NHS
Surgical Ambulatory Emergency Care Network

Surgical Ambulatory Emergency Care

Maximising Surgical AEC

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H
A&E


Outpatients

Here is Edward Bear, coming downstairs now,

bump,
bump,
bump,

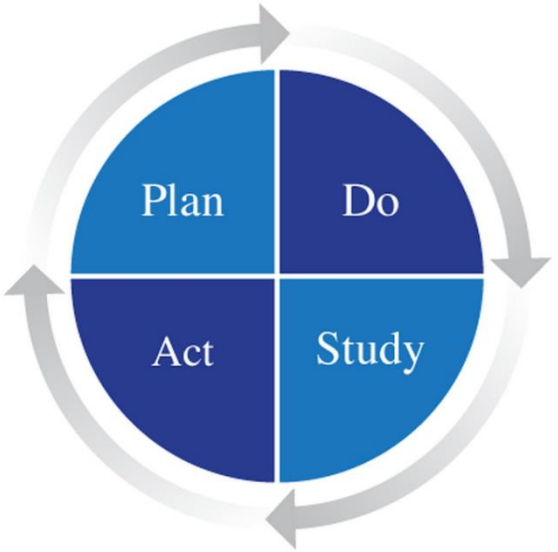
on the back of his head, behind Christopher Robin. It is, as far as he knows, the only way of coming downstairs, but sometimes he feels that there really is another way, if only he could stop bumping for a moment and think of it.

Process

Who are we going to treat?

What do we want to achieve?

How are we going to do it?



- Patients and selection
- Hospital infrastructure
- Personnel/staff
- Process governance and safety nets
- Measurement

ESAC Aim May 2013

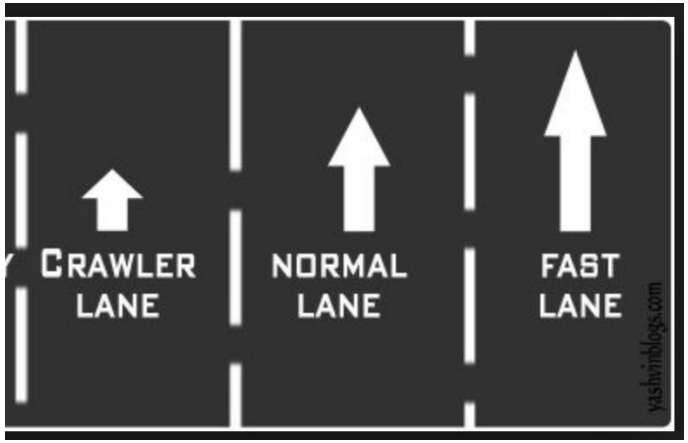
Increase in ambulatory care in emergency surgery

BUT also……

- Rapid definitive treatment
- Accelerated discharges
- Reduced readmissions/clinical need only
- Improved patient experience
- Year round robust service

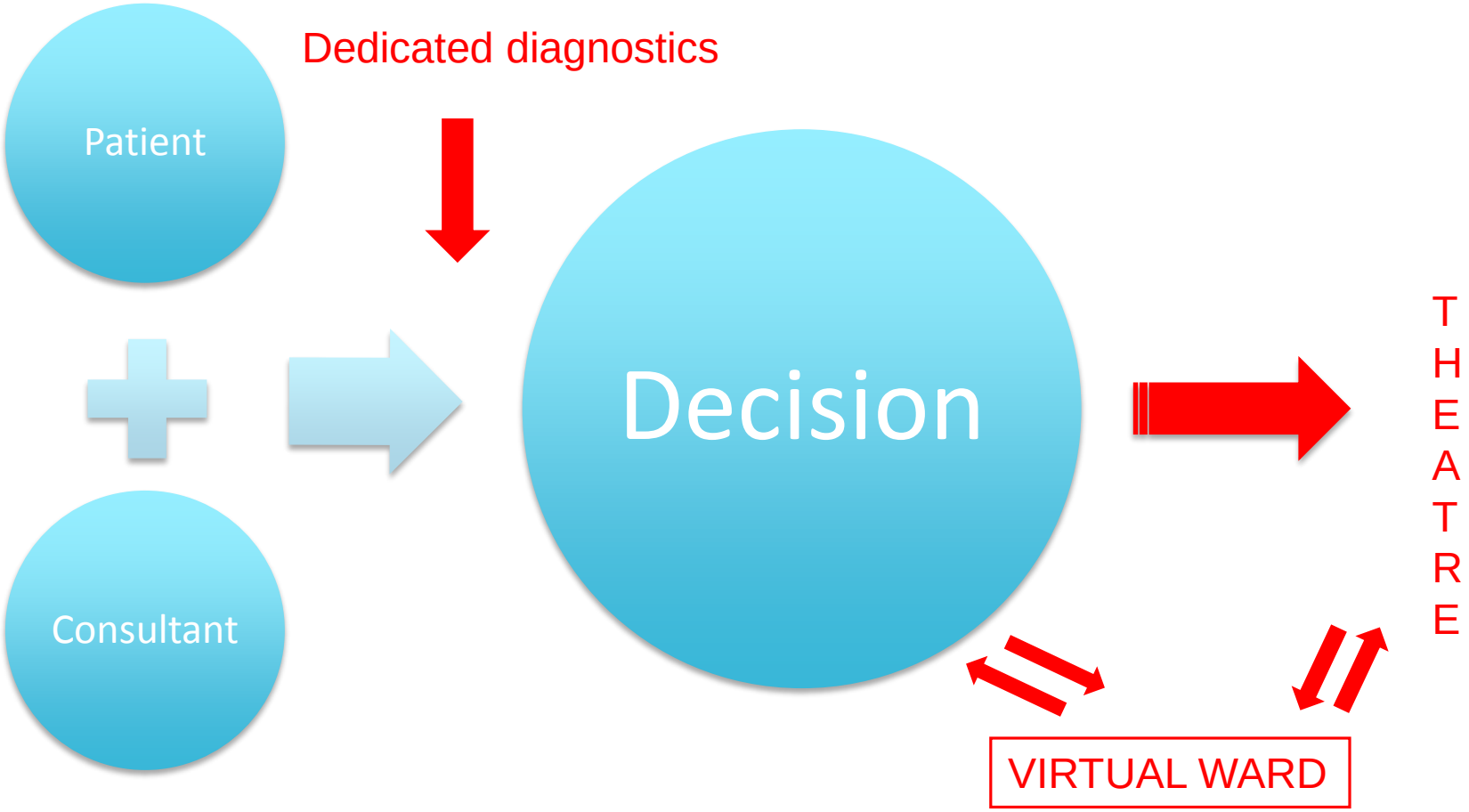
AVOID

- Unnecessary waits and delays
- Poor patient experience



"Time and efficiency is crucial for those that need life-saving surgery"

HOW?


Dedicated diagnostics
Patient
Consultant
Decision
THEATRE
VIRTUAL WARD

WHO? Patients

- Adults> 16 years
- Right upper quadrant pain
- Right iliac fossa pain
- Stable PR bleed
- Painful jaundice
- Peri-anal and tors
- Painful non-
- Post-o
- F

hernias
ns/wound problems
orted discharges

Now **anything** that can safely wait until the next morning

WHO? Staff

- Consultant Surgeon led and delivered
- Senior nurse support
- Ultrasonographer
- Administrative and secretarial input
- Theatre staff and assistant
- Anaesthetist

WHERE?

- Dedicated protected area
- Trolley based
- Co-located with SAU
- Ultrasound facilities
- Easy access to theatre

Measurement

Which patients?
Time taken?
Diagnoses?
Outcomes?
Scans?
Bloods?
Referring practitioner?
When referred?
Adverse events?
Patient experience?
Learning?

PLUS- impacts on in-patients.
Balancing measures.

Regular meetings
Small tests of change

Week before

- Non-elective admission £1600
- Out-patient appointment £120
- What to do?

Off we went!

Initial Challenges

- Different way of working
- GPs perplexed, process evolved
- Little notice for theatre
- Radiology
- Paperwork
- Recording data
- Day surgery mentality
- Risk!

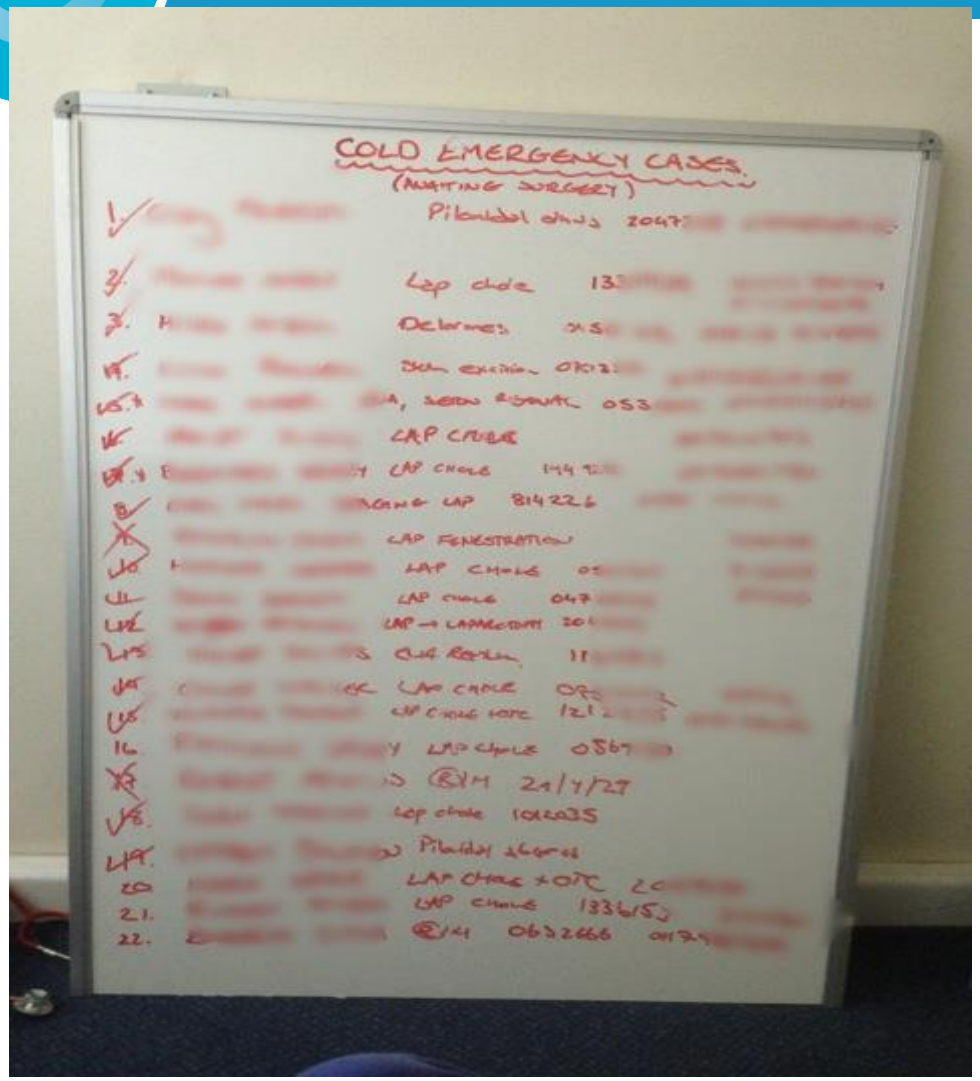
“Go Live” May 2013

- Approximately 120 patients seen per month initially

Outcome	Percentage (%)
Home same day	48
Home same day after local procedure/dressings	34
Operation same day	10
Admit as normal	5

- All outcomes sent to Chief Operating Officer on a monthly basis and weekly input face-to-face.

ESAC Theatre

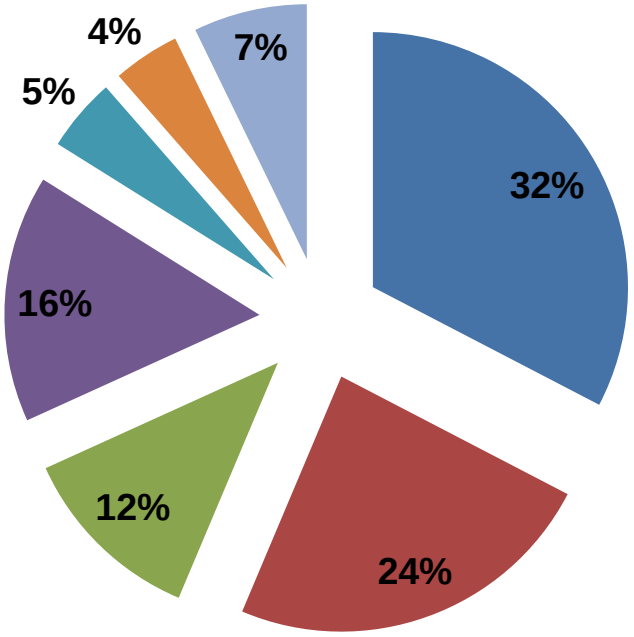


Lists populated by:

- ESAC patients
- Appropriate NCEPOD patients
- Red Board patients

Finalised 1130am →
1330hrs start

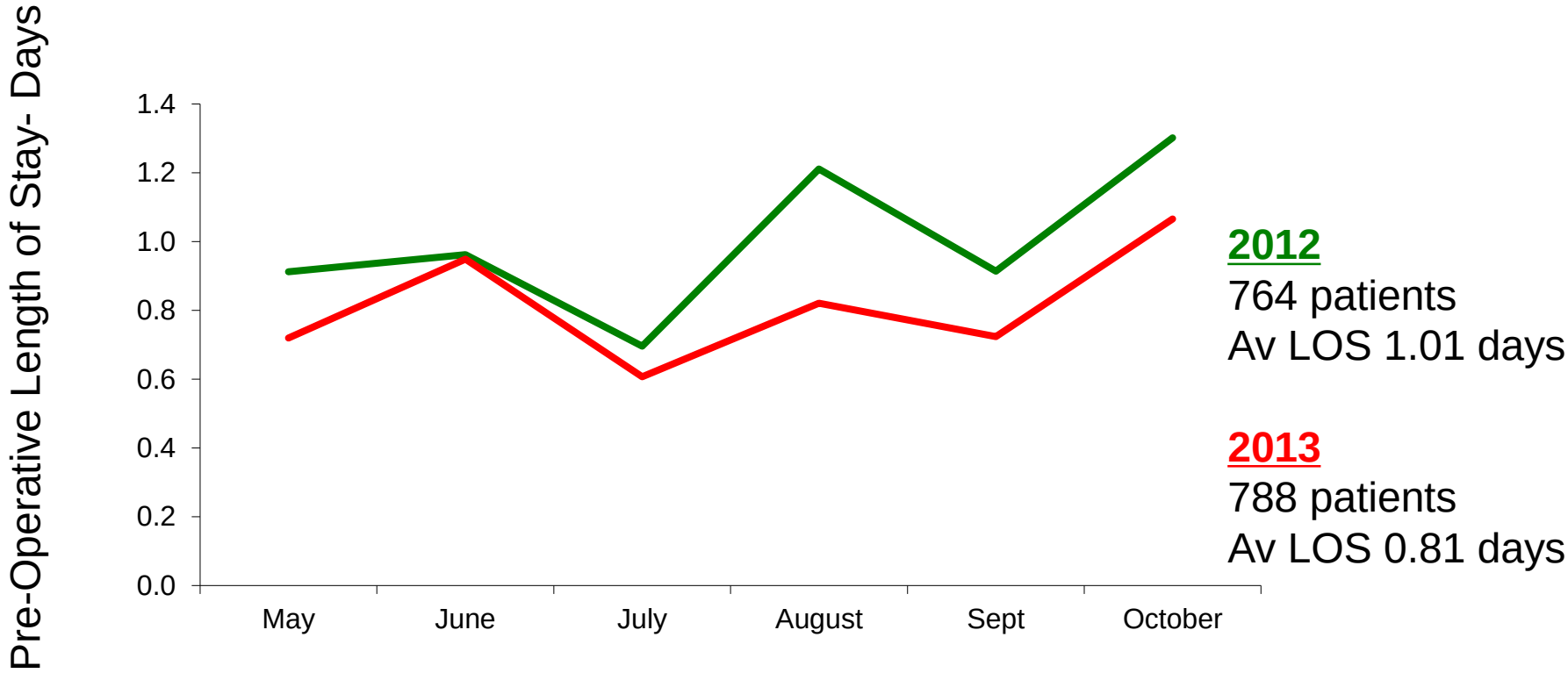
ESAC Theatre Utilisation



- Rectal EUA/Abscess/Fistula/Botox
- Laparoscopic cholecystectomy
- Hernias- various
- Laparoscopic appendicectomy & diagnostic laparoscopy
- Excision biopsy/LN biopsy
- Laparoscopic stoma formation
- Other

450 cases/year approx

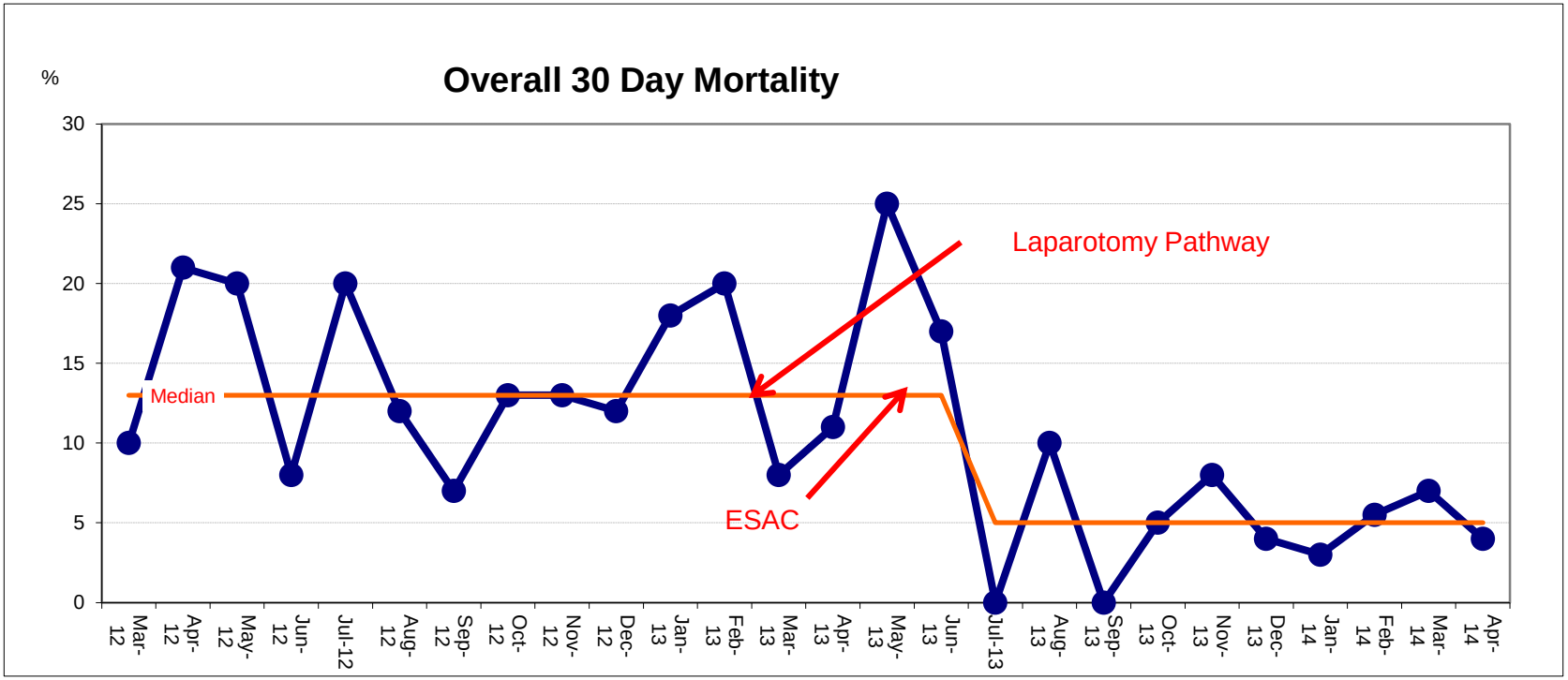
Pre-Operative LOS In-Patients



Bed savings per month

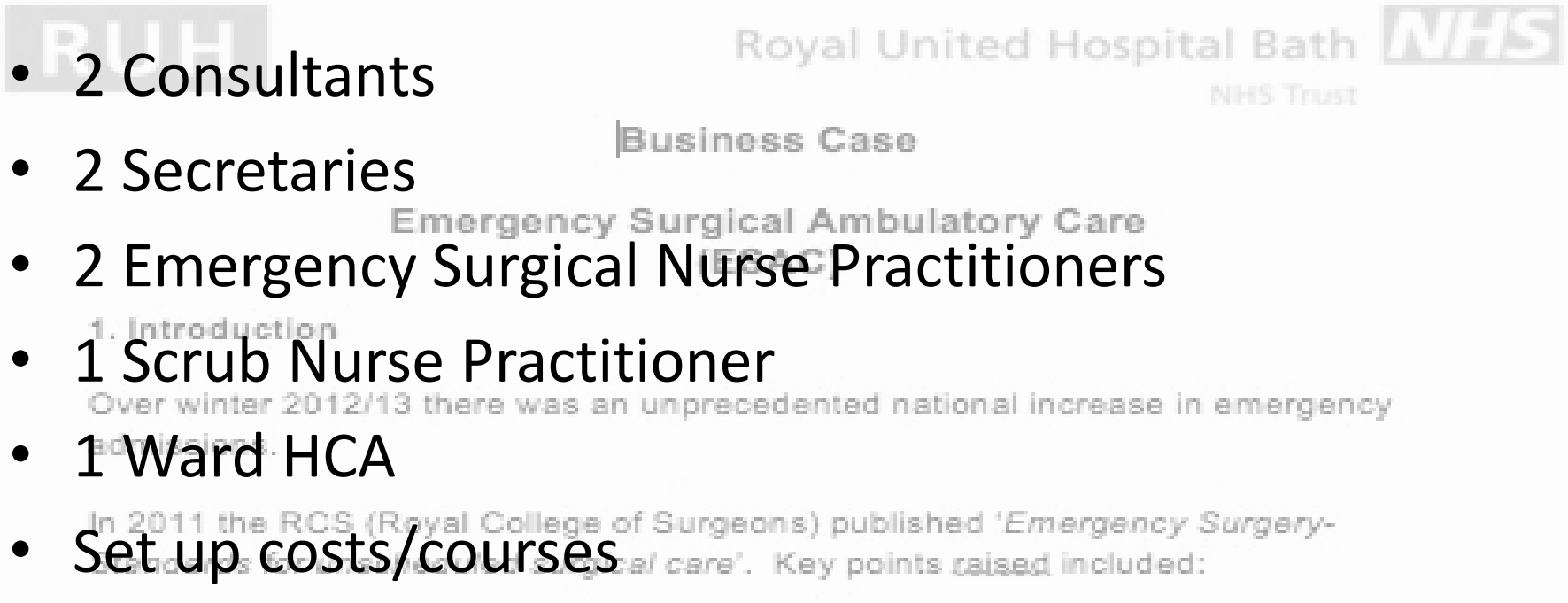
- 85-90 bed stays saved in ambulant patients
- Additional 30 bed stays saved in IN-PATIENTS awaiting urgent surgery

Emergency Laparotomy Mortality



£441K for ESAC

- 2 Consultants
- 2 Secretaries
- 2 Emergency Surgical Nurse Practitioners
- 1 Scrub Nurse Practitioner
- 1 Ward HCA
- Set up costs/courses



A bit about the money

Commissioned November 2013!

- ESAC= £765 plus surgery (elective day-case procedure tariff)

Embed

Infrastructure and personnel

- Runs every weekday 8am-8pm
- Trolley based assessment area
- Consultant-led & delivered (separate from on-call Consultant)
- Emergency Surgical Nurse Practitioners
- Scrub Practitioner
- Ultrasonographer
- CT/MRI slots
- Daily daycase lists (as well as 24/7 NCEPOD)
- Virtual ward
- Consultant letter generated immediately to GP

Promotion to GPs, ED and Teams

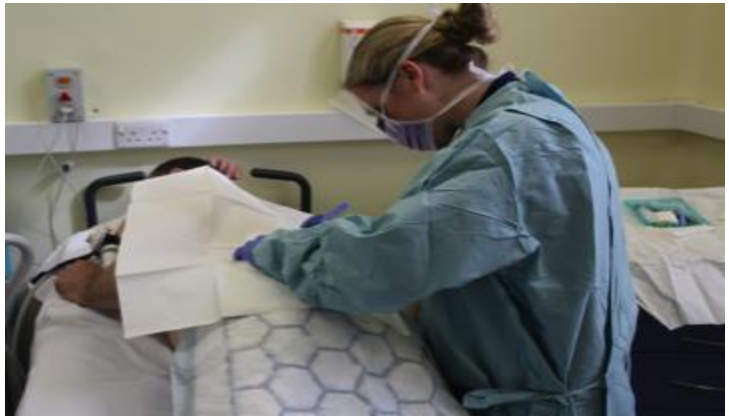
- Referral guidelines
- Appointment time
- Fasting guidelines
- Telephone numbers
- “Safety netting”
- What to expect

No protocols!

Dedicated radiology and theatres

- It’s all about flow
- 62% have ultrasound, 8% CT or MR
- 12% same day surgery
- 15% home awaiting urgent surgery

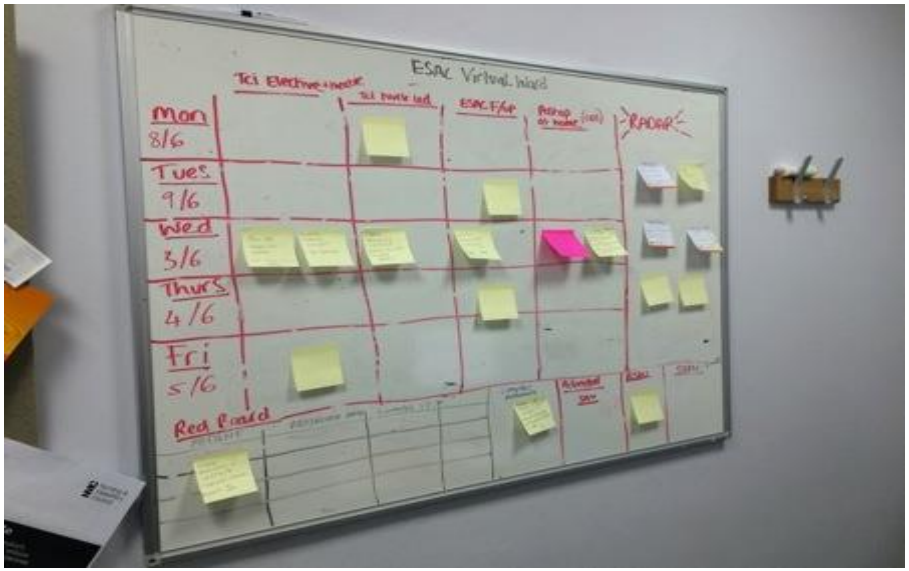
Emergency Surgical Nurse Practitioners



- Abscesses
- Nurse led clinics
- Early supported discharges
- Telephone contact
- Virtual ward
- IV antibiotics, drain removal, VAC change
- Post-op discharge
- Data collection, audit, QI programmes, education

Virtual Ward- Patient Categories

- Awaiting ESAC review
- Planned telephone follow up
- Planned review
- Awaiting procedure/operation
- Awaiting urgent result
- To be aware of
- Some early supported discharges



All patients have direct phone number to ESNPs and on call team

Patient follow up feedback

"Thank you so much for thinking of me and calling"

"Thank you so much for your after care and showing concern"

"I felt very reassured after your call last week"

"It's so good to have a number to call"

"excellent service to be seen and sent home the same day, I have nothing but praise for you

"Thank you very much for your call"

"Every single person I have met has been absolutely fantastic, brilliant service, very impressed"

"Thank you for the follow up, it's much appreciated"

Theatre Coordinator

- Receives referrals
- Discusses with Biliary Surgeon
- Liaises with patient
- Maintains “virtual ward”
- Keeps Lap Chole database
- First Assistant
- Education

Medical Secretaries/Admin

- New role
- Clinic booking
- Notes retrieval
- Typing letters- within 48 hours
- Chase/action results

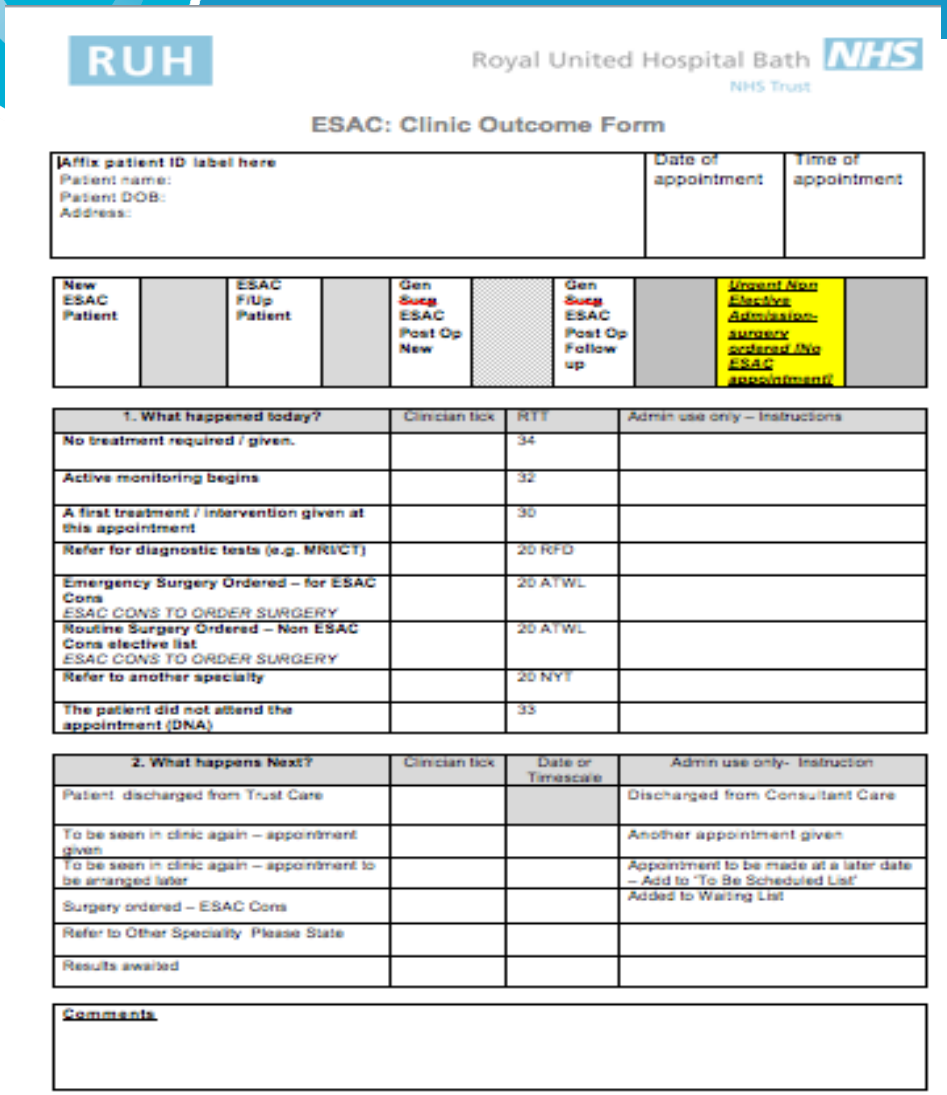
Mornings- clinical area

Afternoons- office based

Consultant Job Plans

- Robust daily service
- Annualised job plans calculated over 42 weeks
- 502 DCC/annum to deliver ESAC
- Remainder on call, ward round, SPA and ELECTIVE activity
- Happy Consultants!

Tariff Complexities



RUH

Royal United Hospital Bath NHS

NHS Trust

ESAC: Clinic Outcome Form

Affix patient ID label here Patient name: Patient DOB: Address:	Date of appointment	Time of appointment

New ESAC Patient		ESAC F/Up Patient		Gen ~~Surg~~ ESAC Post Op New		Gen ~~Surg~~ ESAC Post Op Follow up		~~Urgent Non Elective Admission- surgery ordered (No ESAC appointment)~~	

1. What happened today?	Clinician tick	RTT	Admin use only – Instructions
No treatment required / given.		34	
Active monitoring begins		32	
A first treatment / intervention given at this appointment		30	
Refer for diagnostic tests (e.g. MRI/CT)		20 RFD	
Emergency Surgery Ordered – for ESAC Cons *ESAC CONS TO ORDER SURGERY*		20 ATWL	
Routine Surgery Ordered – Non ESAC Cons elective list *ESAC CONS TO ORDER SURGERY*		20 ATWL	
Refer to another specialty		20 NYT	
The patient did not attend the appointment (DNA)		33	

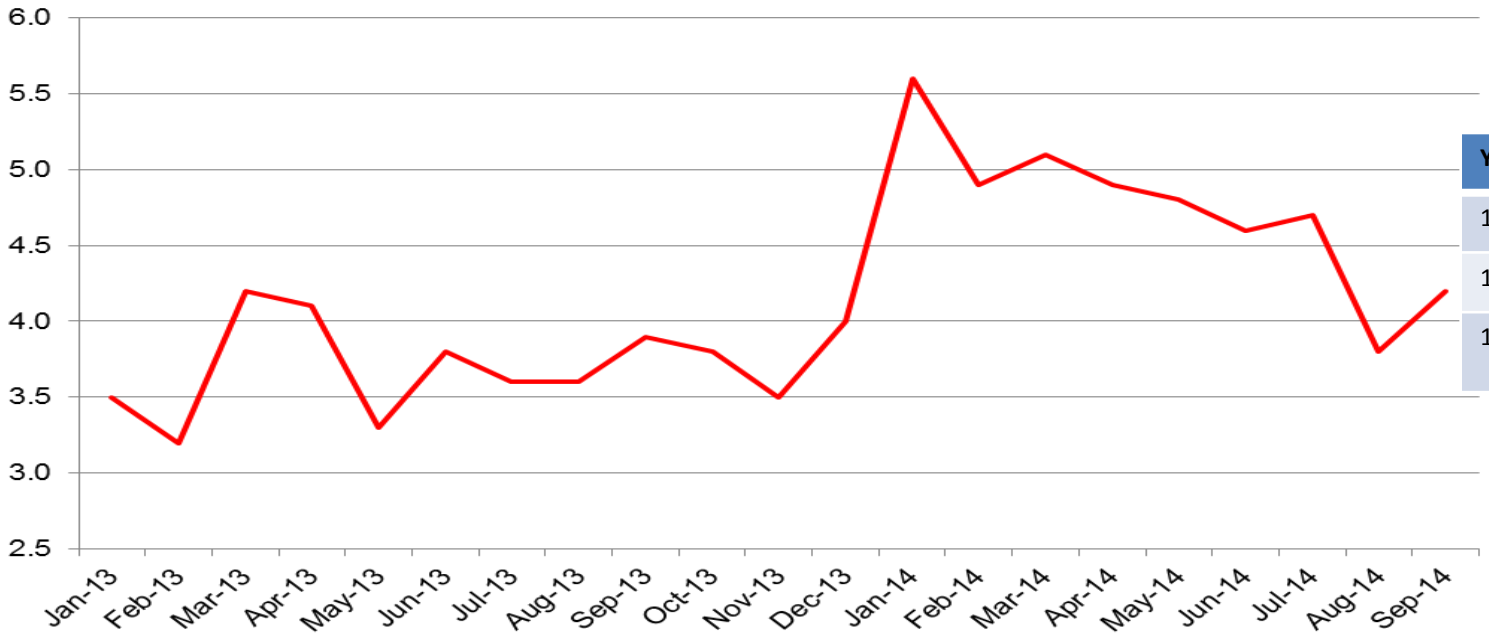
2. What happens Next?	Clinician tick	Date or Timescale	Admin use only- Instruction
Patient discharged from Trust Care			Discharged from Consultant Care
To be seen in clinic again – appointment given			Another appointment given
To be seen in clinic again – appointment to be arranged later			Appointment to be made at a later date – Add to 'To Be Scheduled List'
Surgery ordered – ESAC Cons			Added to Waiting List
Refer to Other Speciality Please State			
Results awaited			

Comments

- New ESAC patient
- ESAC follow up patient
- Gen Surg follow up patient
- Gen Surg ESAC follow up
- Admit

Length of Stay

Average LOS (days)- All Non-Elective General Surgery Patients



Year	LOS(days)
12/13	4.1
13/14	4.1
14/15 (YTD)	4.5

An average day picked at random….

Patient	Activity	Diagnosis	Outcome
1	I&D - ESNPs	Abscess	Home
2	Bloods, TVUS, urine	Ovarian cyst accident	Gynae
3	Bloods, biliary US	Biliary colic	Home, elective list
4	Bloods, US, CT	Contained diverticular perforation	IV antibiotics, virtual ward, ESAC 24 hrs
5	Bloods, biliary US	Acute cholecystitis	Lap chole, home
6	Bloods, urine	NSAP	Home, telephone FU
7	Bloods, urine, TVUS	Appendicitis	Laparoscopy, home

Mrs H

- Appointment 9am
- Bloods and obs 910am
- Consultant review 920am
- TV and Abdo US 940am
- CT Scan 1110 am
- GI Radiologist Report 1145am
- Microbiology advice midday
- Home 1230pm

VIRTUAL WARD Daily review➔ nurse led review➔ telephone follow up ➔to be aware of ➔awaiting surgery➔red board➔day case lap appendix on ESAC theatre list➔virtual ward

Maximize (without driving unnecessary use)

Outcomes May 2013-present

- >7000 patients, 25-28% of take referrals
- 92% managed on fully ambulant basis
- 160 bed stays saved per month (2015-16)
- No adverse events reported in patients managed on ambulant basis
- Reduced pre-op LOS in traditionally managed “take” patients- 30 bed stays/month.
- 98% of patients highly likely to recommend service to friends and family

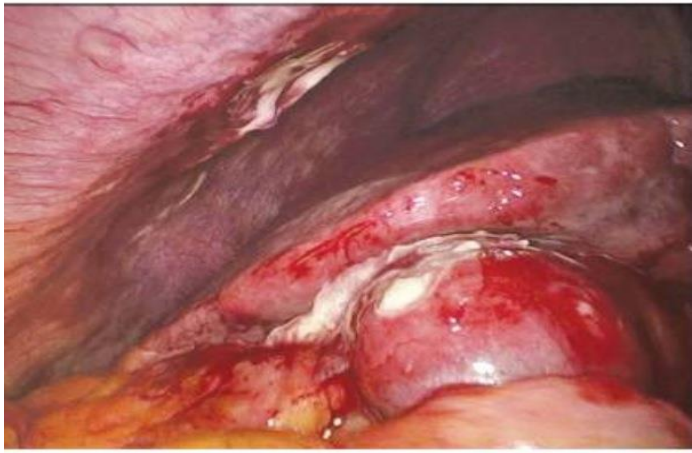
Rectal Bleeds

Probably limited role for ESAC- admit or virtual ward with paper triage for appropriate follow up:

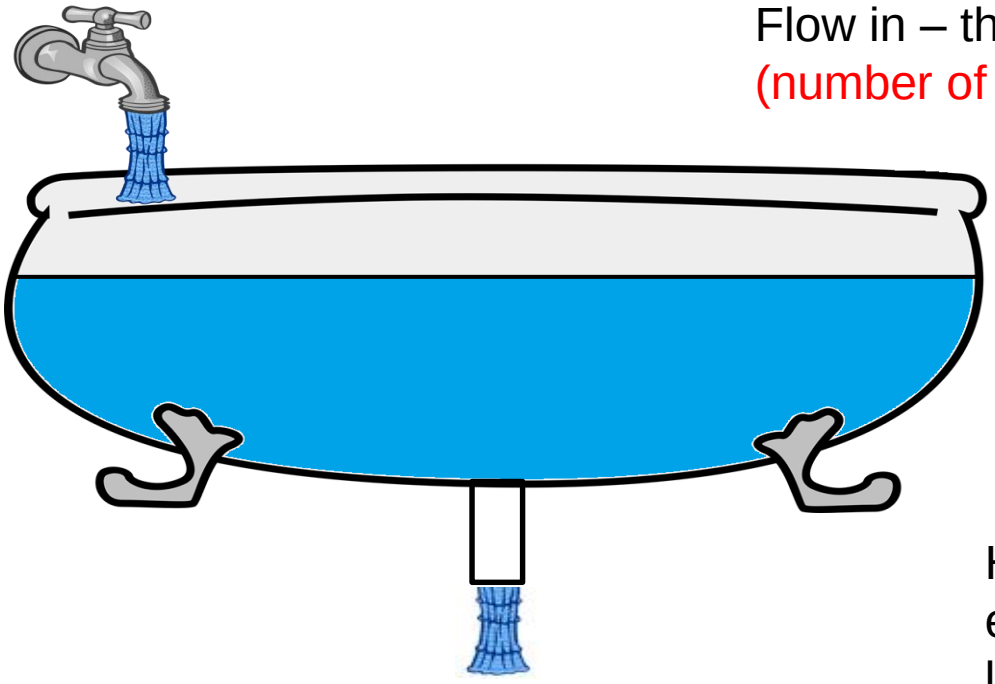
- Hb> 12g/dL males, >11g/dL females
- No anticoagulants other than aspirin
- Systolic BP >110mmHg
- ASA= or <II
- Telephone at home
- Lives with another adult

Acute biliary patients

- Average 25 patients/week referred acute biliary problems
- 28% of re-admissions biliary
- ESAC supported “Acute Biliary Pathway” since January 2016
- Gallstone pancreatitis, acute cholecystitis, crescendo biliary colic
- 236 urgent LCs since January 2016



Measuring system dynamics



Flow in – the **DEMAND** for water
(number of patients needing urgent lap chole)

Amount of water in the bath – the **WORK IN PROGRESS**
(current waiting list**)**

How long from water entering the bath until leaving through the drain
- the **LEAD** time
(AC <7 days, GSP<14 days!!)

Flow out – the **SUPPLY** of water to the next system
(number of operating slots)

Royal United Hospitals Bath NHS
NHS Foundation Trust

Acute Cholecystitis (K800/K810)

- January 2015 to Jan 2017
- 316 patients
- Lap chole in 183 patients (57%)

Pre-October 2015

Average wait= 103 days

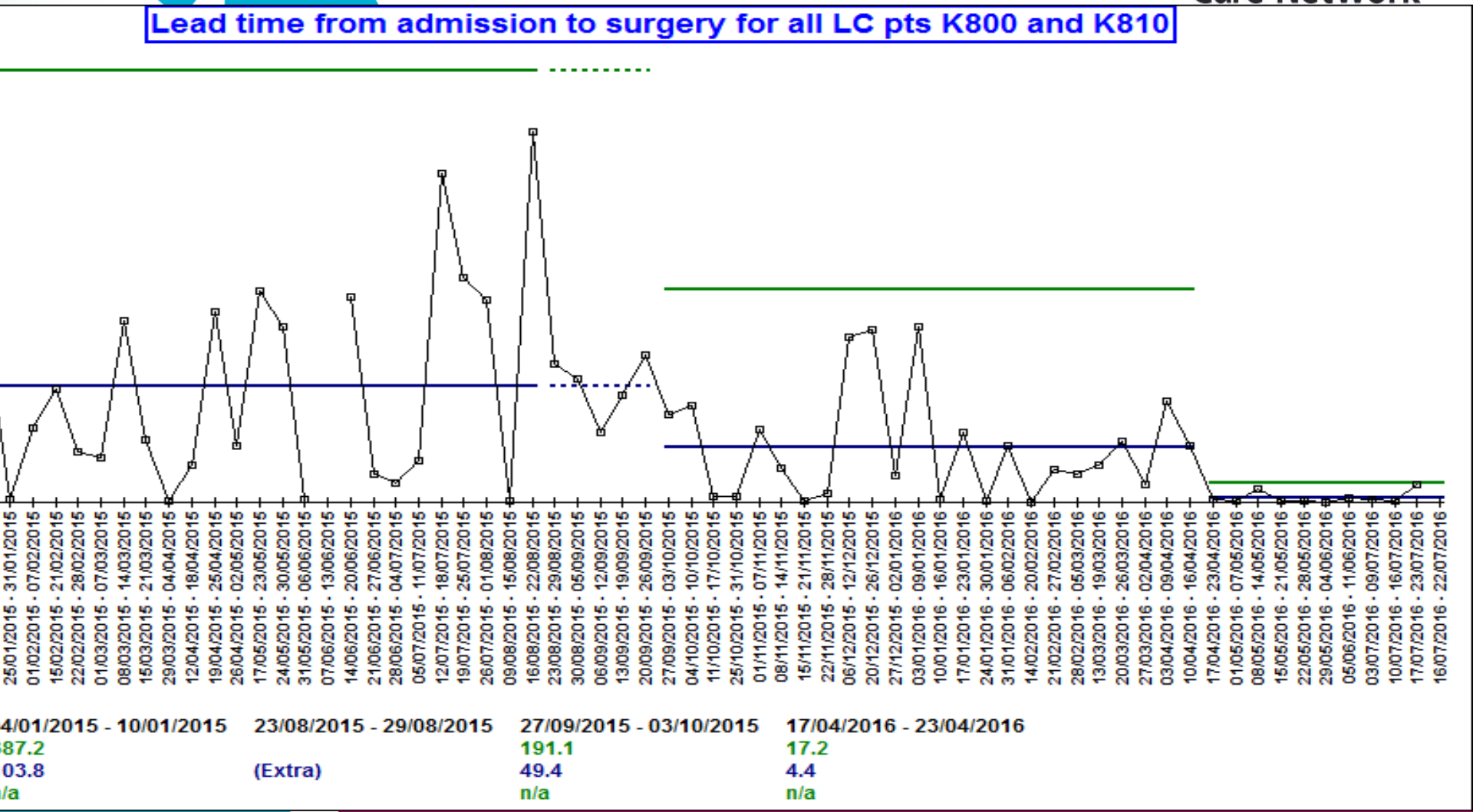
Percentage done within 7 days= 24%

October 2015-Jan 2017

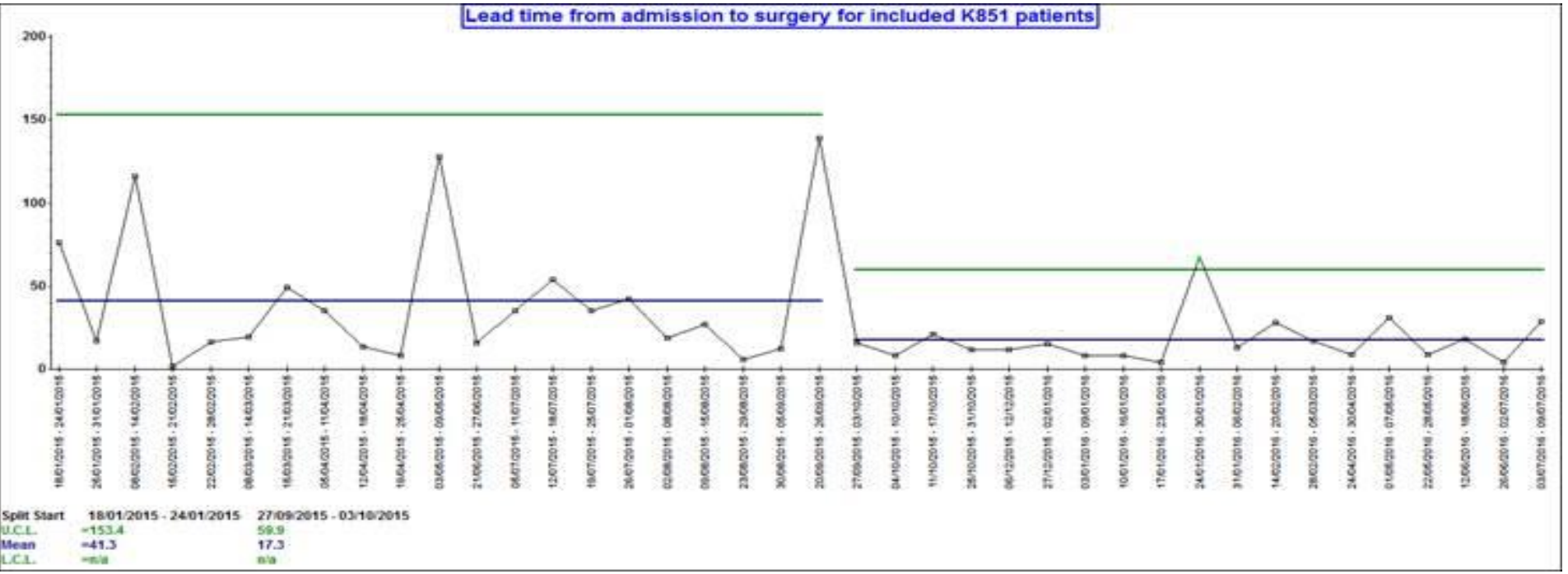
Average wait= 11.7 days

Percentage done within 7 days=76%

Time to LC after Diagnosis of Acute Cholecystitis (Days)

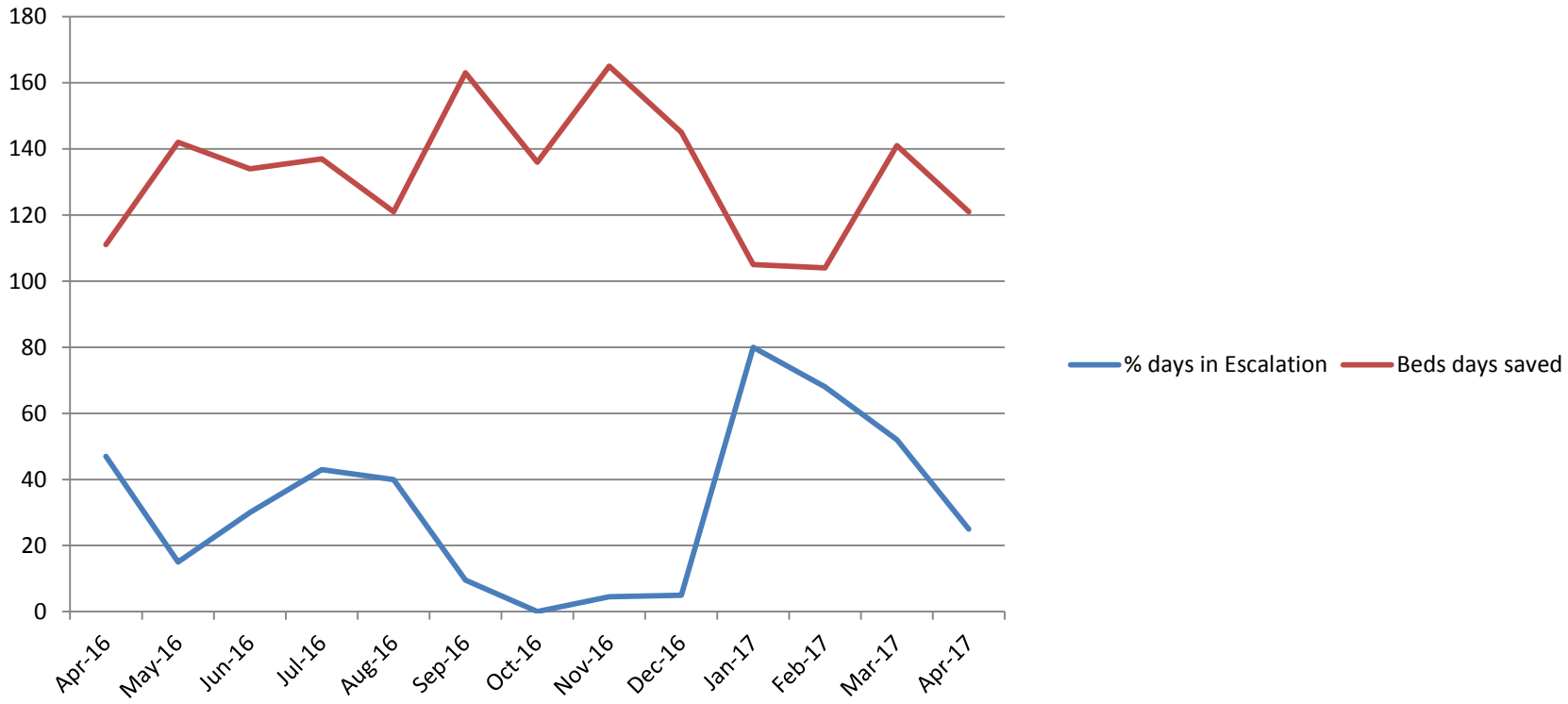


Time to LC after diagnosis of Gallstone Pancreatitis (Days)



Nonelective to nonelective readmission fallen due to biliary pathology fallen from 26% to 8% (Q3 16/17)

ESAC Annual Bed Savings



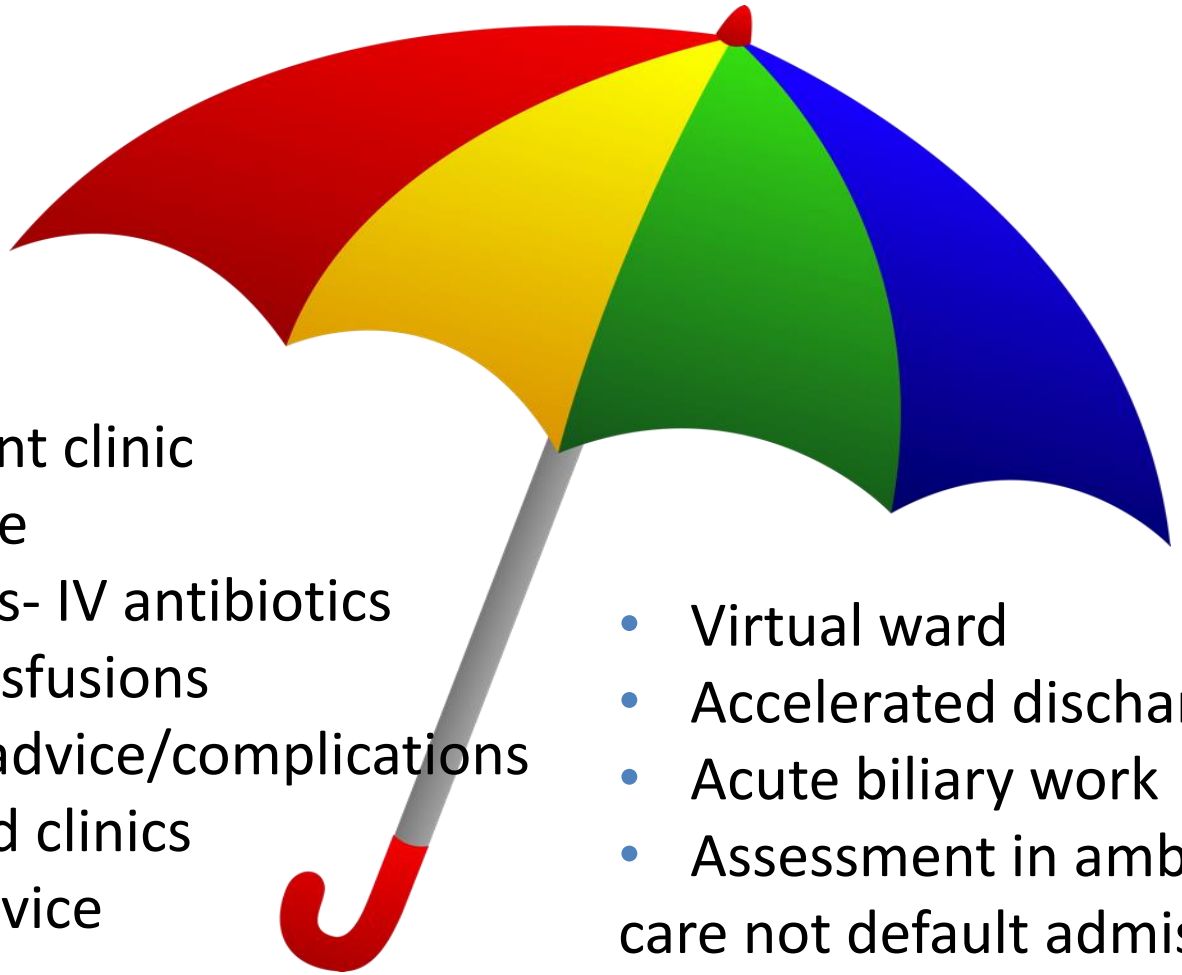
Bed days saved per month plotted against days in escalation/reduced trolley capacity

Training

Overall numbers being admitted via the take unchanged- but are of higher acuity

- Preservation of F1s but rotating them through ESAC as “community facing weeks” with excellent feedback.
- ESAC lists attended well by CTs to gain relevant exposure prior to ST3
- Complex biliary cases for advanced trainees
- Nurse practitioners
- Scrub practitioners

The Vision



- Consultant clinic
- GP Advice
- Therapies- IV antibiotics
- Transfusions
- Post-op advice/complications
- Nurse-led clinics
- 7 day service

- Virtual ward
- Accelerated discharges
- Acute biliary work
- Assessment in ambulatory care not default admission

PRINCIPLES

1. Referrals should be process driven
2. Consultant-led and delivered
3. Rapid access to diagnostics
4. Rapid access to theatre
5. Early supported discharges
6. The Virtual Ward
7. The SAEC should be run from a designated, protected area
8. Nurse Practitioners and other Health Care Professionals
9. Robust documentation and safety-netting
10. Avoid unnecessary referrals to SAEC

. . . the times they are a-changin’

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