

Abstract

Objective:
We work in a busy gynaecological unit in DMH, with high number of 2 week wait referrals. The clinic is run by 2 consultants, two Junior doctors and a specialist nurse to manage this busy one stop clinic.
Our project is to evaluate our services against 3 main performance indicators for gynaecological surgery, as outlined in the RCOG document on “patterns of Gynaecological care in England”. We are proud to provide a service that applies the concepts of Enhanced recovery in managing surgical cases. We hope this has improved the patient journey and satisfaction with our service and this audit will be aiming to measure our performance for future monitoring and development. We will be comparing our performance to the mean for the main indicators outlined in the RCOG document.
Our main indicators are the proportion of abdominal vs laparoscopic hysterectomy, The hospital stay duration and Emergency admission within 30 days.
Secondary indicators for service development are time in theatre, Intra-operative/post-operative complications, VTE prophylaxis and insertion of post op drain/catheter.

Design:
Retrospective cohort, service evaluation project

Methodology:
Population: All hysterectomies done in our hospital Jan-Dec 2021.
Setting: Darlington memorial hospital.
Retrospective data collection.

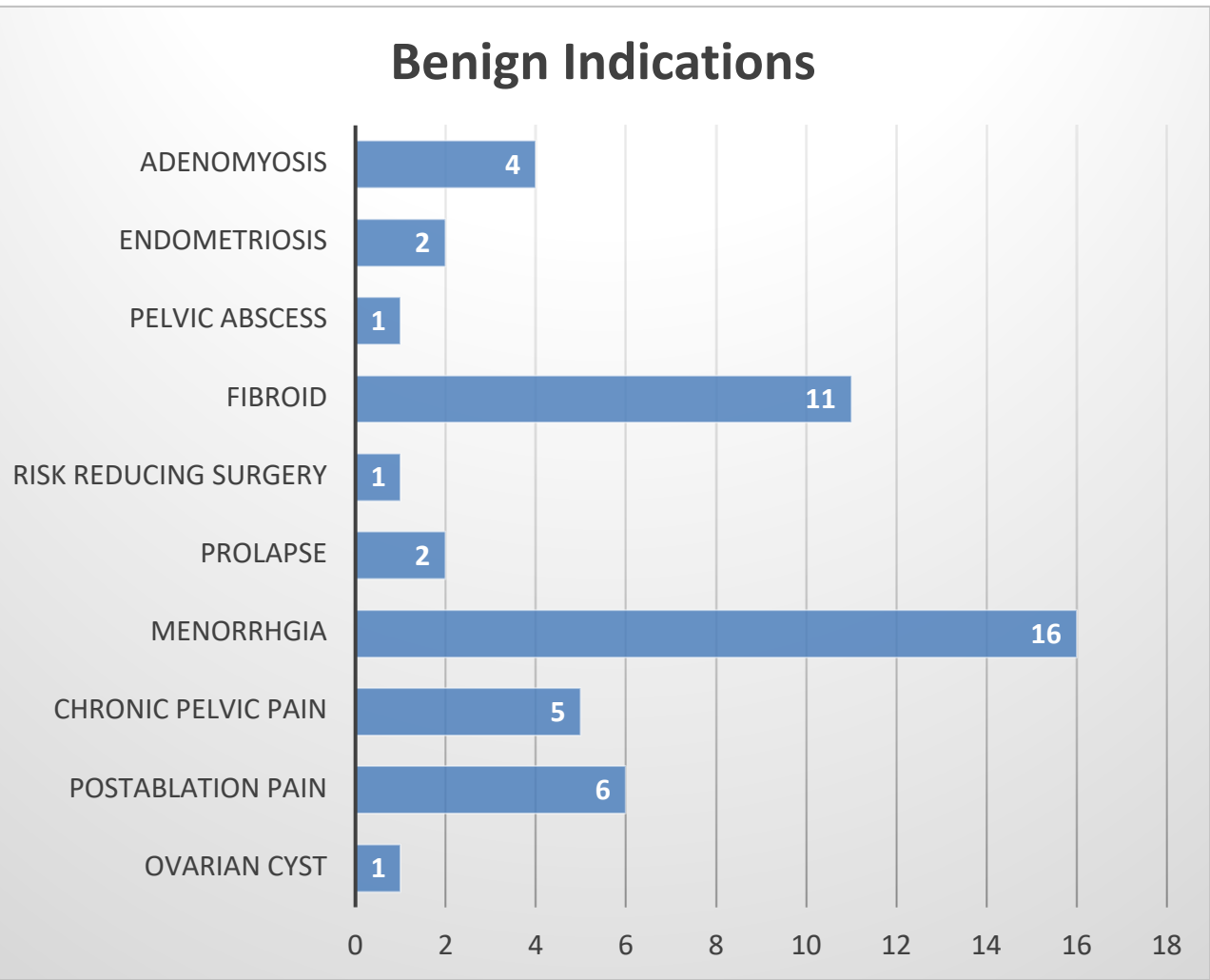
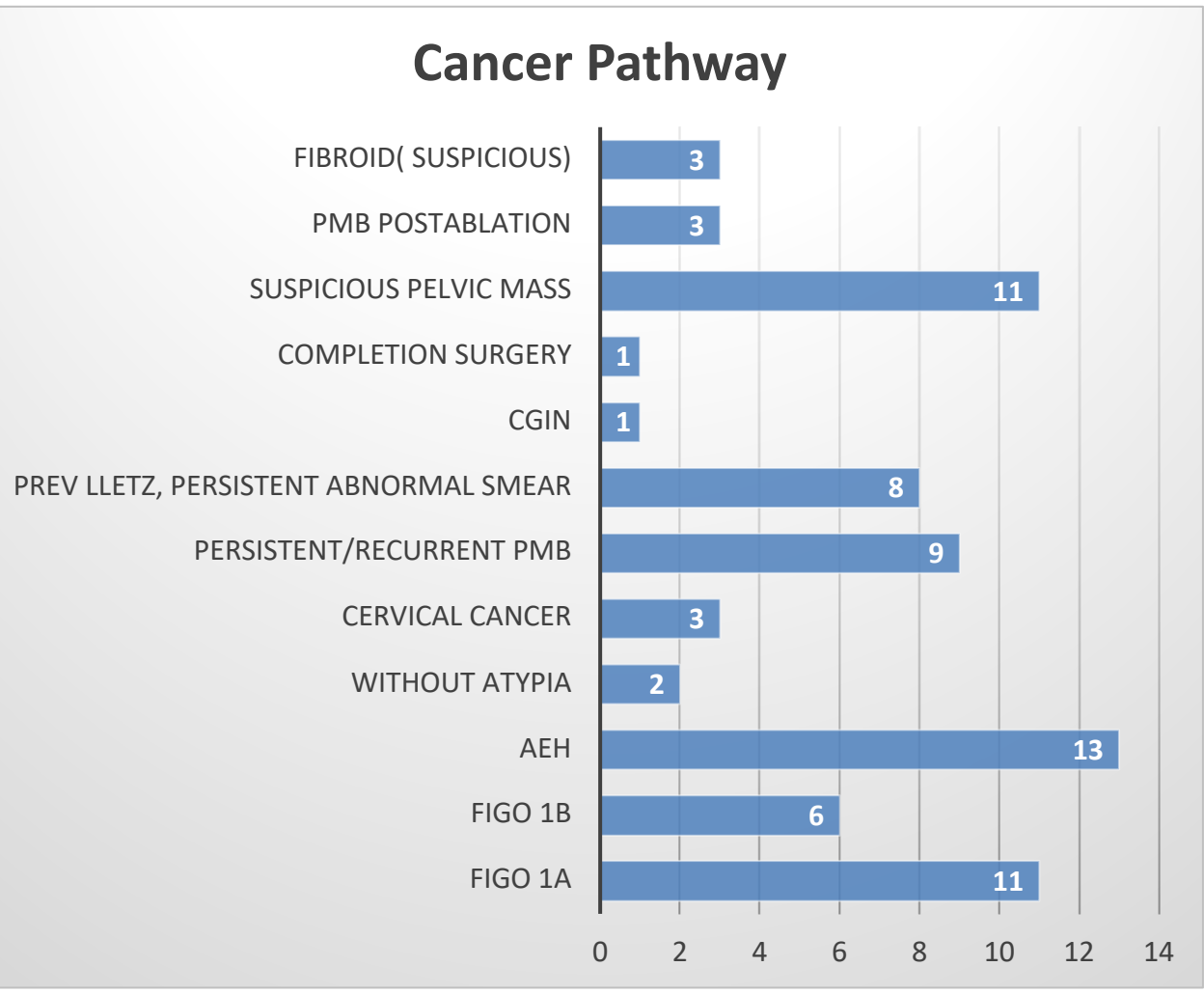
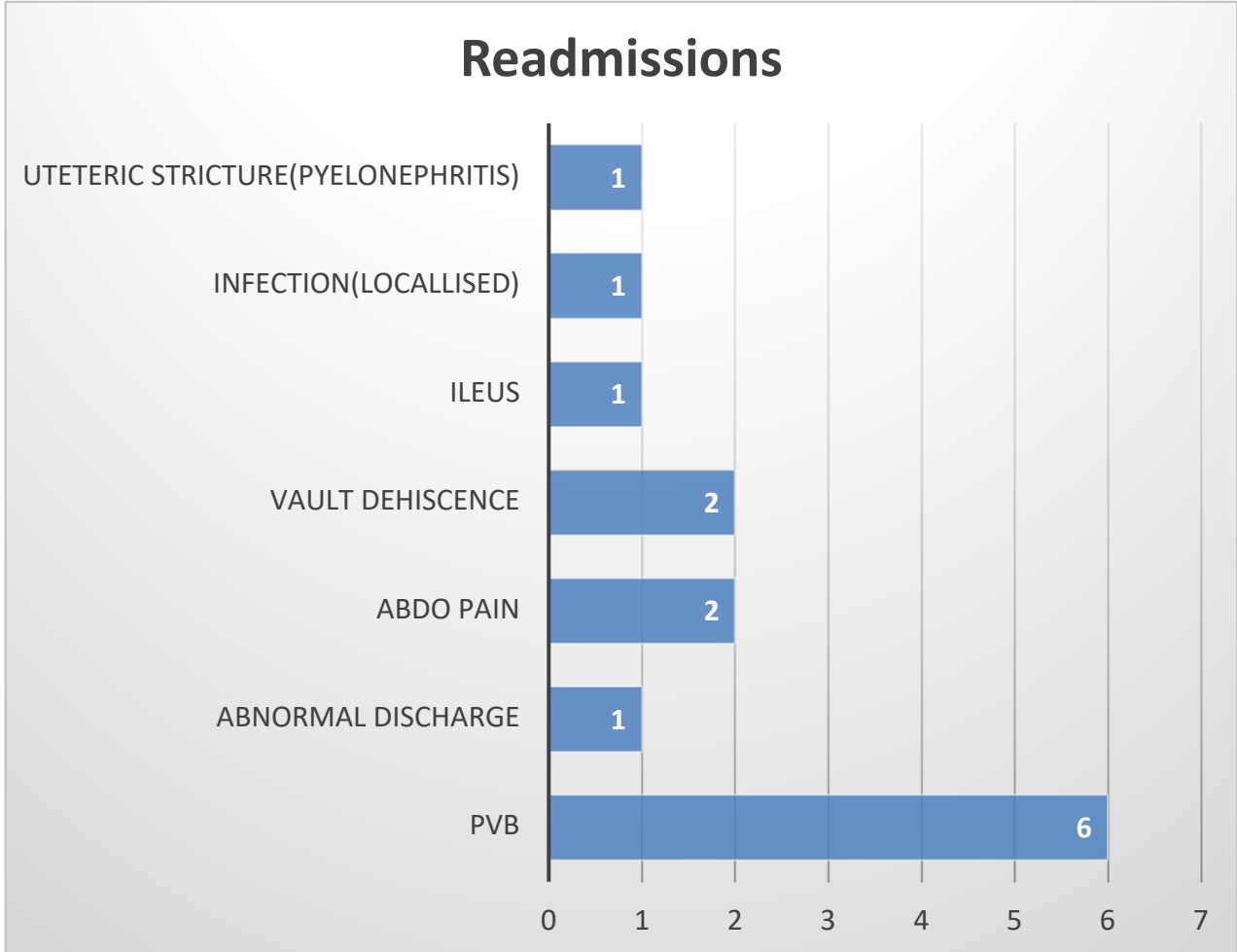
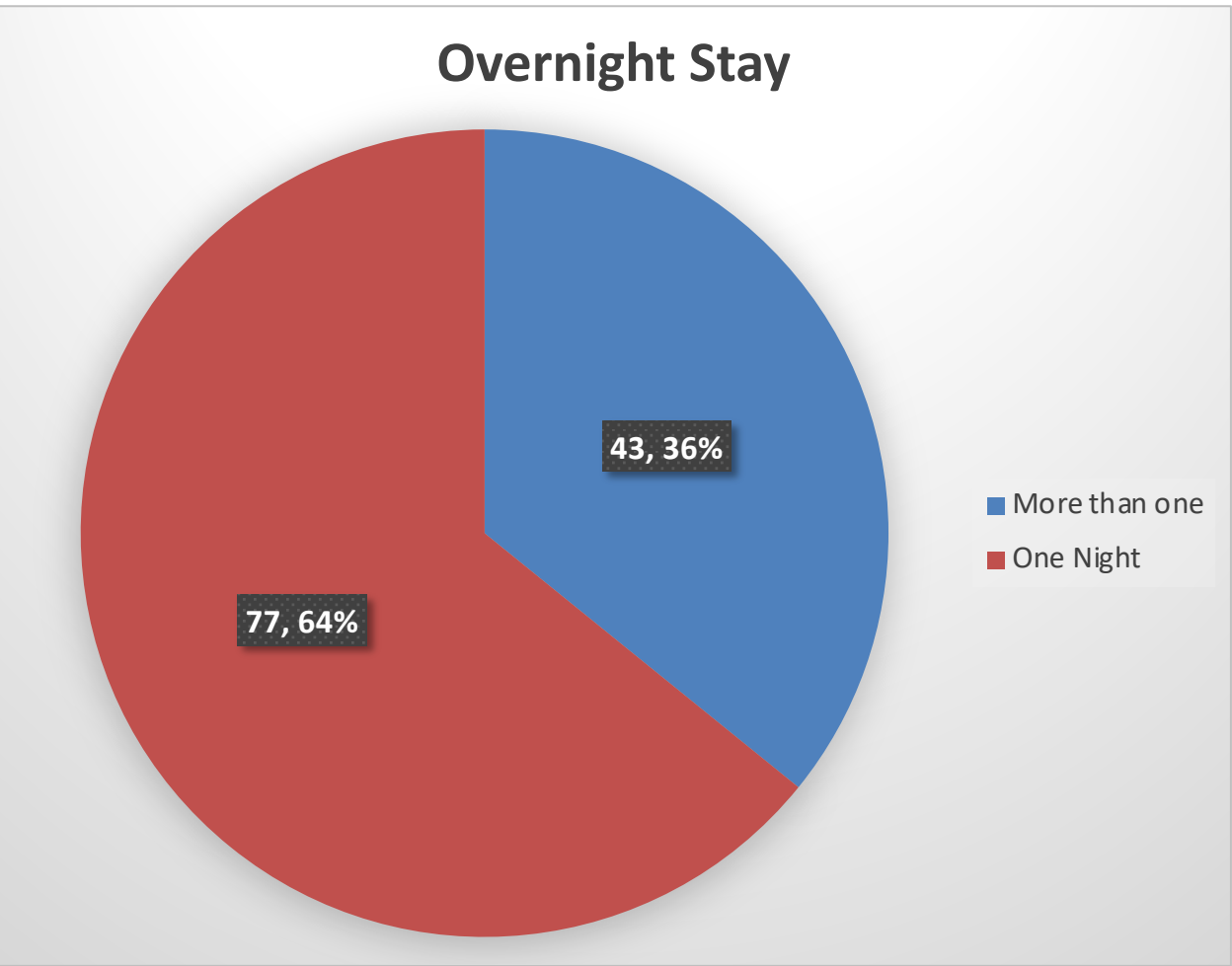
Results:

- TLH represented 72% of all hysterectomies
- 64% of women were discharged next day
- We had 12 readmission, 6 required return to Theatre(for hysterectomies through all routes)

Conclusion
Using Enhanced recovery and laparoscopic route has reduced hospital stay and improved the patient journey when undertaking a hysterectomy.

Methods and Materials

- Examining patient records for 120 hysterectomies performed in DMH January to December 2021.
- Data collected from operative notes, discharge letters, anaesthetic notes, histology results, admissions system and Theatre system.
- .We have collected patient demographic data, ASA grade, surgical related complications, recovery, and histology results. We have extracted total time in theatre from theatre systems. We have investigated readmissions and return to theatre up to 30 days post-surgery
- We have used an electronic form to collect data. This allowed all members of the audit to enter data into the master sheet directly, this reduced time lost in duplicate data entry.
- Time in theatre was cross checked with anaesthetic sheet to improve accuracy (n= 50 cases).



Results

- We included 120 cases. This included all indications for hysterectomies (Benign and Cancer Pathway)
 - Mean Age was 52(Quartile Q1=43, Q3=58)
 - ASA grade: Mean=2, ASA 3=20%
 - Mean BMI 32, with 17% above BMI 40
 - Cancer pathway 59%, Benign indication 41%
 - Type of hysterectomy: TLH 72%, TAH 17%, VH 4%,LAVH 7%
 - Hospital stay: Next day discharge 64% , More than one night 36% (Quartile number of nights; Q1=1, Q3=2)
 - Anaesthetic + operative time(Mean)= 129 mins, Range (60-300)
- Intraoperative complications:
- Conversion to Laparotomy= 5% (n=4)
 - Bowel injury for all routes= 1 (<1%)
 - Bladder Injury for all routes= 1 (<1%)
 - Transfusion required= 2 (<2%) (Intraoperative =1, postoperative =1)
- Post Operative complications n=10:
- Retention was the most common in 2.5% of cases n=3
 - Ileus n=1, Pelvic collection=1, Bleeding n=2, anemia=1, electrolyte imbalance=2
- Readmissions within 30 days:
- We had 12 readmissions (10%), half of which were for vaginal bleeding n=6
 - Second common causes vault dehiscence (n=2) and abdo pain (n=2).
- Return to Theatre(all hysterectomy routes): n=6
- Most common reason was vault dehiscence 67% n=4, Others causes (ureteric stricture n=1, uterine vessel bleeding=1)
- Use of Drain= 19%,
Catheter was left overnight in 21% only.
Transfusion required= 2 (<2%)

Discussion

- Looking into all hysterectomies done in DGH, it is not surprising that the indication for hysterectomy would vary and hence the choice of route for surgery and changes in what to expect in recovery period. It is not possible to draw a specific number for a recommended ratio of laparoscopic vs open surgery due to varying indications and clinician skill set. For clinician to maintain their skill in open surgery is equally important. However, recommendation is for Trusts to provide patient with the option of laparoscopic route when feasible.
- Most of our hysterectomies are done by minimal access, this reflects our belief in enhanced recovery and the evidence behind it. It has improved the patient journey and patient satisfaction. Many women in our cohort had significant comorbidities with ASA 3, non the less they have tolerated the procedure well laparoscopically. High BMI and comorbidities can be challenging to the surgeon for access and need to use less tilt to improve ventilation, however, they benefit from the quicker recovery associated with laparoscopic surgery (as long they were clear for surgery medically on preassessment)
- We avoid using catheter or drains unless indicated. This reduces the time till the patient is mobile and facilitate next day discharge.
- We had only 4 cases that required conversion to laparotomy. We generally would attempt laparoscopic route when reasonable. We find the clinical examination in theatre valuable in determining the route(not radiological report alone), other factors such as indication and comorbidities, all are considered in the decision. Low rate for conversion to laparotomy reflects good case selection.
- In the year 2015/2016 Of the 27,208 hysterectomies performed in English hospitals: 42.8% (n=11,634) were abdominal, 37.1% (n=10,091) vaginal and 20.2% (5,483) laparoscopic.¹
- We had 6 patients that had to return to theatre, the most common theme was vault dehiscence. Although it is not preventable completely. Promoting Good surgical technique when closing the vault can reduce the risk.

Conclusions

Enhanced recovery and laparoscopic hysterectomy has improved patient journey and recovery. Laparoscopic route is the most used, whenever possible. Service evaluation audit for hysterectomies can help monitor the service and finding areas for improvements.

Introduction

- Enhanced recovery has changed surgical recovery through the past 10 years. It has allowed for shorter hospital stay, improved recovery, subsequently improving patient satisfaction
- Minimal access route for surgery has been integral part of enhanced recovery. Women undergoing laparoscopic hysterectomy tends to recover quicker from surgery and stay less in hospital, compared to abdominal route. It has been suggested that minimal access route should the main method for hysterectomy for benign reason if technically feasible, and for trusts to make arrangements to offer minimal access surgery for patients.
- Benign indications for hysterectomy such as HMB and Fibroids are being managed more with medical methods than before. For hysterectomies done through cancer pathway, the population tends to be older with/without comorbidities. Minimal access surgery is particularly beneficial in this group as it reduces the risk of surgical recovery complications. Also, they tend to have a smaller uterus which is easier to delivery vaginally.
- Hysterectomies done in a DGH will carry a variety of Benign and Cancer pathway indications, hence, the route for hysterectomy used will vary accordingly.

References

1. Royal College of Obstetricians and Gynaecologists LU. *Patterns of Benign Gynaecology Care in English NHS Hospital Trusts 2015/16.*; 2018. URL: <https://www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/clinical-indicators-programme/benign-gynaecological-care/benign-gynaecology-report-2015-16/>(Accessed Jan2022