



Introduction

1 in 8 women require an instrumental birth in the UK. National maternity and perinatal Audit. 2022 states that the rates of 3rd and 4th degree tears are highest in prim parous birth with instruments. Quality improvement audits should look at all the auditable standards as per the GTG-26 in addition to improving birth experience and safety with instrumental births. Our aim was to analyse the Instrumental births (OVD) in ULHT to compare with national standatds and determine trends in its use.

Methodology

Time period for audit : December 2023 TO July 2024

Data collection via midway records and available paper notes at 2 sites
Lincoln hospital (LH) and Pilgrim Hospital (PH)

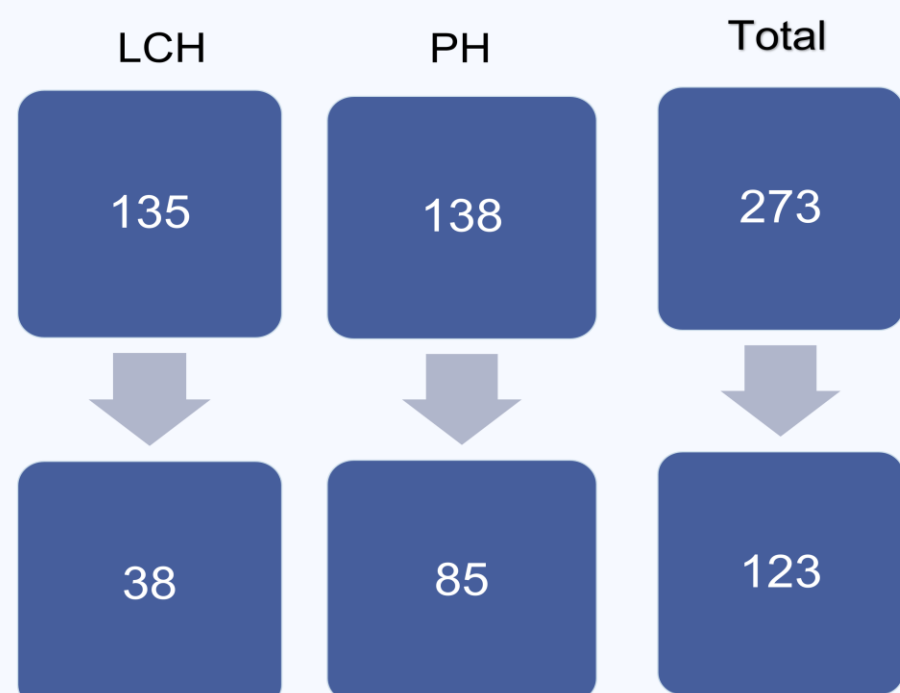
Comparison of data with standards from our QG 1 Form.

Review presentations of 2019 and 2022. (Recommendations and action plans)

Auditable standards	Minimum
Proportion of unsuccessful vaginal births	17.36%
Proportion of sequential instrument use	<50%
Proportion of 3 rd and 4 th degree perineal tears	1-4% vaccum 8-12%forceps
Proportion of birth injuries related to instrumental use	According to injury
Proportion of written or verbal consent	100%
Proportion of written consent for trial of instrumental delivery in theatre	100%
Postpartum Haemorrhage rate	10-40%
Antibiotic use	100%

Results

DATA COLLECTION – 6 MONTHS (JAN TO JULY 2023)



Additional details of 45 % patients retrieved

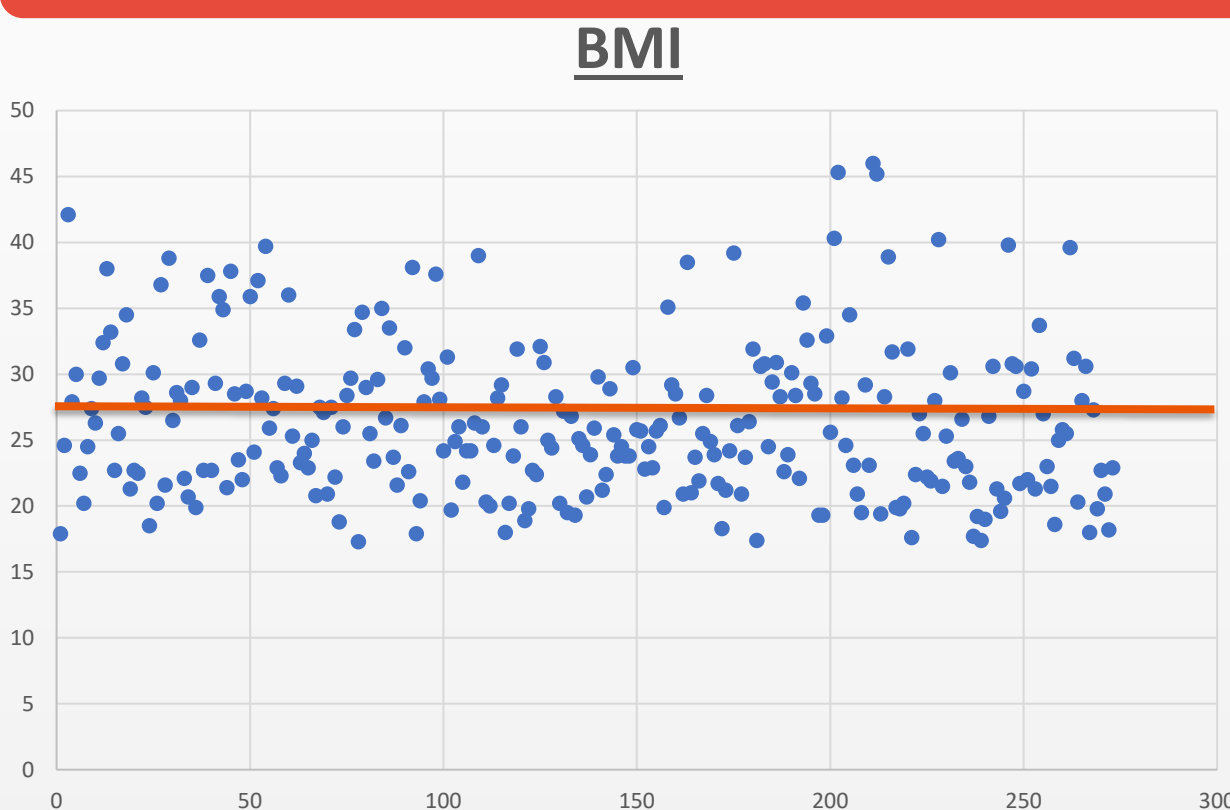
Challenges

Records at 2 sites

Storage area limited notes had to be removed.

Solution : Add additional fields to the data entry on midway , no manual review and improve our accuracy.

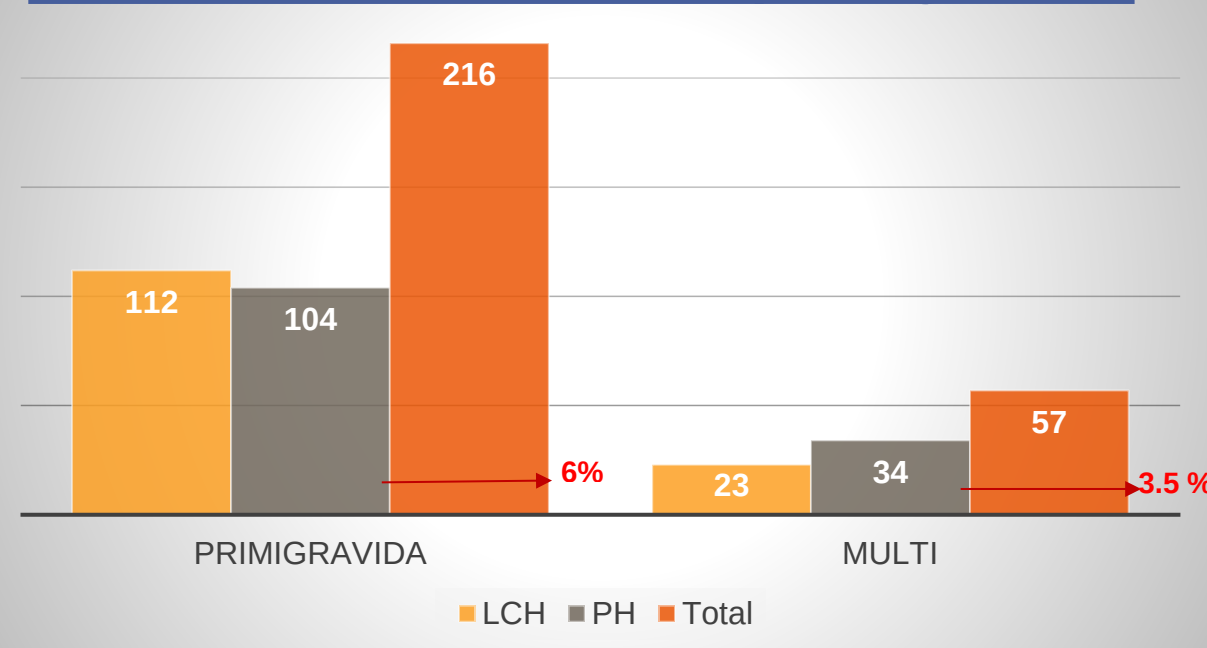
Results



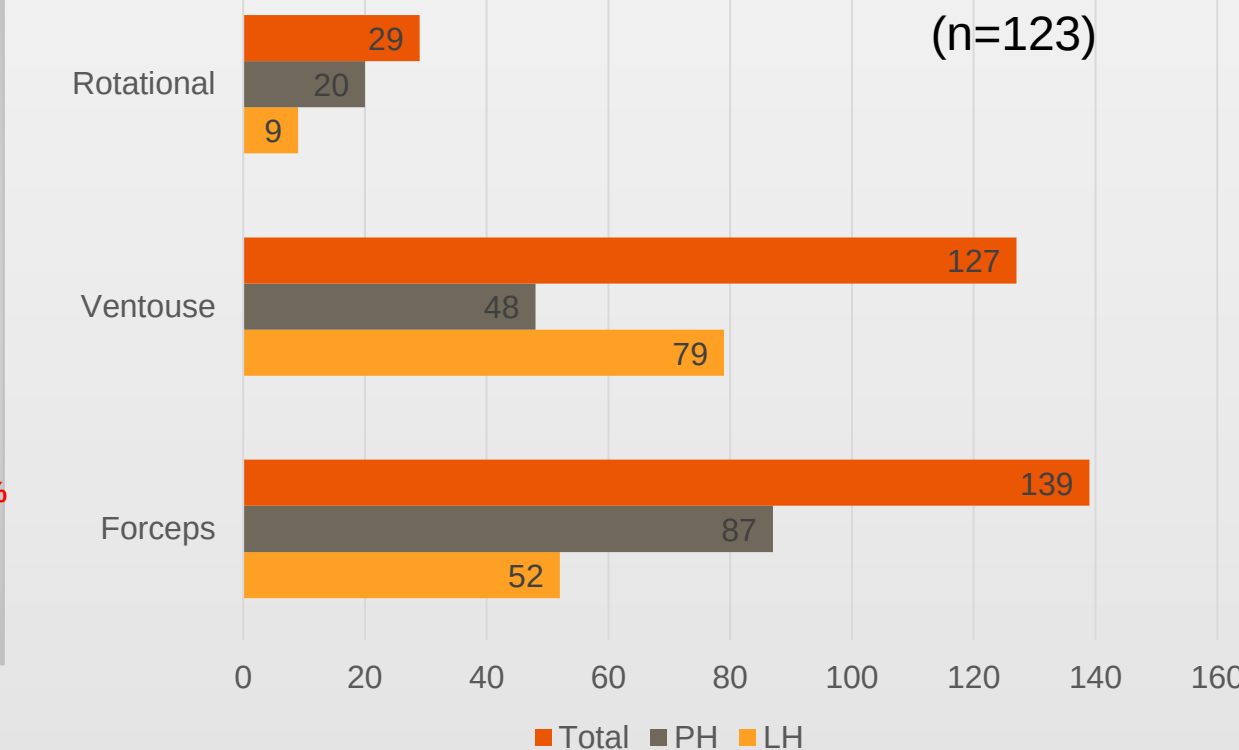
LCH	PH	Total
22.96%	23.1%	23%

Median : 25.5 (17.3 – 46)
It is important to identify high BMI as a predictor for
Failure rate/ Poor outcome/ PPH

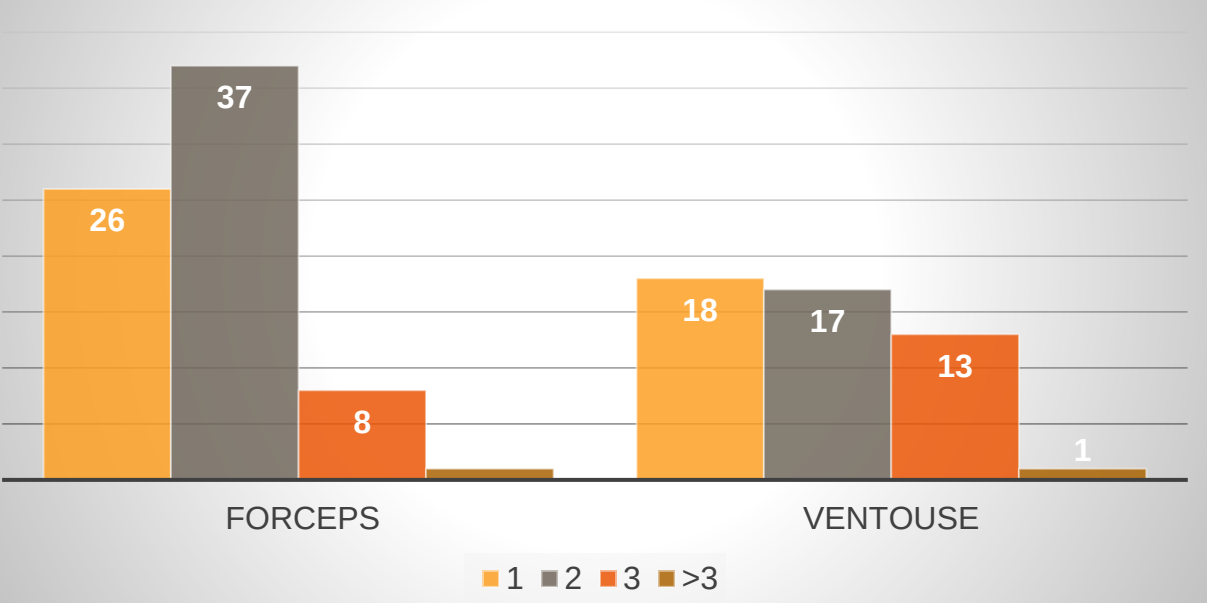
PARITY – 79.12 % were primigravida



Type of instrument



2/123 (1.6 %) deliveries > 3 pulls.



STANDARD 1: Instrumental failure rate

Parameter	LH	PH	Total	Standard
OVD Failure/ CS rate	4/135 (2.9%)	4/138 (2.89%)	8/273 (2.93%)	17-36

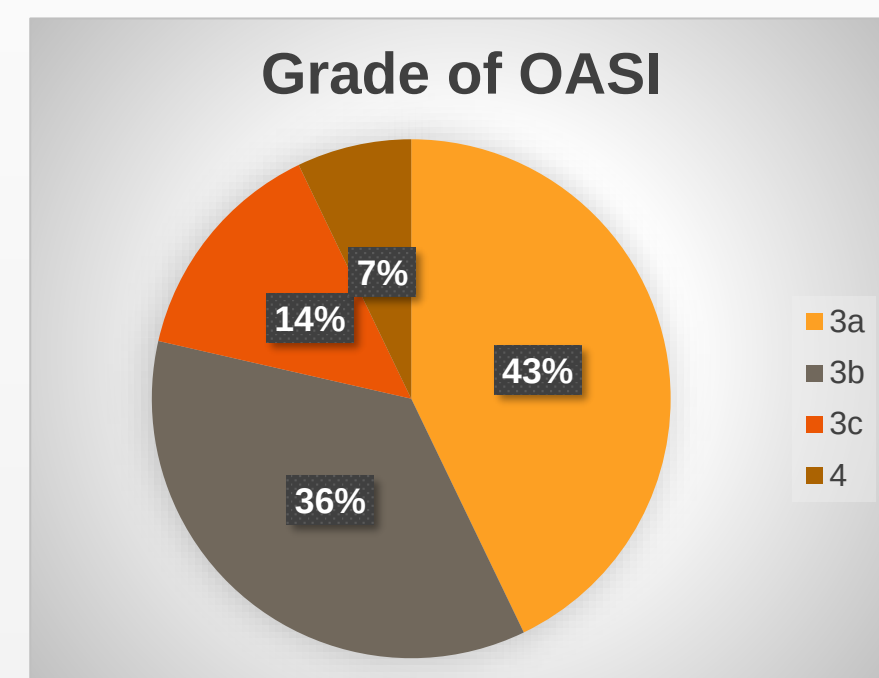
STANDARD 2 : Sequential instrument rate

Parameter	LH	PH	Total	Standard
Second instrument	4 (2.96%)	3(2.17%)	7 (2.56%)	< 50

STANDARD : 3 OBSTETRIC ANAL SPHINCTER INJURY RATES (OASI)

LCH	PH	Total	Standard
7.89%	5.8 %	6.5% V: 2.3 F: 8.6	Vaccum : 1-4 Forceps 8-12

Results



N = 15 (6.5%)

More likely in forceps than ventouse

3b most common injury

PPH rate of 60 %.

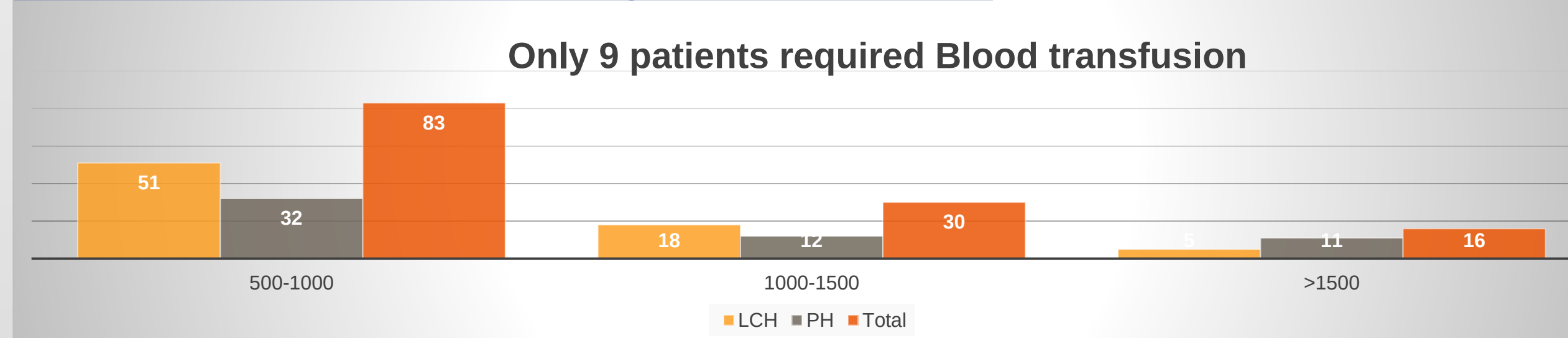
There were no birth injuries in the 273 patients analysed.

STANDARD 4 : Birth Injuries

STANDARD 5 and STANDARD 6 : Consent

100 % Documentation of verbal consent for all instrumentals as well as written consent for those women taken to theatre.

STANDARD 7 : Blood loss during instrumental birth



PPH Rates

54.81 % in LCH	38.41 % in PH	Total 47.25 % / Major 5.86%	10-40 %
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STANDARD 8 : ANTIMICROBIAL USE

Rate of antimicrobial use : 78.86% For the rest it was not given or documented.
LCH : 15.77 % PH : 25.88 %.

Standard : 100 %

COMPARITIVE TREND OVER 5 YEARS (2019 -2024)

	2019	2022	2023	Standard
OVD rate	9.9%	10.23%	8.86%	10- 15%
n	119	111	273	-
Primiparity	79 %	72 %	79.2%	-
BMI	-	>30 41.1%	>30 23 %	-
Type of instrument	V – 29 F - 88	V- 54 F – 59	V-127 F – 139	-
Seq	3	2	7	<50%
Conv LSCS	4%	ND	2.93%	<17%
Number of pulls> 3	2	2	2	-

Results

	2019	2022	2023	Standard
Episiotomy	94.1%	72-81%	84.2%	-
OASI	2-3 %	1.2%	6.5% V: 2.3 F: 8.6	1-4 % vaccum 8-12 % forceps
PPH	40-59%	41-48% 1.5L 3-4 %	47.25% 1.5L 5.86%	10-40%
Neonatal admission	10.7%	15.3%	7.6%	-
Consent	-	-	100%	100%

Success

Adapted New OVD GTG 26 2020 Guidance in the trust.

ULHT antimicrobial policy for OVD was developed.

Limited pulls only 1.6 % of pulls >3.

Introduction of intrapartum scanning

East Midlands regional teaching emphasis on second stage, local teaching for OVD.

Increasing intrumentals by trainees over time period due to encouragement of training..

Documented consent 100 % (written or verbal)

Introduction of PPH tool

Recommendations

Improve Medway documentation – electronic database including all items. Refer to RCOG Birth Proforma for standards of minimum documentation.

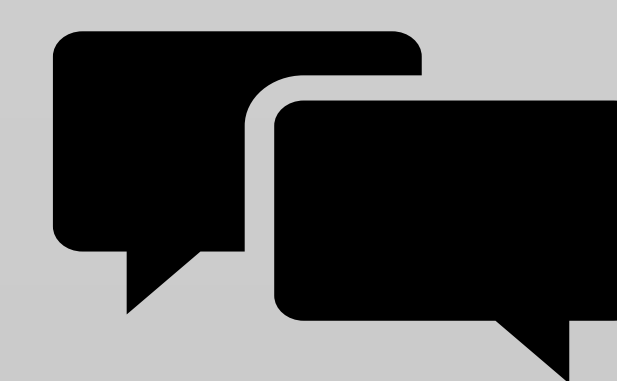
PPH rates to be reduced further by identifying women at high risk.

Antibiotics use and documentation was only 78 % (100%)

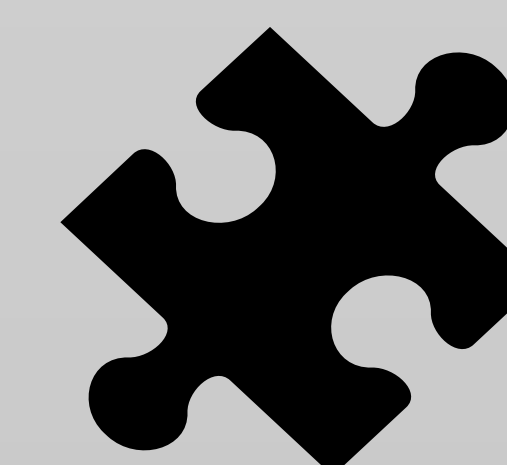
To curb the rising Increasing OASI rates – 6.5 %, even if within national standards.

Increasing intrapartum scan use and encouraging the introduction of birth reflections clinic.

Conclusion



Use of electronic
birth proforma



PPH task group



Reducing OASI rates
locally
Workshops and training