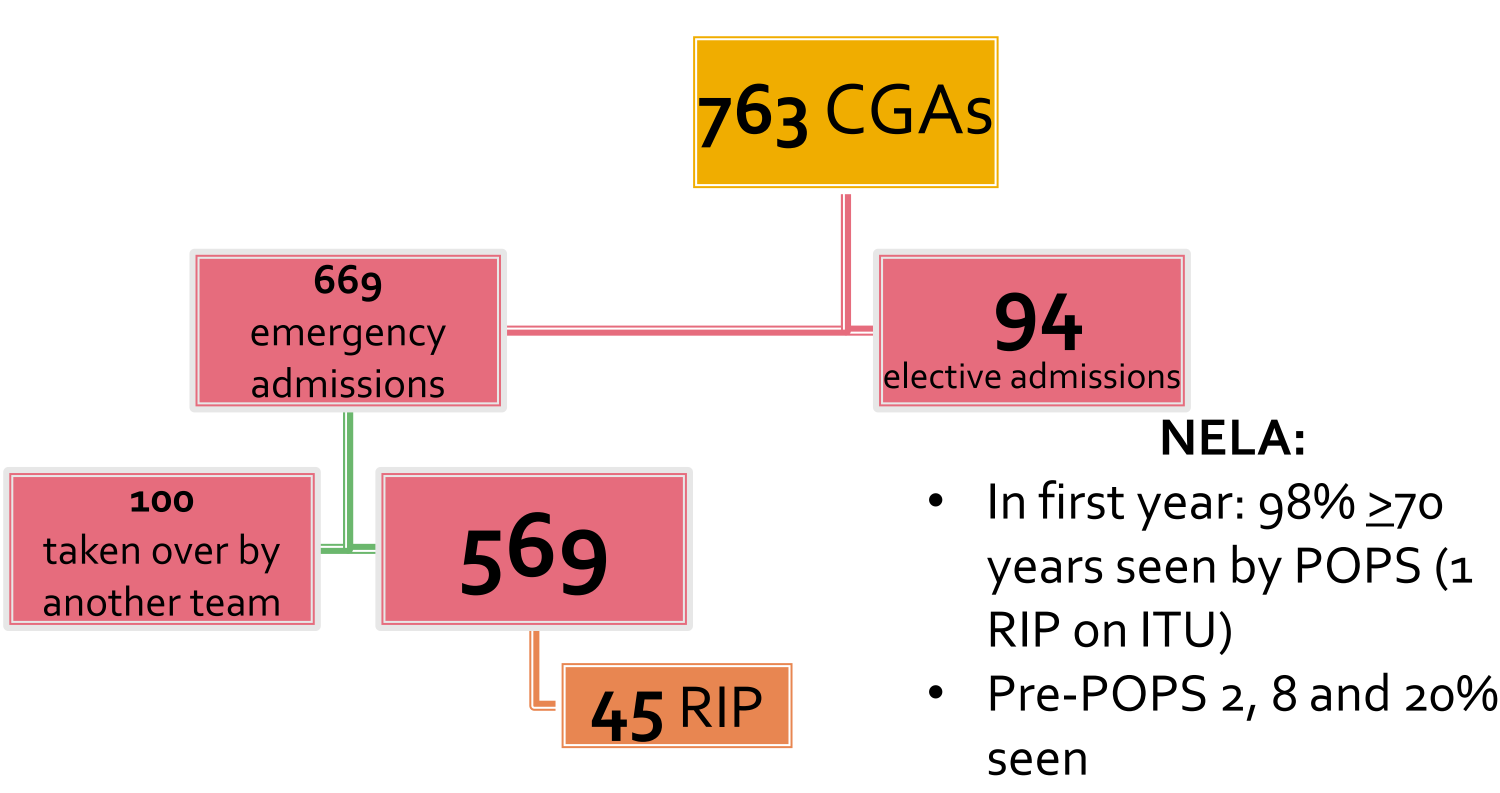
Local collaboration

Strategic financial leadership

Cross site collaboration

Mechanisms for sustainability

Inpatient activity over 1st year

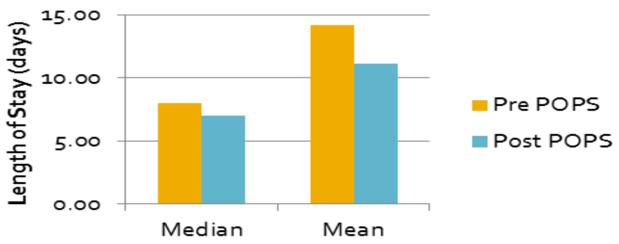


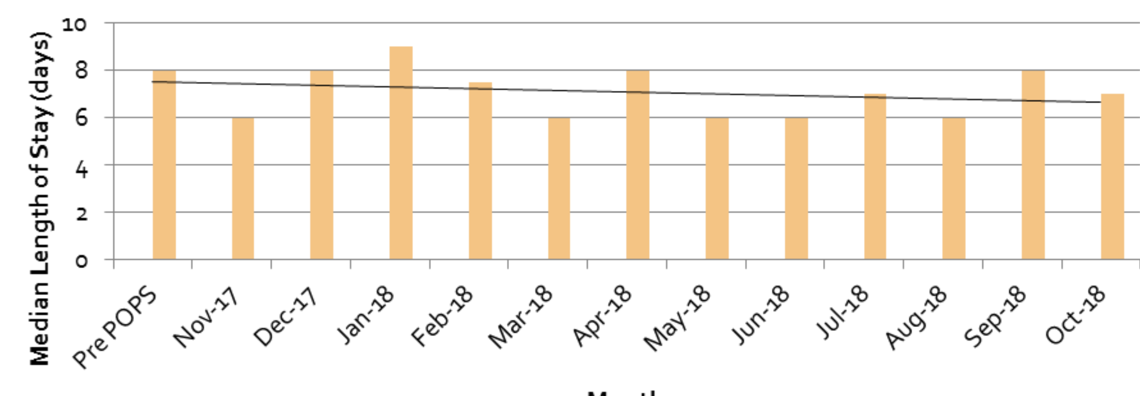
NELA:

- In first year: 98% ≥70 years seen by POPS (1 RIP on ITU)
- Pre-POPS 2, 8 and 20% seen

Length of stay for EGS

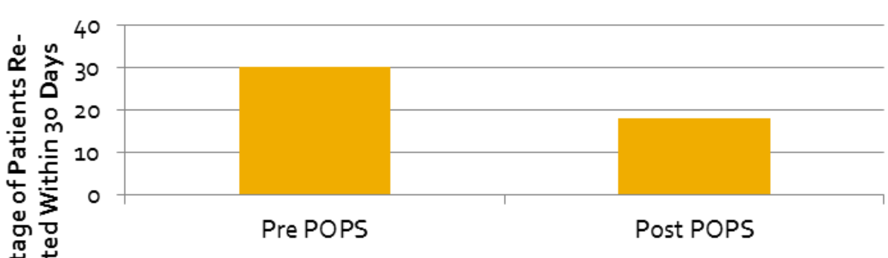
LOS
(days)

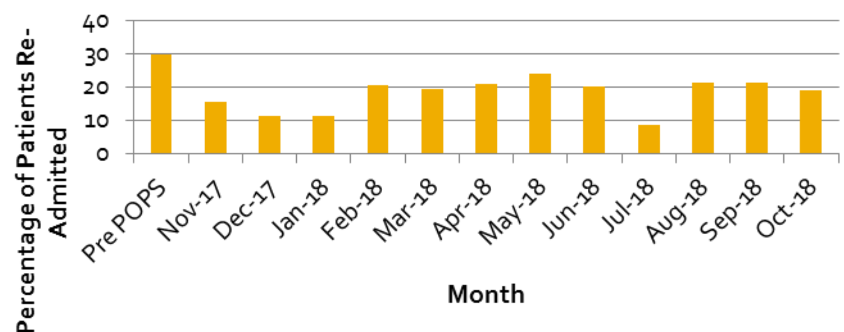




Length of Stay	Median	Mean
Pre POPS	8.00	14.18
Post POPS	7.00	11.16

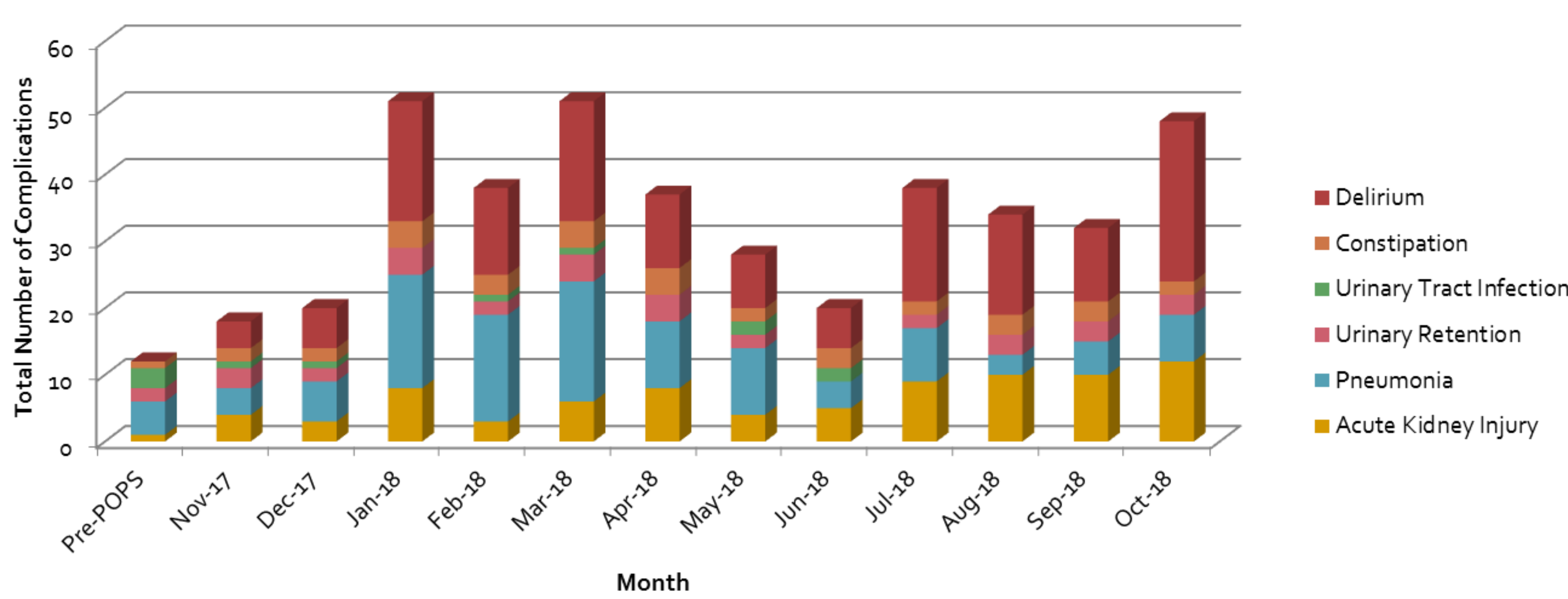
30 day readmissions rate for EGS





- **30%** readmission rate pre-POPS. 7/15 (46%) of readmissions were for medical reasons, 8/15 (53%) for surgical
- Average 30 day readmission rate over first year **18%**
- Analysis done at 8 months of POPS: 25/61 (41%) of readmissions were for medical reasons and 36/61 (59%) were for surgical reasons

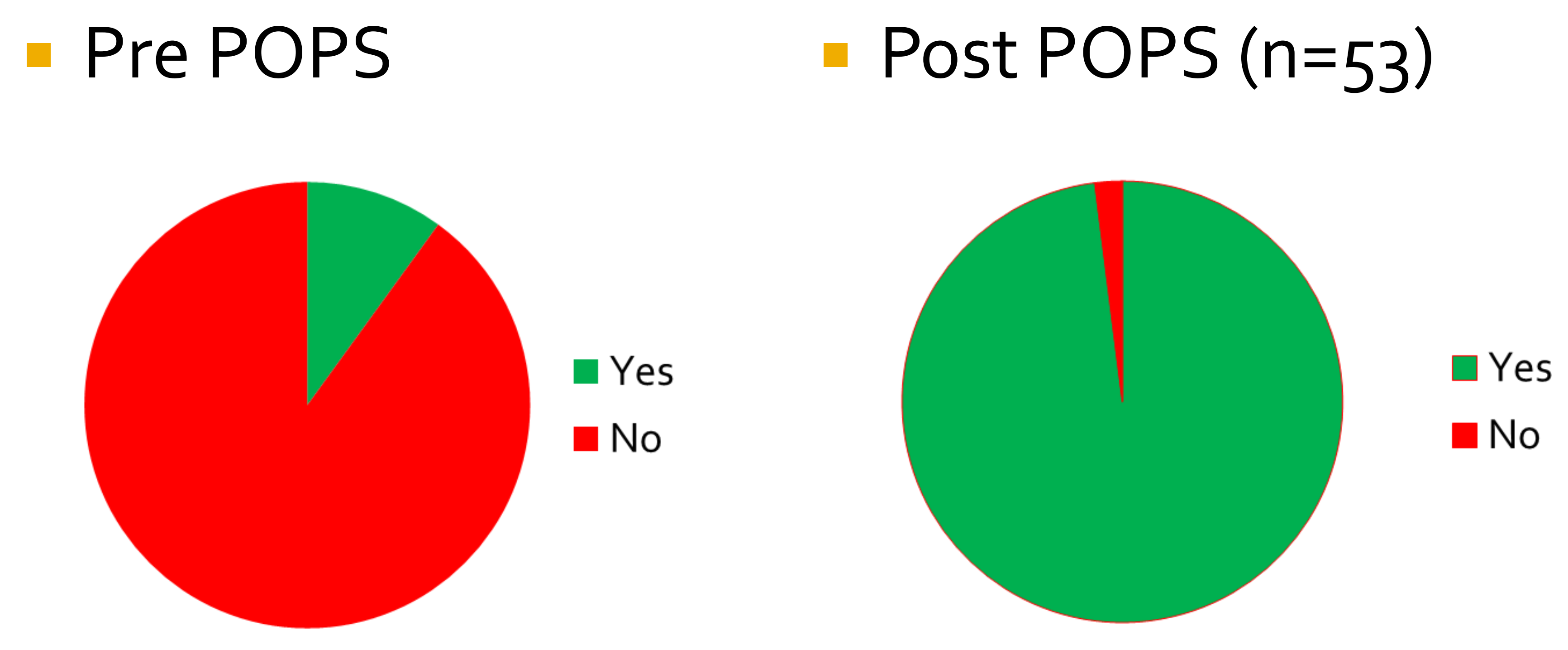
Medical complications



- The incidence of all common medical complications has increased when compared to pre-POPS data
- This most likely represents increased **detection** of medical complications

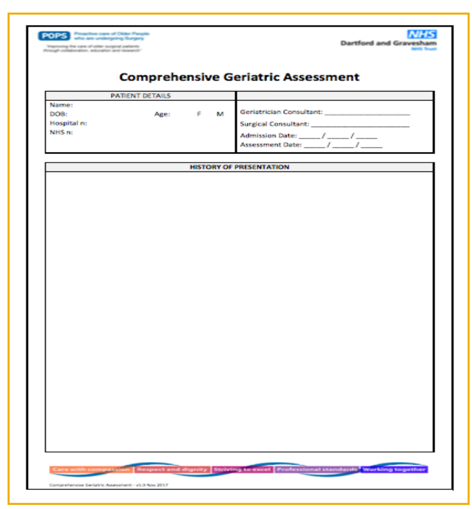
NELA: geriatrician review laparotomy patients > 70 years

- Pre POPS
- Post POPS (n=53)



Standardised pathways to improve clinical care

- A standardized CGA proforma
- Establishment of a working group in Delirium
- A Silver trauma pathway (for head injuries, non NOF injury)



POPS Proactive care of Older People who are undergoing Surgery

NHS Dartford and Gravesham NHS Trust

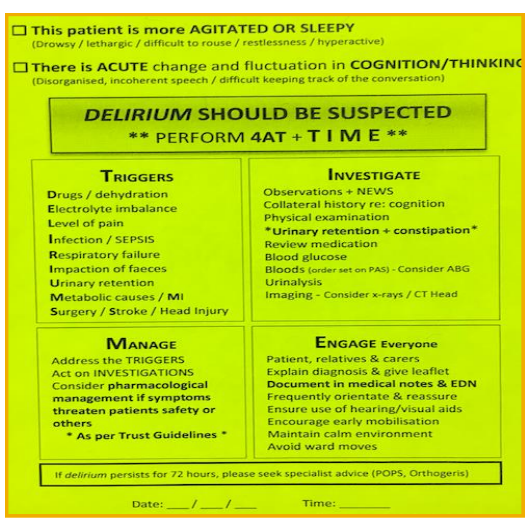
Comprehensive Geriatric Assessment

PATIENT DETAILS	
Name: DOB: Age: F M Hospital n: NHS n:	Geriatrician Consultant: ____ Surgical Consultant: ____ Admission Date: ___/___/___ Assessment Date: ___/___/___

HISTORY OF PRESENTATION

Care with compassion | Respect and dignity | Striving to excel | Professional standards | Working together

Comprehensive Geriatric Assessment - v1.0 Nov 2017



Colleague Feedback

- Staff agreed that POPS@DGT **improved the overall care of the older surgical patient, improved management of medical problems, improved discharge planning, and improved older patients' experience were reported by >80% of those surveyed**
- Improved interdisciplinary working with the introduction of MDMs
- Improved educational opportunities which facilitated better clinical care

- Least positive feedback came from surgical JDs, some reported an increased workload following introduction of the POPS service
- Those who remained less engaged expressed a **wish to see locally-generated data regarding service outcomes**

Patient Feedback

- A series of patient events have been held in order to engage our service-users in shaping the new service

- Improvements resulting from these events are numerous, and include coproducing documents such as patient information leaflets and maps that make clinic day easier and streamlining pathways

Our Patients' Opinions

"I think it's a brilliant service, I wish it would spread out further and further"

"I felt she was really listening, and as if I could ask her anything"

"I had a lovely appointment with POPS - it put my mind at rest"

"Someone at long last who's showing respect to us older folk, and not expecting us to be like a younger person"

"I just got the impression that she had an overview of what was going on with me"

"My concern was the anaesthetic would cause dementia. But she did all the tests, and reassured me"

Our successes

- Demonstrated successful translation of tertiary model to a DGH
- Progression at speed…..
- Co – production
- Shared learning – presentations, toolkit, publications
- Darzi fellow: Ruth De Las Cases
- Education
- Culture change – Trauma / POPS CNS post
- Ward MDMs for discharge planning
- **Data shows we ARE making a positive difference to patient care**

Our biggest challenges

- Busier than expected
- Small team
- Workforce dilemmas
- Outpatient service – referral pathway / criteria
- Cultural change:
  - ‘It’s fine in a teaching hospital but there is no evidence this approach works at DVH’
  - ‘All they do is increase our workload and it makes no difference to patient care, in fact, they increase length of stay’
  - And my personal favourite…. ‘We managed before you came….’

.....Thinking about our future

Improve recruitment

- Registrar training opportunities
- OOPE / registrar allocation
- Regional multidisciplinary study days

Expand the service

- Extension to Urology
- Increase Consultant number.

Develop CNS roles

- Further education
- Framework and pathway to ANP

Grow your own service tips....

- Adapt not adopt
- Data is power
- Attract attention
- Don’t be afraid to go to the top
- Creative financial and workforce solutions
- Relationships are key
- Learning communities (POPS SIG, NHS Elect)
- (Almost) everyone comes around in the end

Thank You

Measurement for Improvement

Matt Tite

In the next 30 minutes…

- Introduce our approach to measurement
- Tell you about the measurement offer
- Start our measurement journey
  - Aim statements
- Set some homework

POPS Measurement Journey

- Launch Event (Part 1: 08/06/21): Setting the Aim and understanding the scope using process mapping
- Launch Event (Part 2: 22/06/21): Driver diagram development session and the 7 steps to measurement
- Measurement Masterclass (Date In July): Measurement for Improvement knowledge, how and what to measure
- Your Measurement visit
- Mid Programme: Share your working data and the tools you are using for data collection
- Final Core Event: Your charts

YOU'RE THE ***ONLY ONE*** ON THE TEAM NOT TO REACH THAT ***HEIGHT!***

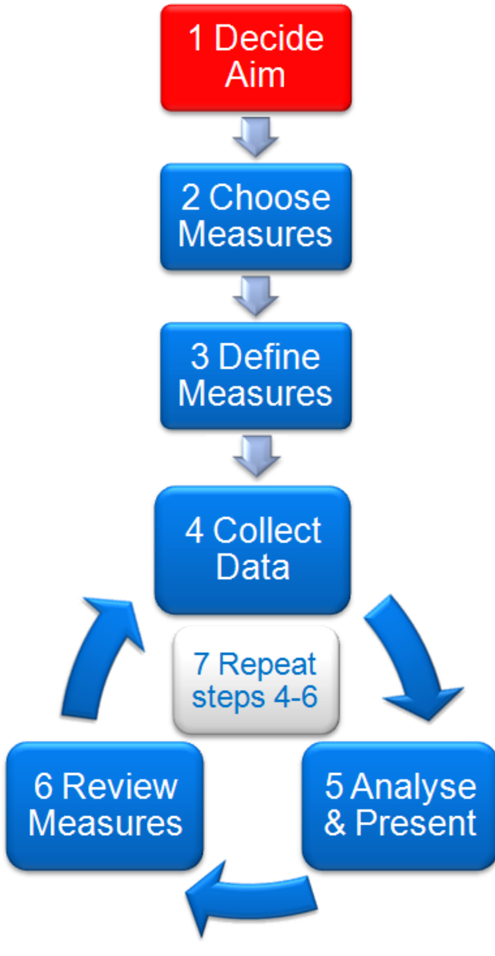
LET'S TRY A FEW MORE RUNS WITH A ***DIFFERENT GRIP*** AND SEE WHAT HAPPENS?

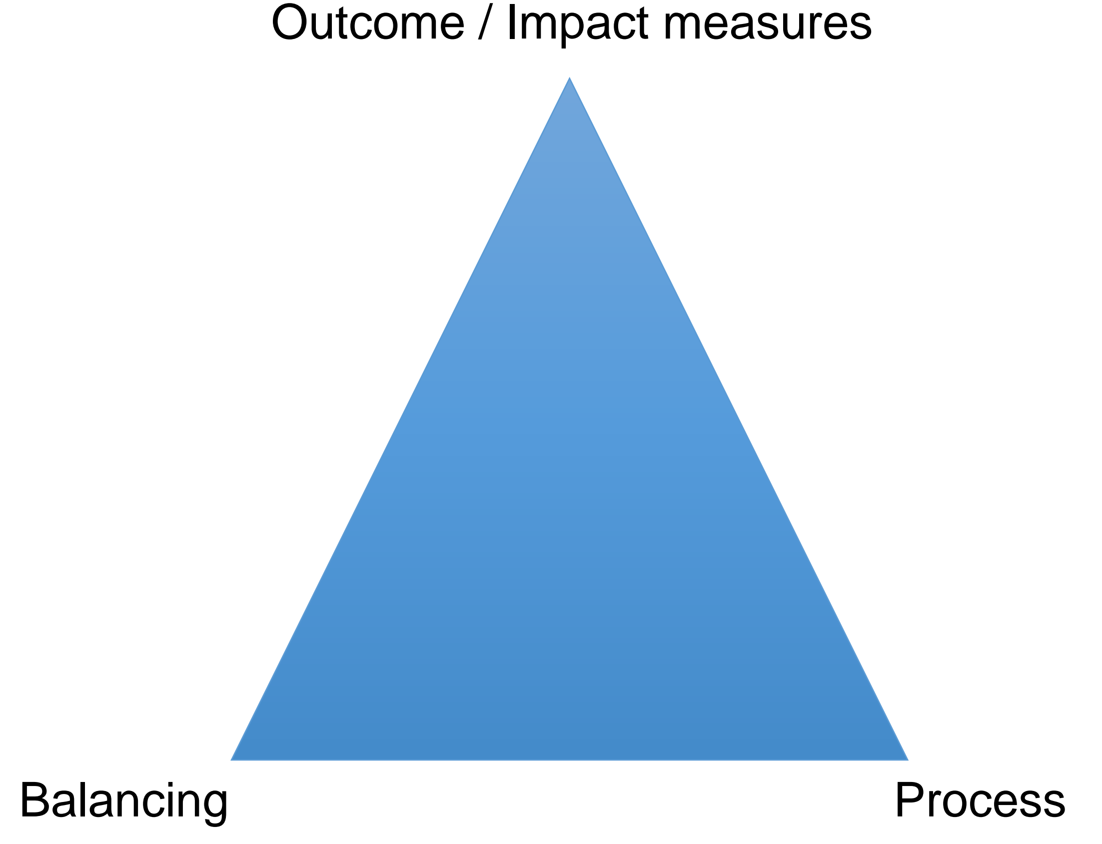
NOW JUST ***3000 MORE*** ATTEMPTS TO GO!

ANGLE OF POLE BEND

LAUNCH ANGLE

The 7 steps to measurement




Outcome / Impact measures
Balancing measures
Process measures

NHS
Elect

Outcome / Impact measures

Balancing measures

Process measures

Data / Graphs

Patient Perspective

Staff Perspective

Problems Found Per Person

How do you feel as you were delivering care to this patient

Emotional Map

I was kept well informed all along

Through A&E very quickly

I seem to have been well cared for

O.T's etc. came up with things I hadn't thought of

Problems with the light in the shower/toilet not working meaning that need to leave door open.

Worried, frightened, confused

Frightened

Apprehensive

Improvement Networks

What shall we measure?

Activity One : Where are you wanting to go?

For your POPS service, what would ‘Perfect’ look like?

- Open a blank email
- Write in your sentence
- Sent it to your project lead

Where are you wanting to go?

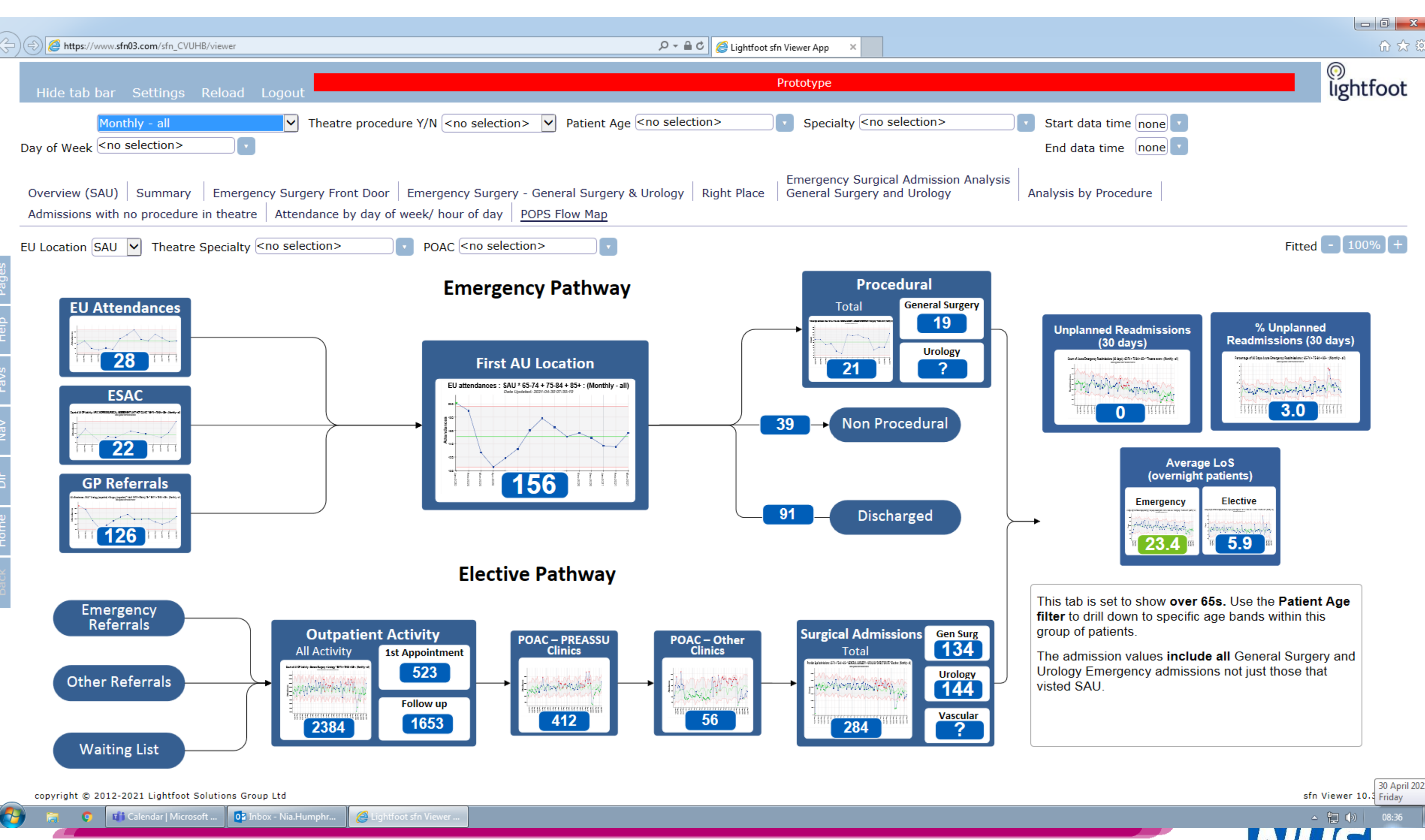
Homework

Work as a team – have you written the same things?

If so, see if you can create an aim statement

Bring your combined aim statement to driver diagram session (22nd June)

Our Pathway Map



NHS Elect

Improvement Networks

Homework

Can you create a functional map:

- Where do your patients come from
- What are the stages that they currently go through
- Has C19 changed the process?

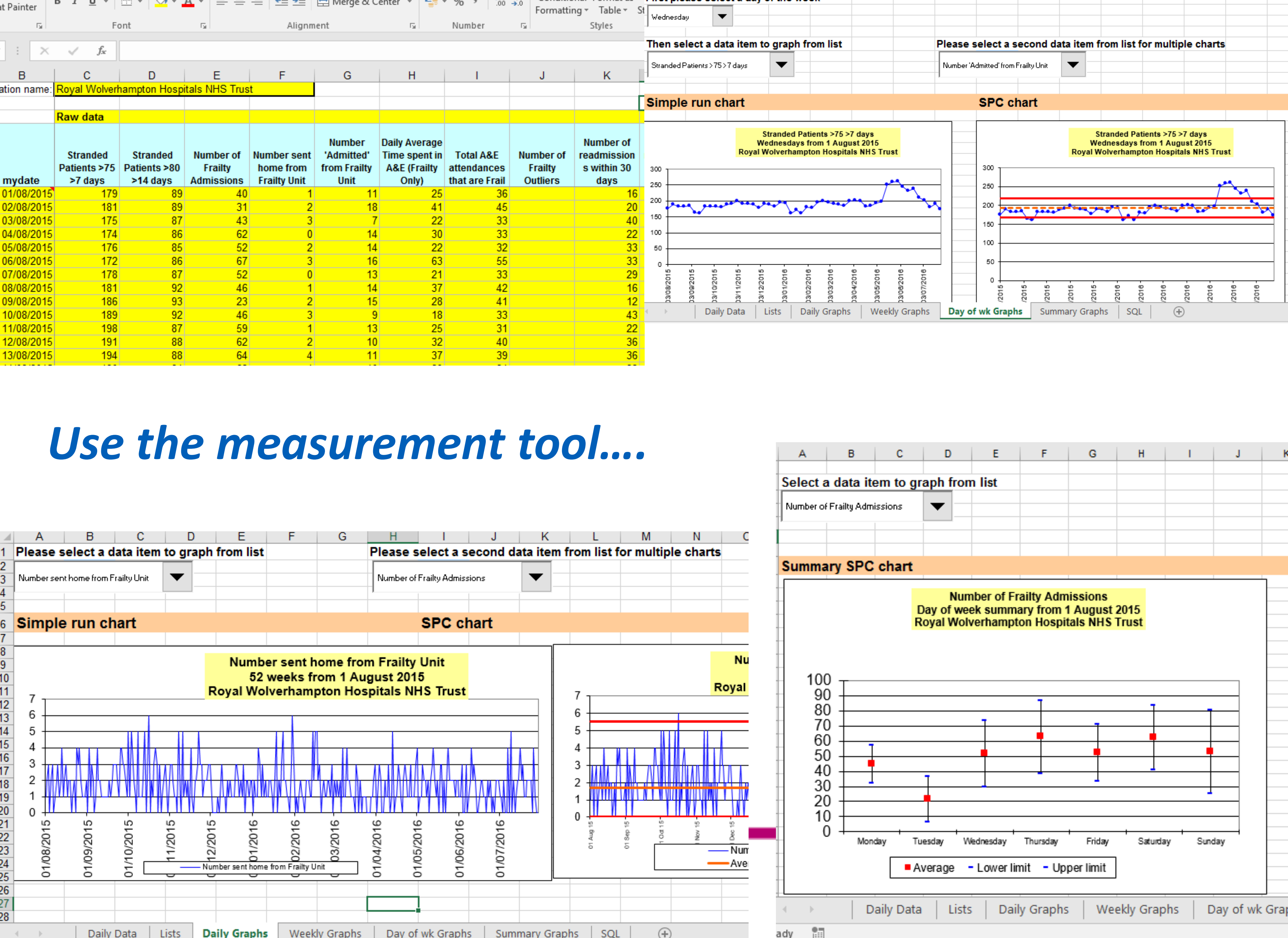
Bring your functional map to driver diagram session (22nd June)

Measurement and analysis support

- Measurement for Improvement Masterclass
- A measurement visit
- An interactive measurement guide
- Webinars
- Telephone support
- SPC tools

Five Measurement Challenges

1. Are you clear on your aim?
2. Have you selected the right measures to quantify the benefits?
3. Are you tracking the right patient groups - how do you identify these?
4. Can you map and quantify the flow of older patients through your system?
5. Will you be able to demonstrate the impact of implementing your improvements?



mydate	Stranded Patients >75 >7 days	Stranded Patients >80 >14 days	Number of Frailty Admissions	Number sent home from Frailty Unit	Number 'Admitted' from Frailty Unit	Daily Average Time spent in A&E (Frailty Only)	Total A&E attendances that are Frail	Number of Frailty Outliers	Number of readmissions within 30 days
01/08/2015	179	89	40	1	11	25	36		16
02/08/2015	181	89	31	2	18	41	45		20
03/08/2015	175	87	43	3	7	22	33		40
04/08/2015	174	86	62	0	14	30	33		22
05/08/2015	176	85	52	2	14	22	32		33
06/08/2015	172	86	67	3	16	63	55		33
07/08/2015	178	87	52	0	13	21	33		29
08/08/2015	181	92	46	1	14	37	42		16
09/08/2015	186	93	23	2	15	28	41		12
10/08/2015	189	92	46	3	9	18	33		43
11/08/2015	198	87	59	1	13	25	31		22
12/08/2015	191	88	62	2	10	32	40		36
13/08/2015	194	88	64	4	11	37	39		36

Examples of SPC analysis (East Kent)

LOS (days)

UCL=68.79

X̄=22.56

Patient Number

Moving Range

UCL=56.80

MR̄=17.38

LCL=0

Observation

Examples of SPC analysis (East Kent)

Length of stay for emergency vascular patients seen by POPS

LOS (days)

100, 75, 50, 25, 0

UCL=44.5

$\bar{X}$=14.7

LCL=-15.1

1, 19, 37, 55, 73, 91, 109, 127, 145, 163

Patient Number

Moving Range

80, 60, 40, 20, 0

UCL=36.64

$\overline{MR}$=11.21

LCL=0

1, 19, 37, 55, 73, 91, 109, 127, 145, 163

Patient Number

Frailty Opportunity Identifier

Frailty Dashboard | National | About

NHS Elect Acute Frailty Network **Frailty Opportunity Identifier**

Arden&GEM

Trust Name	Hospital	CCG Name	Specialty	AGE Range	Frailty Type	Data Item 1	Data Item 2
Cambridge Universi...	(All)	(All)	(All)	(All)	(All)	ALL	ALL

Data Item 1 options:
- ALL
- Mortality
- Stranded at 7 days
- Stranded at 21 days
- Transfers to other hospitals
- Usual place of residence
- Re-admitted within 30 days
- Re-admitted within 7 days
- Re-attended A&E within 30 days
- Re-attended A&E within 7 days
- ED Attender
- ED Admit
- ED Re-attender
- Length of Stay 0
- Length of Stay 1
- Length of Stay 0-3

Admitted Patients ALL

Number of Patients: 700, 600, 500, 400, 300, 200, 100, 0

17-Dec-18, 14-Jan-19, 11-Feb-19, 11-Mar-19, 08-Apr-19, 06-May-19, 03-Jun-19, 01-Jul-19, 29-Jul-19, 26-Aug-19, 23-Sep-19, 21-Oct-19, 18-Nov-19, 16-Dec-19, 13-Jan-20, 10-Feb-20, 09-Mar-20, 06-Apr-20, 04-May-20, 01-Jun-20, 29-Jun-20, 27-Jul-20, 24-Aug-20, 21-Sep-20, 19-Oct-20, 16-Nov-20, 14-Dec-20, 11-Jan-21

How does the selected Trust compare to other Tru...

60K, 40K, 20K · 80.00% · 100, 50%, 0%

RM1: Nor.., RGT: Cam.., RWH: Eas.., RC9: Bedf.., RGP: Jam.., RDD: Basi.., RQ8: Mid.., RC1: Bedf.., RY3: Norf.., NQ108: Cl.., NQ106: F.., NVC19: Ri.., NPG16: S.., NT317: S.., NYW20: A.., NQA20: B..

Spread of the Specialties within the Provider / Sit...

20K, 10K, 0K · 80.00% · 100, 50%, 0%

300, 100, 180, 303, 302, 301, 305, 800, 320, 810, 410, 160, 190, 502, 145, 420, 560, 830, 192, 831, 421, 824

ALL vs ALL

Data Item 1 · Data Item 2

To get your own login..

https://apps.model.nhs.uk/register

https://ncdr.england.nhs.uk/Account

www.youtube.com

Using the Online Frailty Opportunity Identifier Tool

Wants and Offers

Lisa Godfrey

Want's and offer's

- Think about what you 'want' to know about POPs and the knowledge you have to 'offer' about developing POPs services
- Copy the Jamboard link from the chat function into your web browser:
  - if your surname starts with A-L please use Jamboard One
  - if your surname starts with M-Z please use Jamboard Two
- Write what you 'want' to know on the WANT board on a **pink** sticky note
- On the OFFERS board write down what you can 'offer' on a **green** sticky note – *make sure you also include your name, organisation and email address as we may ask you to share your offer in the next session on 22 June.*

World café on Tuesday 22 June

Next steps

What's next on your POPS Improvement Journey?

Simon Griffiths

Next steps

As a team think about the following:

- Ensure you've identified core members of your team e.g. your Exec Sponsor, Analyst, Project Manager etc.
- Access the POPS website www.popsolderpeople.org and let us know what content would be useful
- Access the POPS Toolkit at the website
- Get the date for your virtual site visit in your diary
- Then, work with us to schedule the date for your virtual measurement site visit.
- Register for the next session on 22 June – 10am to 12:30pm, and the next Measurement session in July (invites to follow).

3, 2, 1

As a team think about the following:

3 things I am going to make sure happen, to embed or further develop in our POPs service plans

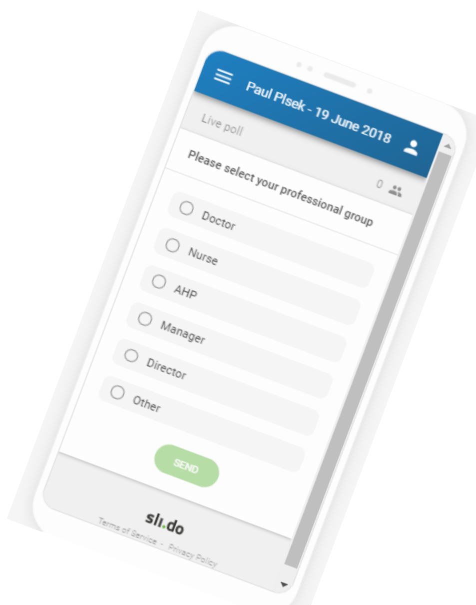
2 people I need to speak to about our plans for POPs

1 thing I am most excited about in our POPs service plans

Summary and closing remarks

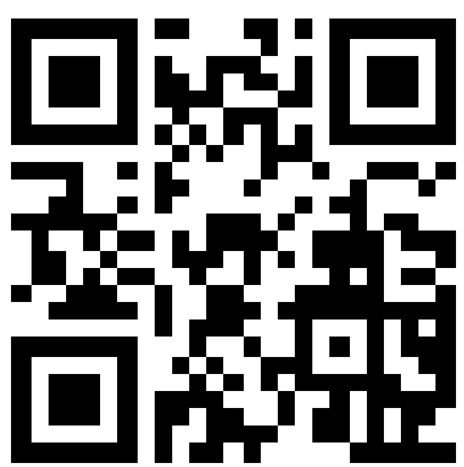
Dr Jugdeep Dhesi

sli.do



Open a browser on any laptop, tablet or smartphone

- Go to **slido.com** or scan the QR code below
- Enter the event code **#POPSLaunch1**
- Use the polls to give us feedback about the day



Think about the support you want/need and let the programme team know at

networksinfo@nhselect.org.uk