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Emergency Surgical Ambulatory Care

The Bath Experience

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Consultant Surgeon
February 2nd, 2017
Southwest Clinical Senate

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Setting the Scene

Unnecessary admissions
Unnecessary waits

Minutes matter for those that need life saving surgery

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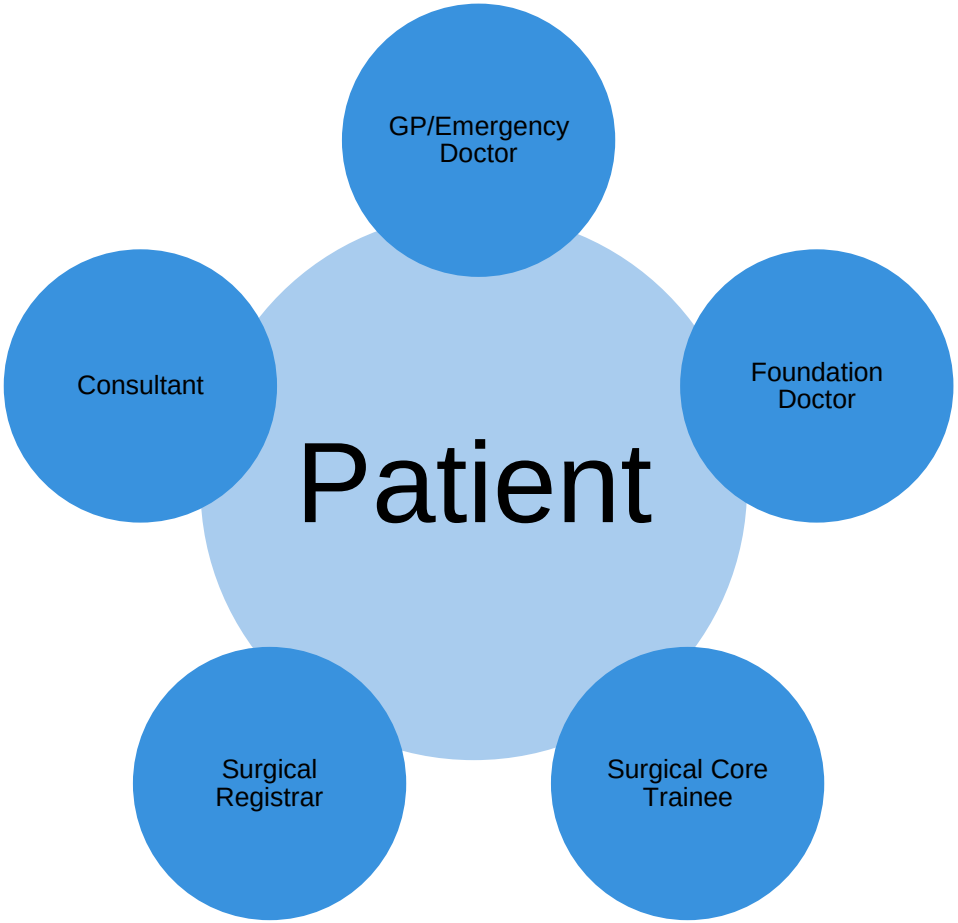
Traditional Process



- Investigations
- Queue/wait

- Operation
- Queue/wait

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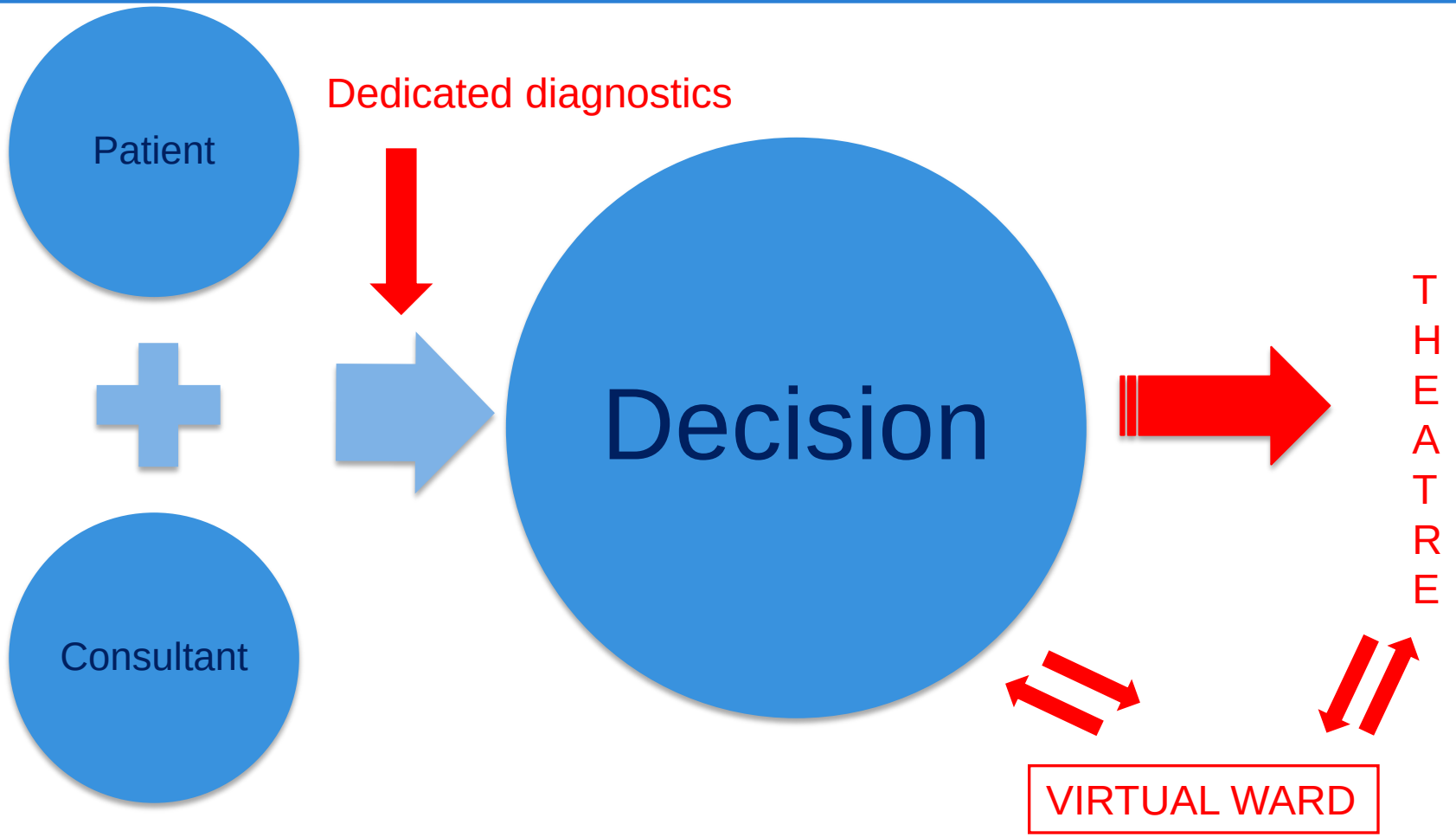
How ESAC Works



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Ambulatory Care is a quick win

*"**Ambulatory care** is medical **care** provided on an outpatient basis, including diagnosis, observation, consultation, treatment, intervention, and rehabilitation services. This **care** can include advanced medical technology and procedures"*

- **Assessment default (not admission)**
- **Personnel (not beds) are capacity**
- **Shift as much as possible into out-patient setting**

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

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Promotion to GPs, ED and Teams

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

No protocols!

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Referrals

- Adults> 16 years
- Right upper quadrant pain
- Right iliac fossa pain
- Stable PR bleed
- Painful jaundice
- Peri-anal a[illegible] abscess
- Pain[illegible]bstructed hernias
- [illegible]p problems/wound problems
- Accelerated discharges

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

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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
- 450 cases/year on afternoon ESAC lists- of these 86% are discharged before 10pm

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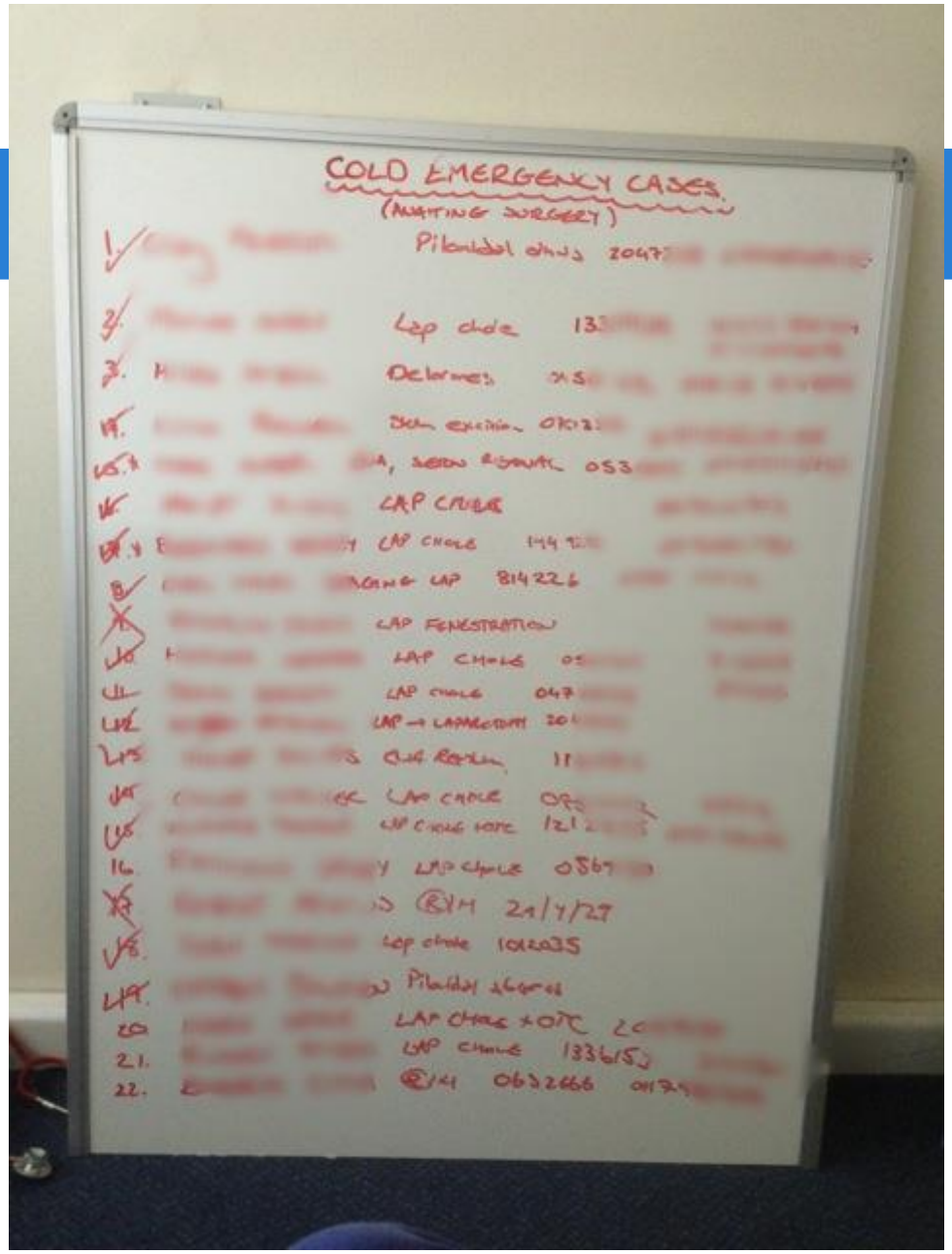
ESAC Theatre



Lists populated by:

- ESAC patients
- Appropriate NCEPOD patients
- Red Board patients

Finalised 1130am → 1330hrs start

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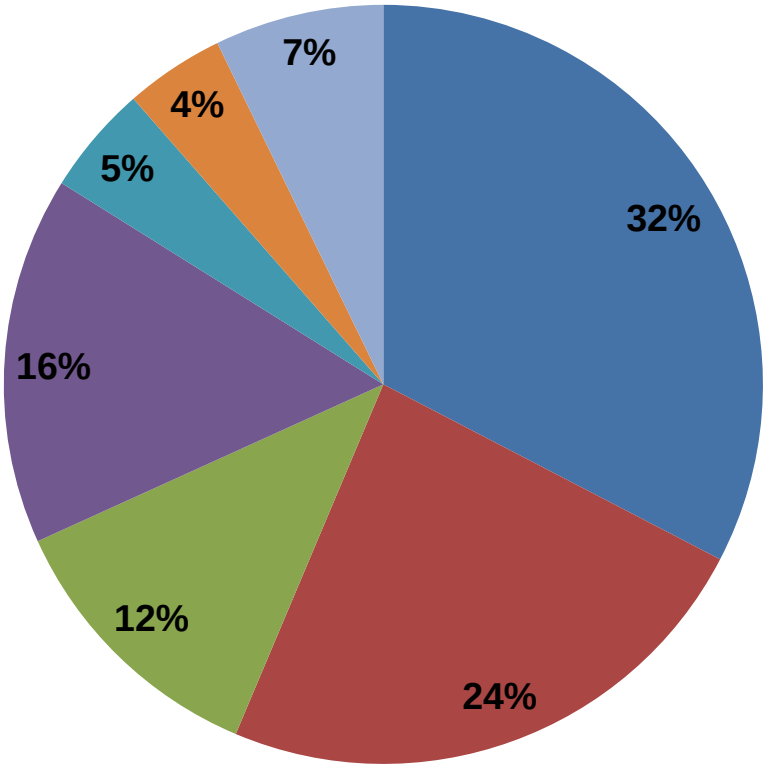
ESAC Daycase Theatre Utilisation



- 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

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Emergency Surgical Nurse Practitioners

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

Outcomes May 2013-present

- >6500 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
- 1 written complaint (painful lymphadenopathy)

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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

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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

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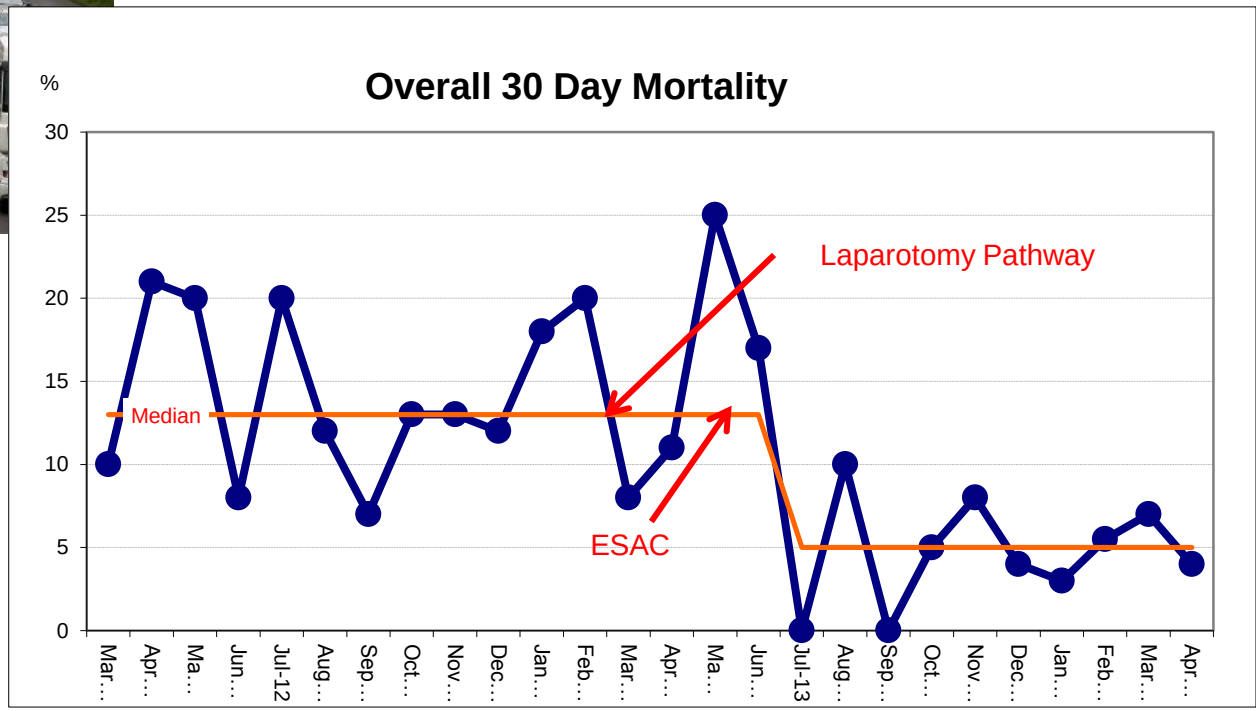
Saving NCEPOD (and beds) for the sickest



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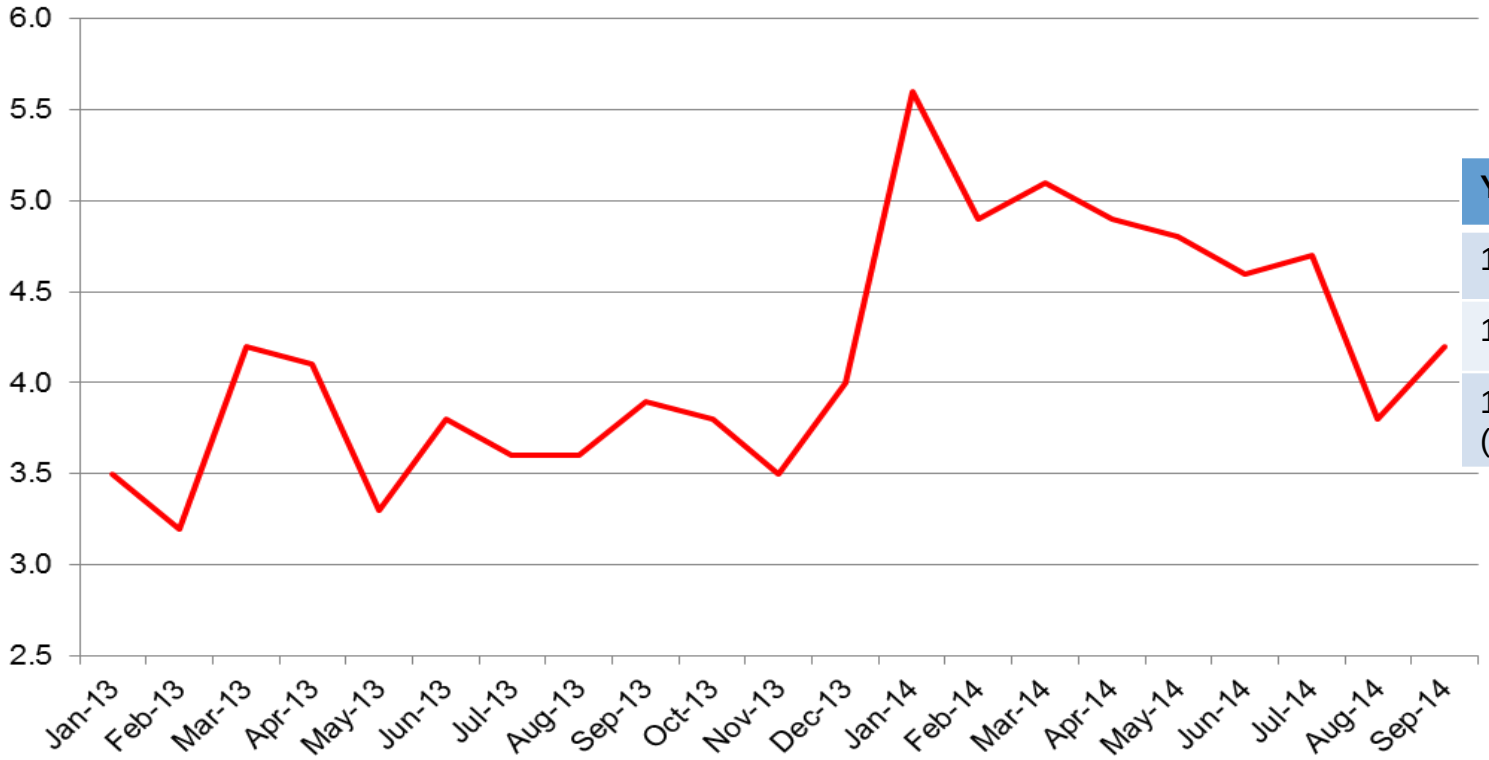
Length of Stay

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

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Good practice and areas for improvement

Areas of good practice

Our inspection team highlighted the following areas of good practice within the hospital:

- The trust had made good progress towards seven-day working where staffing and services at the weekend were similar to weekdays, for example, in the A&E department, for patients receiving emergency medical and surgical care.
- Patient in-hospital mortality rates were lower than expected and there was no difference between weekday and weekend mortality.
- The emergency surgical ambulatory clinic was specifically designed to see patients with urgent general surgical problems. Patients were assessed and diagnosed (and some had their procedures) on the same day. The clinic had helped to avoid hospital admissions and had reduced the time inpatients waited for emergency surgery.
- Staff in the critical care unit were struggling with staffing levels and being able to discharge people in an appropriate way, but they showed complete dedication to the service and provided outstanding

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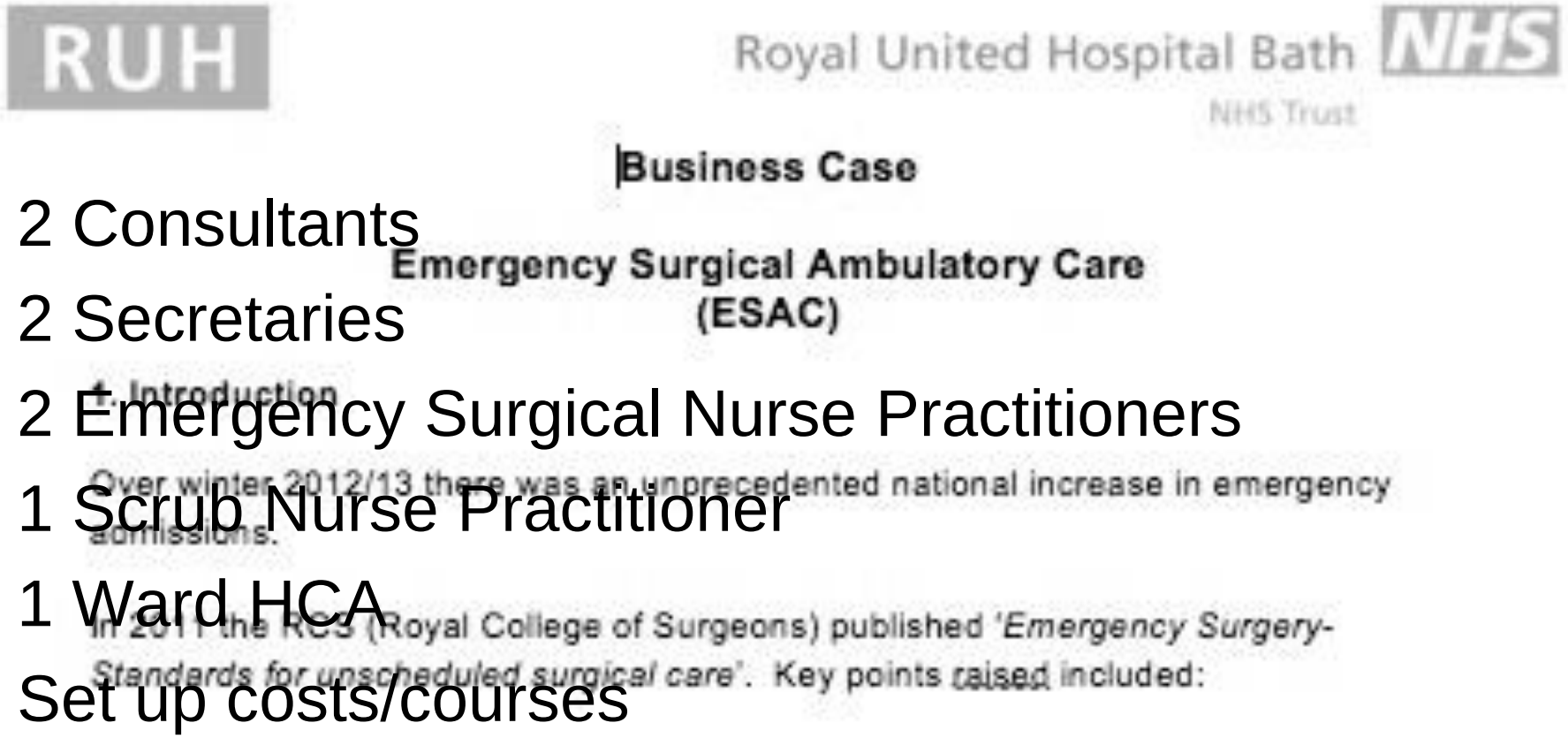
£441K for ESAC


RUH

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Business Case

Emergency Surgical Ambulatory Care (ESAC)

1. Introduction

Over winter 2012/13 there was an unprecedented national increase in emergency admissions.

In 2011 the RCS (Royal College of Surgeons) published '*Emergency Surgery- Standards for unscheduled surgical care*'. Key points raised included:

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

RUH

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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)		35	

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

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Tariff Complexities

- New ESAC patient £765
- ESAC follow up patient c£60
- Gen Surg follow up patient c£60
- Gen Surg ESAC follow up c£60
- Admit c£1600
- Phone call c£20

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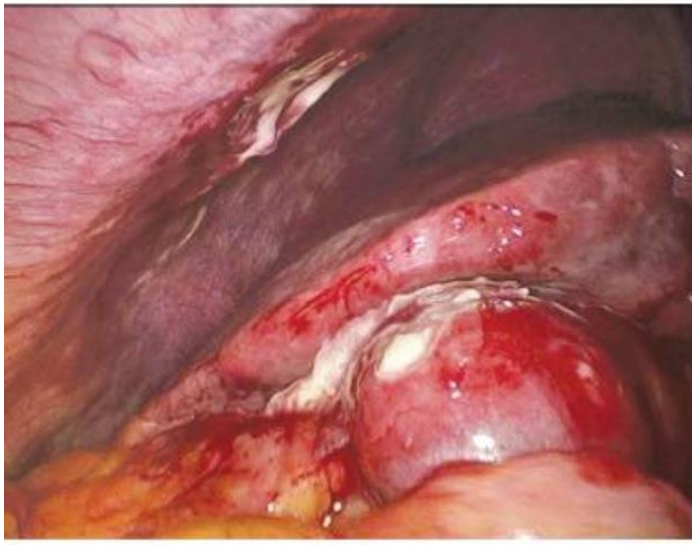
Acute biliary patients

- 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



FLOW

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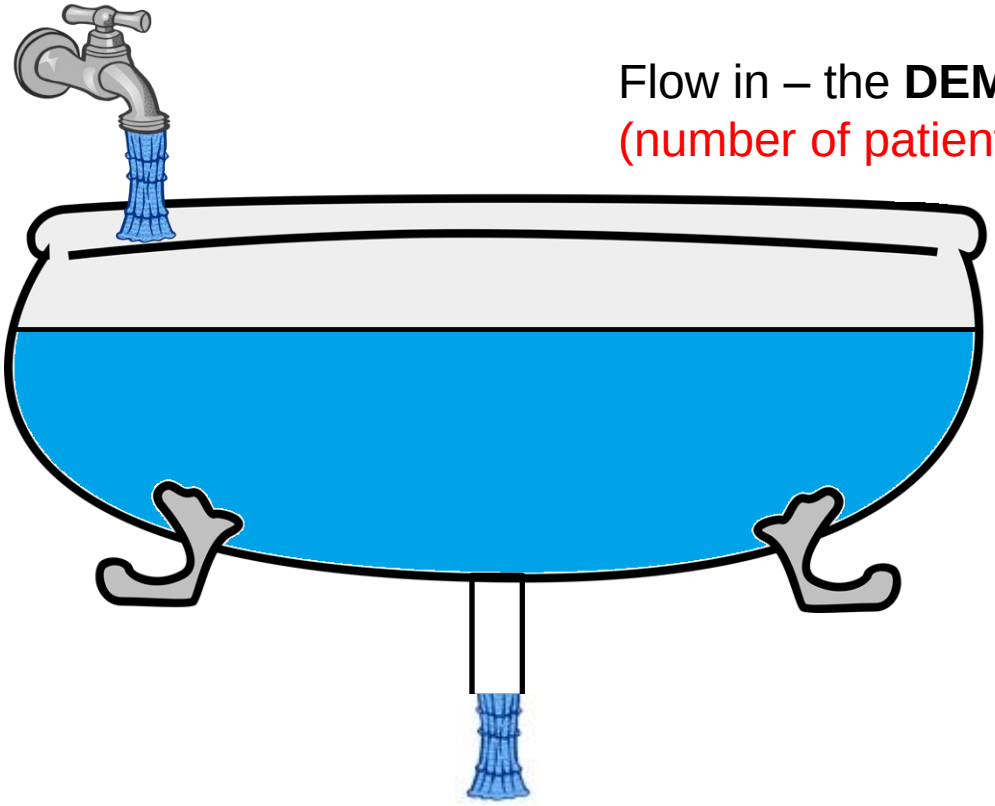
Measuring system dynamics



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)

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Biliary Coordinator

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

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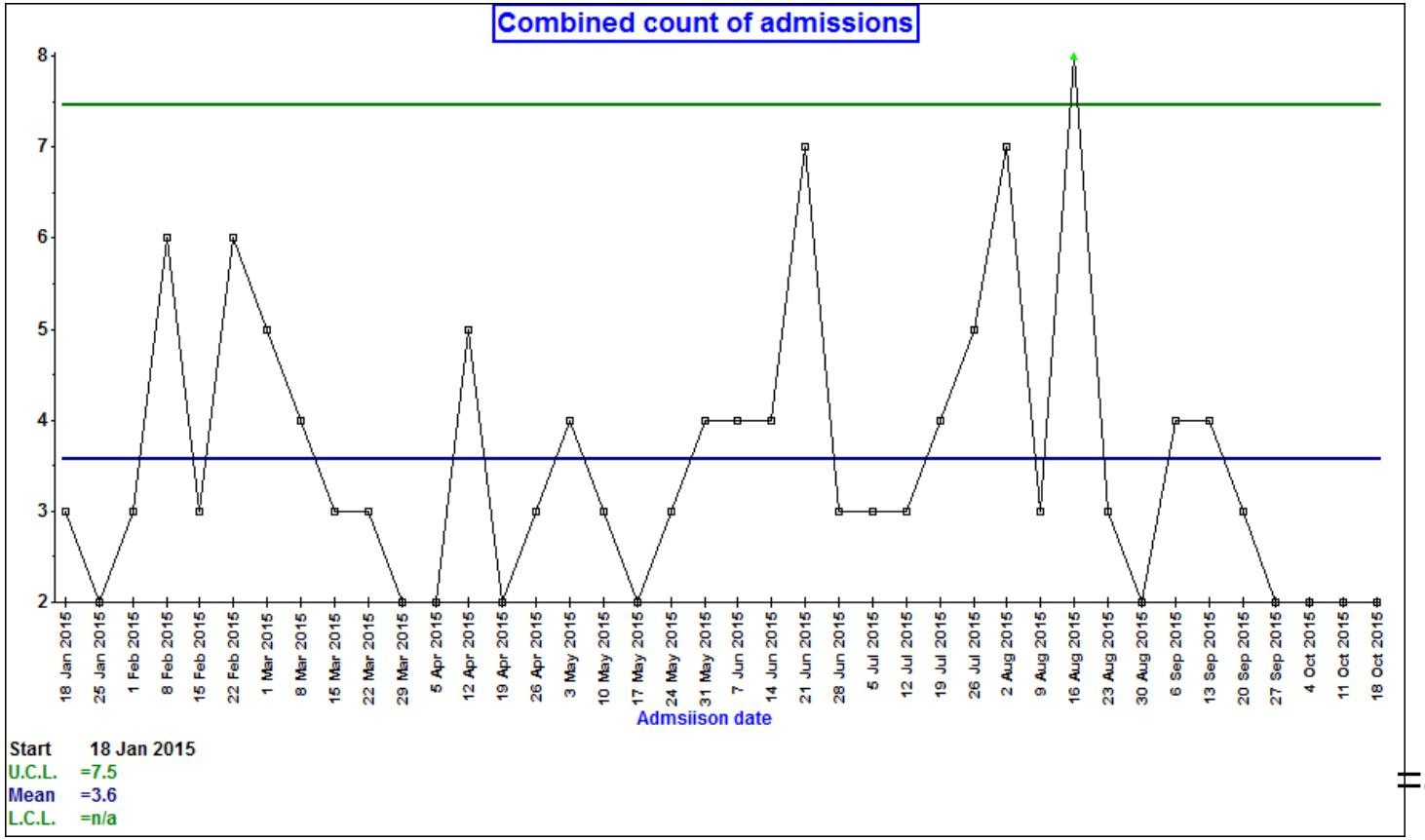
Capacity Planning



=80% to avoid queue

=5 slots per week

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Acute Cholecystitis (K800/K810)

- January 2015 to May 2016
- 219 patients
- Lap chole in 113 patients (51%)

Pre-October 2015

Average wait= 103 days

Percentage done within 7 days= 24%

Post-October 2015

Average wait= 11.3 days

Percentage done within 7 days=79%

But 8 awaiting LC

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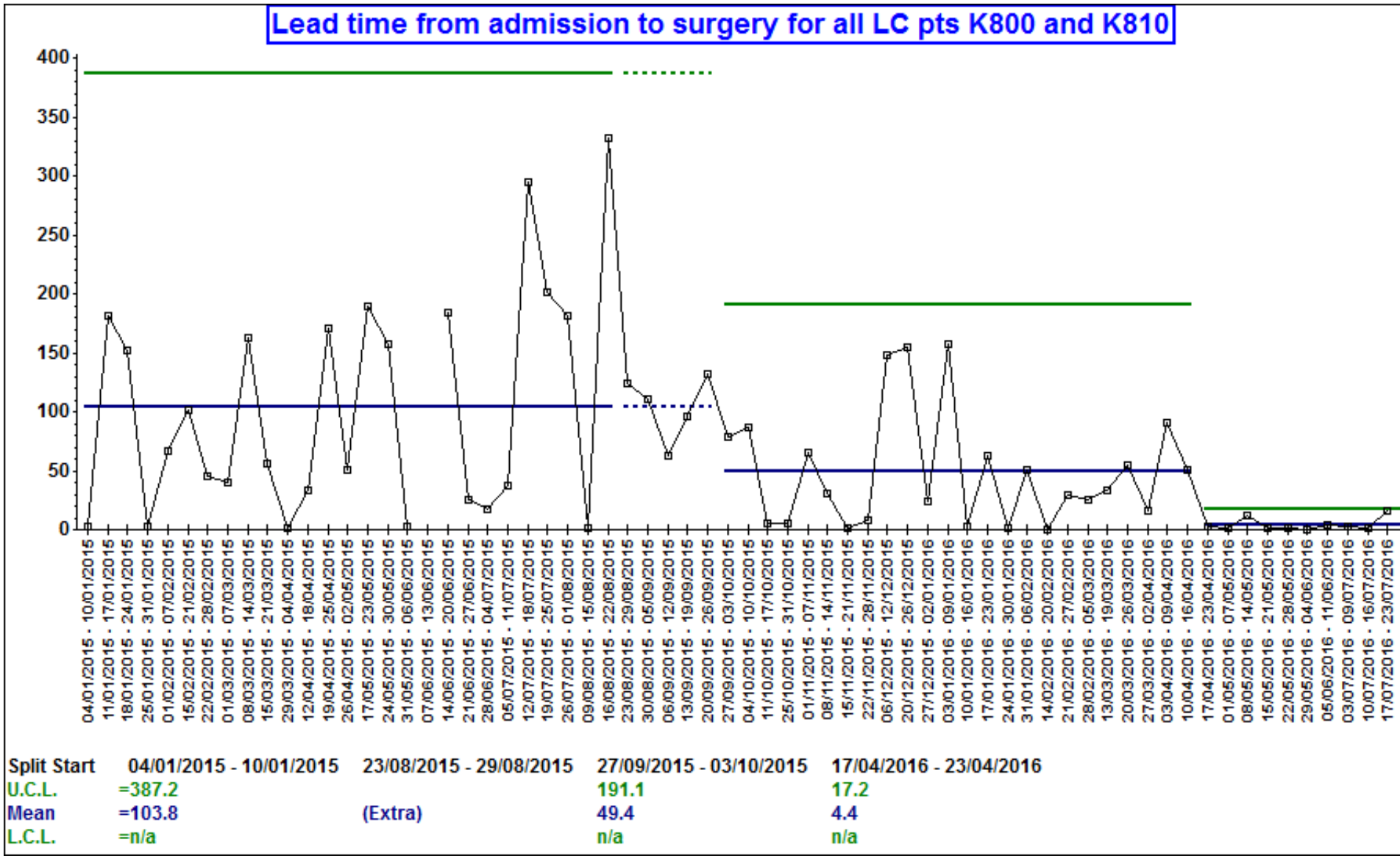
Time to surgery after Diagnosis of Acute Cholecystitis (Days)



Split Start	04/01/2015 - 10/01/2015	23/08/2015 - 29/08/2015	27/09/2015 - 03/10/2015	17/04/2016 - 23/04/2016
U.C.L.	=387.2		191.1	17.2
Mean	=103.8	(Extra)	49.4	4.4
L.C.L.	=n/a		n/a	n/a

Gallstone Pancreatitis

- 89 patients (Jan 15-July 16)
- 72% have had LC
- Remainder- not fit, death, out of area etc. 2 notes no clear reason.

Pre-October 2015

Percentage done within 14 days= 31%

Post-October 2015

Percentage done within 14 days= 65%

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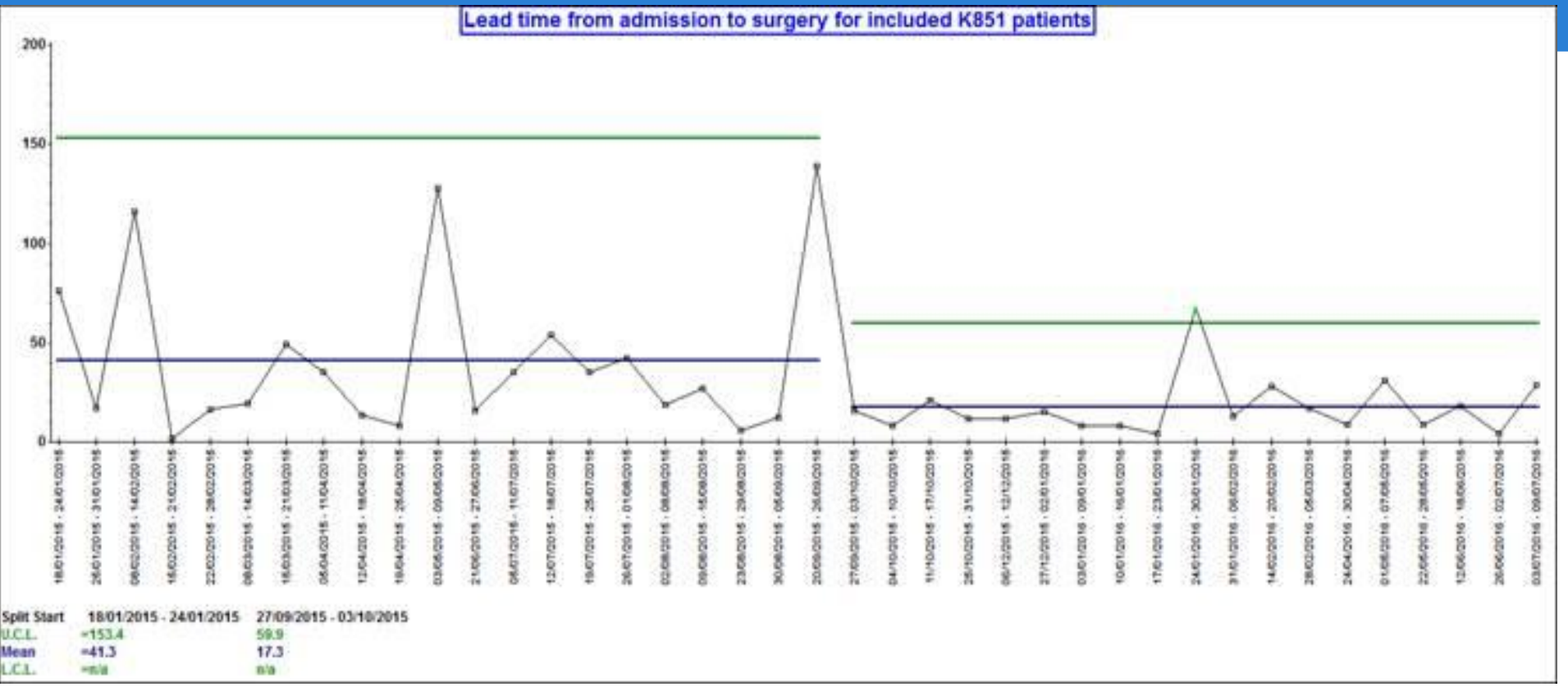
Time to surgery after diagnosis of Gallstone Pancreatitis (Days)



Biliary readmission rate 8% Nov16-Jan17

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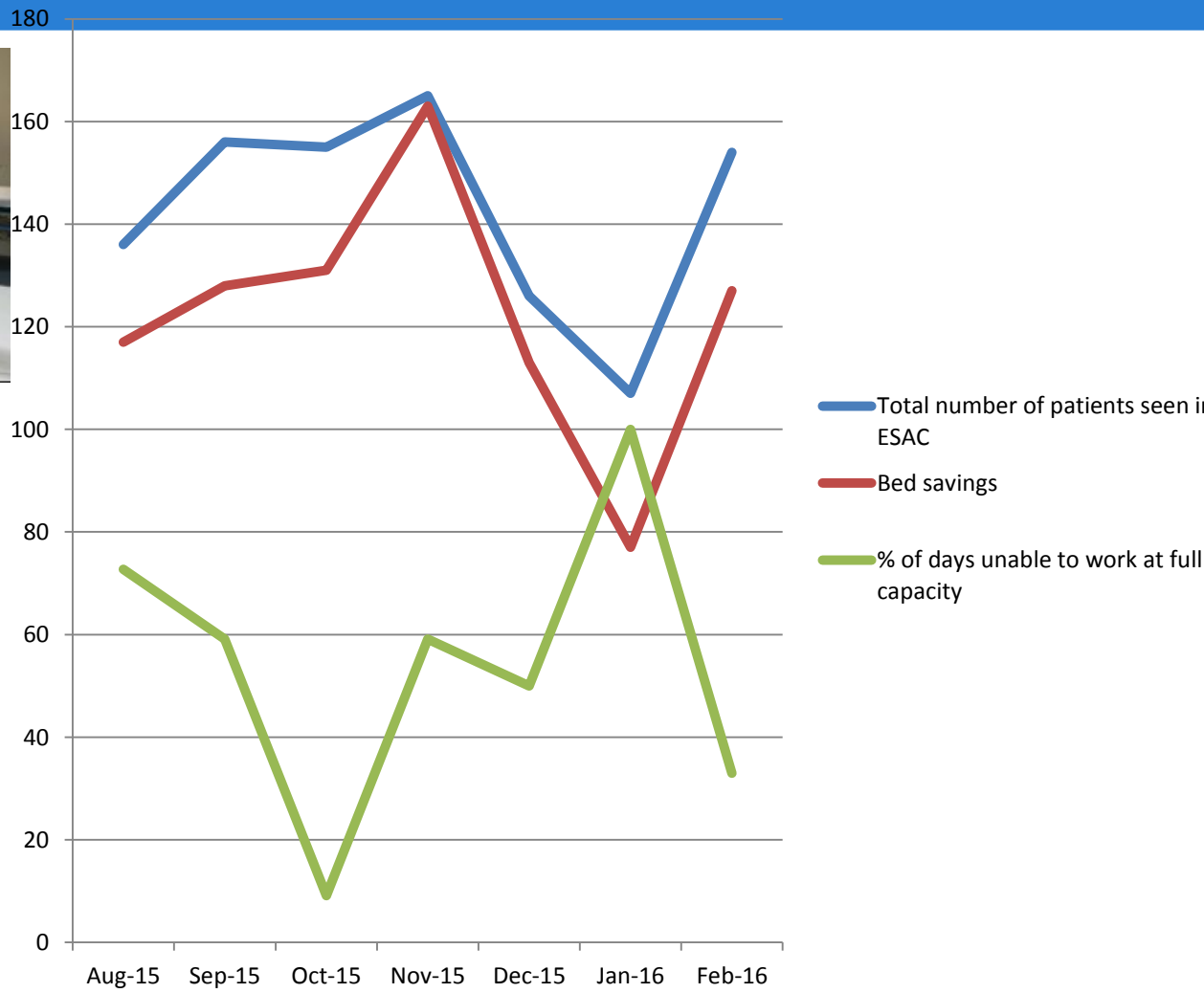
Protected Area



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

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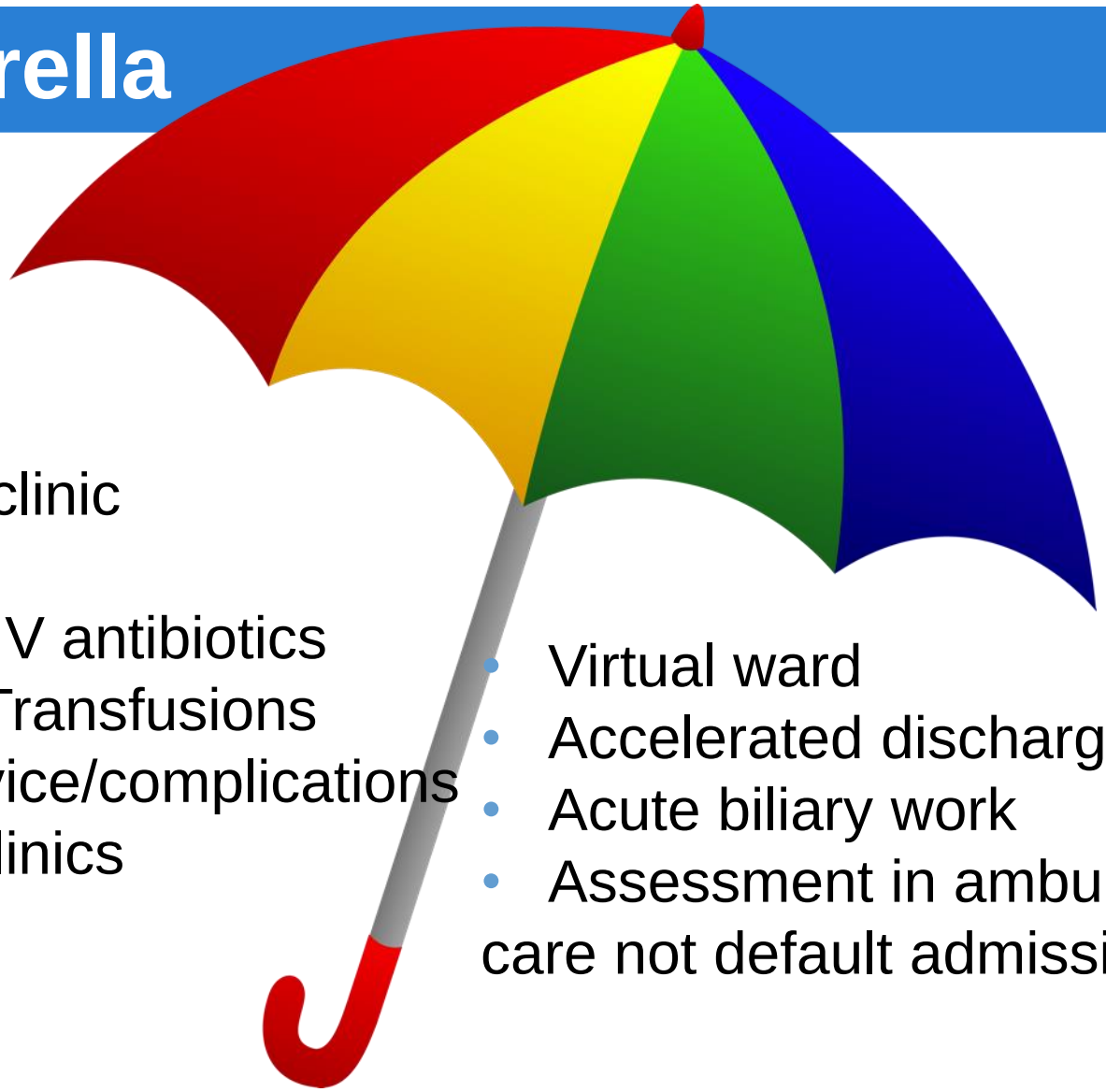
ESAC Umbrella



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

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

Initial Challenges

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

Top Tips

- Dedicated diagnostics
- Senior delivered service- risk
- But get trainees involved- great training
- Establish appropriate tariff
- Protected area
- Use a “virtual ward” concept
- Dedicated theatre lists
- Supportive colleagues and hospital management!

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Thanks to the ESAC Team

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