Digital follow-up of high-volume low complexity general surgical patients is safe, acceptable to patients and saves resources (0-29 Day Reattendance to STU). A 1-year pilot study.

Picker Experience Network (PEN) Awards 2025

- Jody Carvell
  - RODP Dip/He, Surgical Care Practitioner MSc, Upper Gastrointestinal and General Surgery Nottingham University Hospitals
- Simon Parsons
  - Honorary Professor and General Surgery Consultant Nottingham University Hospitals
- James Short
  - Medical Student Nottingham University Hospitals

- *Acknowledgements:*
- *Grace Handley (Service General Manger)*
- *Michelle Roden (Upper Gi and Endocrine Deputy Service Manager)*
- *Leanne Maycock (RODP Dip/He, Surgical Care Practitioner Upper Gastrointestinal and General Surgery)*
- *Hannah McConkey (Senior Technical Programme Manager)*

Conflicts

• Jody Carvell	None
• Simon Parsons	EIDO Healthcare
• James Short	None

Introduction

Patients having high volume, low complexity (HVLC) general surgical procedures often do not have follow- up or have telephone follow-up appointments.

A significant number of these patients also represent to emergency services and attended surgical triage units (STU).

Reattendance rates for those patients at Nottingham University Hospitals (STU) for 2023 (8.6%) and 2024 (15.3%)

Objective

- To assess the value of digital follow up on identifying post operative complications, reattendance rates and patient satisfaction for follow-up of HVLC general surgical patients.

The Method

Patients undergoing laparoscopic cholecystectomy, hernia repair or anti reflux surgery in 2024. Were invited to take part in the pilot study.

A text message at discharge containing postoperative information produced by EIDO Healthcare® and invitation to the ISLA® digital follow-up platform.

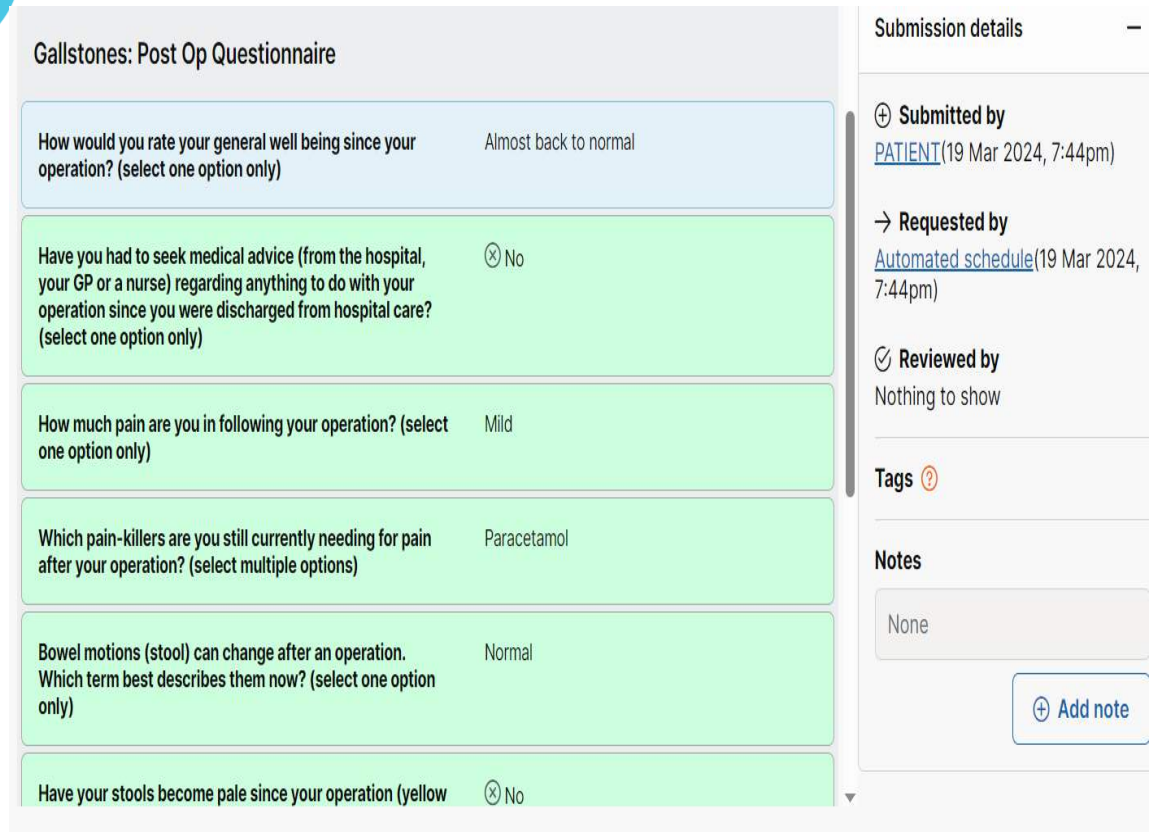
After consenting, patients were asked to submit a questionnaire at 7 days postoperatively along with photographs of their wounds.

Submissions were reviewed by surgical care practitioners (SCP) with advice available from a consultant and patients were either discharged, asked to submit another questionnaire in a further 7 days, required a telephone consultation or outpatient appointment for physical review.

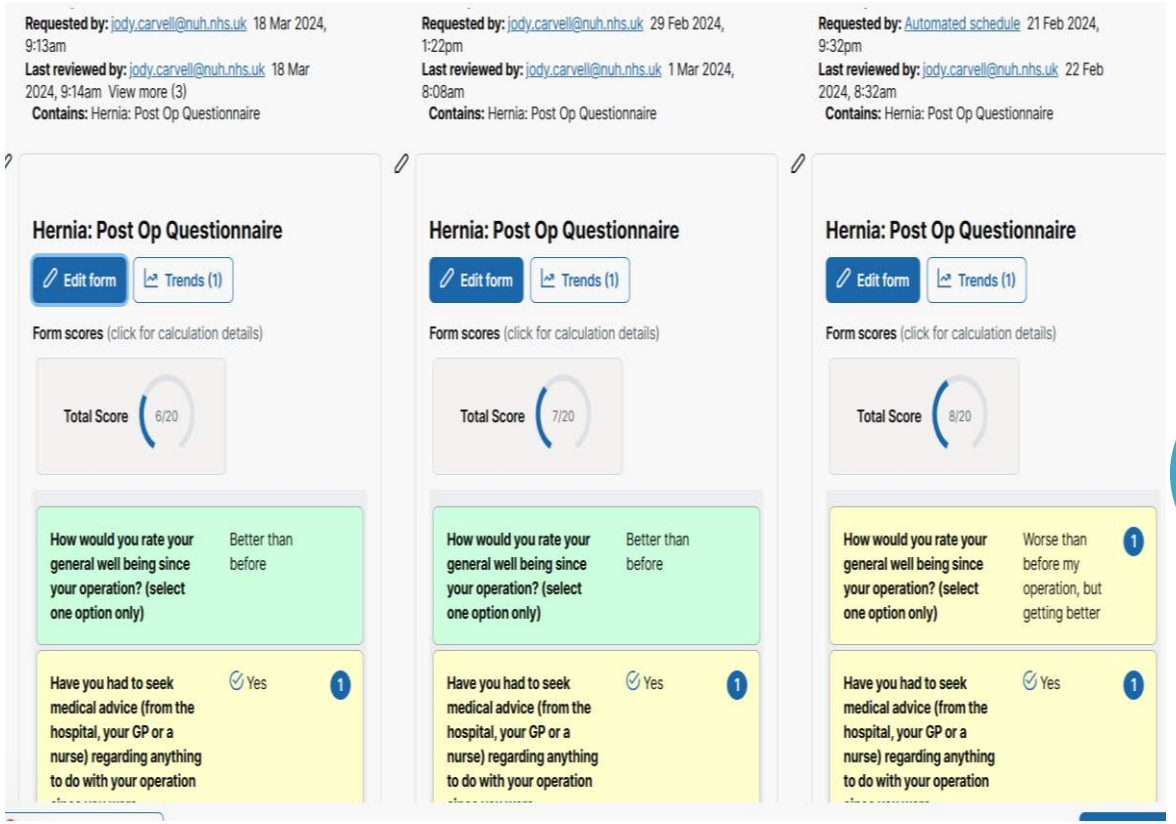
After discharge, they were asked to complete an anonymous patient satisfaction survey.

Questionnaire Progress Submissions

Discharged

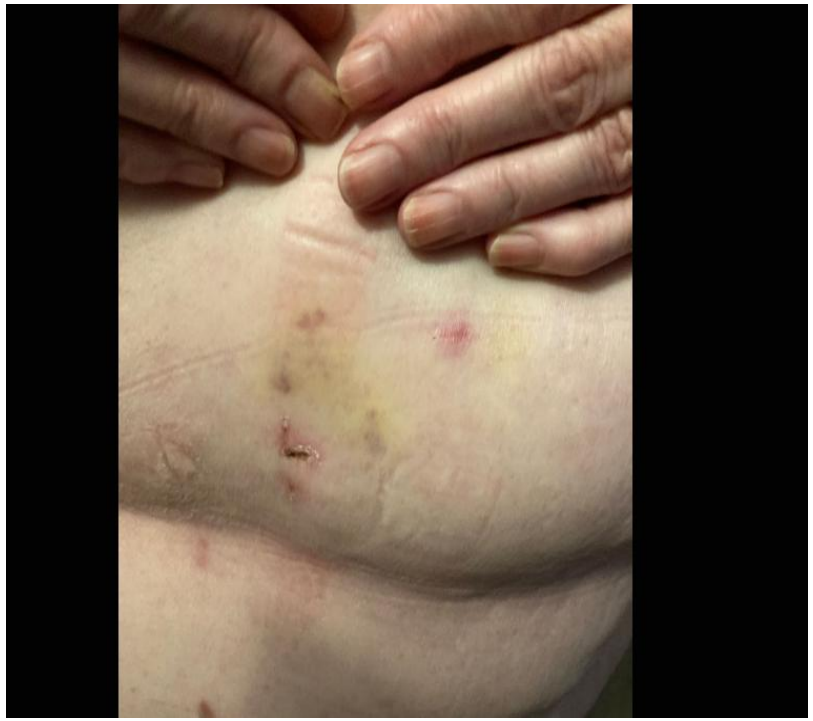


Continued review through platform

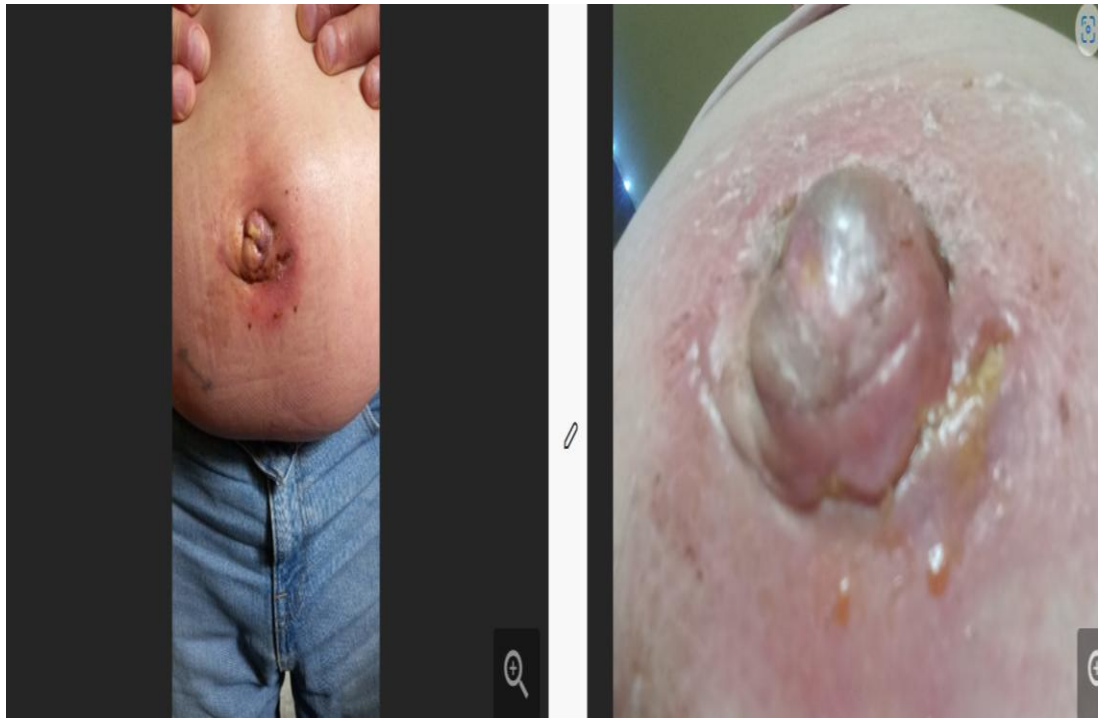


Photograph Submissions

Discharged



Continued review through platform



Outpatient Follow Ups, SSI and Haematoma

After submission of questionnaire by patient, % of patients requiring contact by SCP N=29/389 (7.4%)

Surgical Site Infections N=16

Haematomas N=14

Results

HVLC elective procedures and reattendance to STU within 0-29 days

	Digital submissions from patients who participate in study 1st Jan 2024 – 31st Dec 2024		1st Jan 2024 – 31st Dec 2024	1st Jan 2023 -31st Dec 2023
Had surgery			1047	1084
Patients not in study	638		xx	xx
Patients invited	409		xx	xx
Invited but did not consent	20 (4.8%)		xx	xx
Patients who completed 7 day post operative questionnaire	389 (95.2%)		xx	xx
Consented but STU attendance	28 (7.2%)	**P<0.0001 Chi square**	xx	xx
Invited did not consent to study STU attendance	10 (50%)			
STU attendance of patients not in study	123/638 (19.2%)	**P<0.0001 Chi square**	xx	xx
STU attendance in patients invited into study (Intention to Treat)	38/409 (9.2%)			
Total STU attendance			161 (15.3%)	93 (8.6%)

Costings

Cost Summary of Original Procedure and Total Cost of STU/Ward/Theatre for Post Operative complication

	Original Procedure (Day case and Inpatient)	STU Stay
	Avg. Cost Per Patient	Avg. Cost Per Patient on STU
Total Hernia	-£3,139.00	£831.90
Total Laparoscopic Cholecystectomy	-£3,287.04	£1010.82

Cost of follow up appointments

	Cost	Average Cost Per Patient
Isla Digital Platform Annual (Whole Trust)	£292,915.00	£13.44
PIFU		High % return to STU or A/E
New Patient Appointment		£201.02
Follow Up Appointment		£83.50
Stu Attendance		£921

Group	Percentage Attending STU	Number Attending	Comparison / Adjustment	Attendances Avoided	Cost Saving (at £921 each)
Patients not in study	19.2%	123 / 638	–	–	–
Patients in study	9.2%	38 / 409	–	–	–
If not in study group had 9.2%	9.2%	59 (expected)	123 – 59 = 64 fewer	64	£59,000
If reduced to 7.2% (percentage of patients consenting and completing digital follow up)	7.2%	46 (expected)	123 – 46 = 77 fewer	77	£70,917

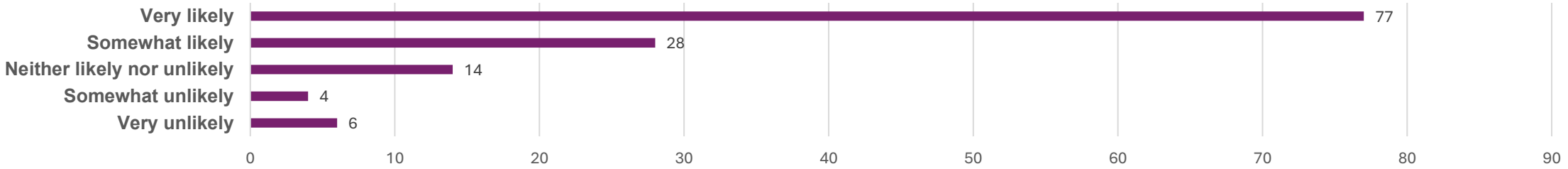
Patient Satisfaction Survey

- Patient Demographics
- 129 patients completed satisfaction survey (33%)

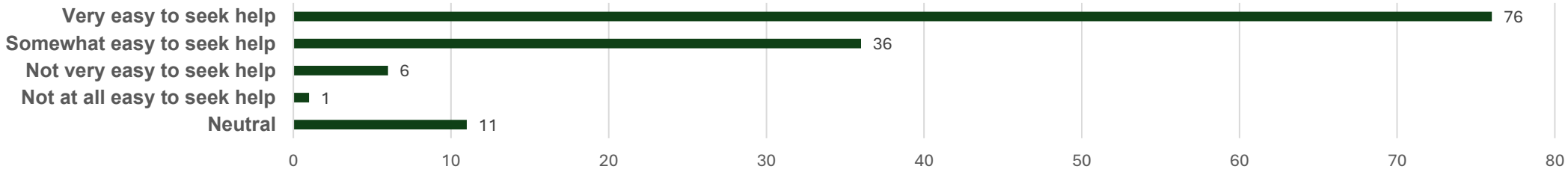
Procedure	Anti-reflux surgery	Hernia repair	Laparoscopic cholecystectomy
Number of Patients Responses (%)	2(2%)	105(81%)	22(17%)
Sex (%) Male	2%	68%	5%
Sex (%) Female	0%	14%	12%
Age Range			
18-40	0%	1%	2%
40-60	2%	27%	8%
40-70	0%	31%	5%
70+	0%	23%	2%

Patient Satisfaction Survey

- 117 (90%) where happy with the digital follow-up process
- Would you be likely to use digital follow-up over telephone/ hospital appointments for follow-up in the future, if given the choice?



- Did you feel you could easily seek help if needed (for concerns about your recovery from surgery)?



- 109 (84%) patients felt reassured by the digital follow up process
- 108 (83%) Saving time
- 57 (44%) Avoiding transport costs

Conclusion

- Patients in the digital follow up study have a significantly lower attendance at STU.
- Good satisfaction from patient's questionnaire responses.
  - Patients found digital follow up acceptable and convenient.
- The digital follow process showed a reduced number of unnecessary face to face appointments, so that patients who need physical review can access them more readily.