

APPENDIX 1: THISTLE Study – Train the Trainers (T3) programme - includes Demonstration PROMPT Course (Day 1) and Train the Trainers (T3) Day (Day 2)

THISTLE Study				
Demonstration PROMPT 2 Course Programme				
Scottish Simulation Centre, Larbert, Stirling				
Date:				
Time	Programme	Format	Trainer/s:	
09.15	Coffee and Registration			
09.30	Introduction to PROMPT Course and THISTLE study Includes 'Ice Breaker'	Lecture		
10.15	Hypertensive disorders in pregnancy	Lecture and video		
10.45	Major Obstetric Haemorrhage	Lecture and video		
11.15	Tea and Coffee			
11.30	Maternal Collapse and Basic Life Support	Lecture and hands on BLS		
12.00	Maternal Sepsis, recognition of the unwell woman	Lecture		
12.45	Fetal monitoring in labour	Interactive lecture		
13.30	Lunch			
	Obstetric Emergency Work Stations 30 mins each station 1 team per station. Teams to follow work station timetable for rotation to each station			
	Team A	Team B	Team C	Team D
14.00 – 14.30	Obstetric haemorrhage + teamwork	Severe hypertension/ eclampsia + teamwork	Recognition of unwell pregnant woman + teamwork	Shoulder dystocia (presentation and hands on)
14.30 – 15.00	Severe Hypertension/ eclampsia + teamwork	Obstetric Haemorrhage + teamwork	Shoulder dystocia (presentation + hands on)	Recognition of unwell pregnant woman + teamwork
15.00 – 15.30	Coffee Break			
15.30 – 16.00	Shoulder dystocia (presentation + hands on)	Recognition of unwell pregnant woman + teamwork	Obstetric Haemorrhage + teamwork	Severe Hypertension/ eclampsia + teamwork
16.00 – 16.30	Recognition of unwell pregnant woman + teamwork	Shoulder dystocia (presentation + hands on)	Severe Hypertension/ eclampsia+ teamwork	Obstetric Haemorrhage + teamwork
16.30 – 16.45	General Feedback Evaluation sheets Certificates			

THISTLE Study

PROMPT 2 TRAIN THE TRAINERS (T3) DAY PROGRAMME - 2014

Venue: Scottish Simulation Centre, Larbert, Stirling

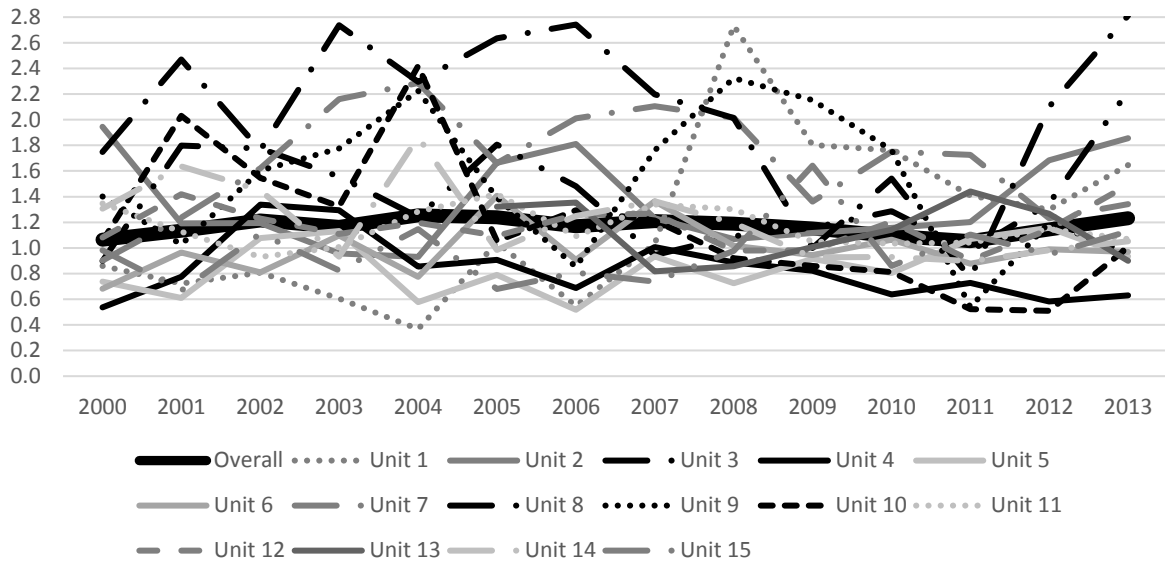
- 09.15 *REGISTRATION and REFRESHMENTS*
- 09.30 Welcome and introduction (including PMF Charity)
- 10.15 PROMPT 2 'Course in a Box'
- 10.45 Team working
- 11.15 *REFRESHMENTS*
- 11.30 How to roll-out PROMPT courses in your own unit
- 12.00 Drill Facilitation (include PROMPT video)
- 12.30 Teams divide up (1 team in each group):
- Red & Yellow** groups:
 CTG session
- Blue & Green** groups:
 Maternal Collapse/anaesthetic emergencies (concentrating on setting up and debriefing):
- 13.00 Groups **Red & Yellow** and **Blue & Green** groups swap round
- 13.30 *LUNCH*
- 2.00 – 2.45pm Teams set up their own drills: (PPH & Eclampsia)
 Red & Yellow and **Blue & Green**
- 2.45pm Implementation and sustainability of multi-professional training and working
- 3.15pm Summary and questions
- 3.30pm *CLOSE of MEETING*

APPENDIX 2: The THISTLE Study - Local Training Record

This form should be completed following each of your local PROMPT Courses, and returned to the Thistle Study Office in the envelope provided in your Thistle Study Follow-up pack. Thank you.

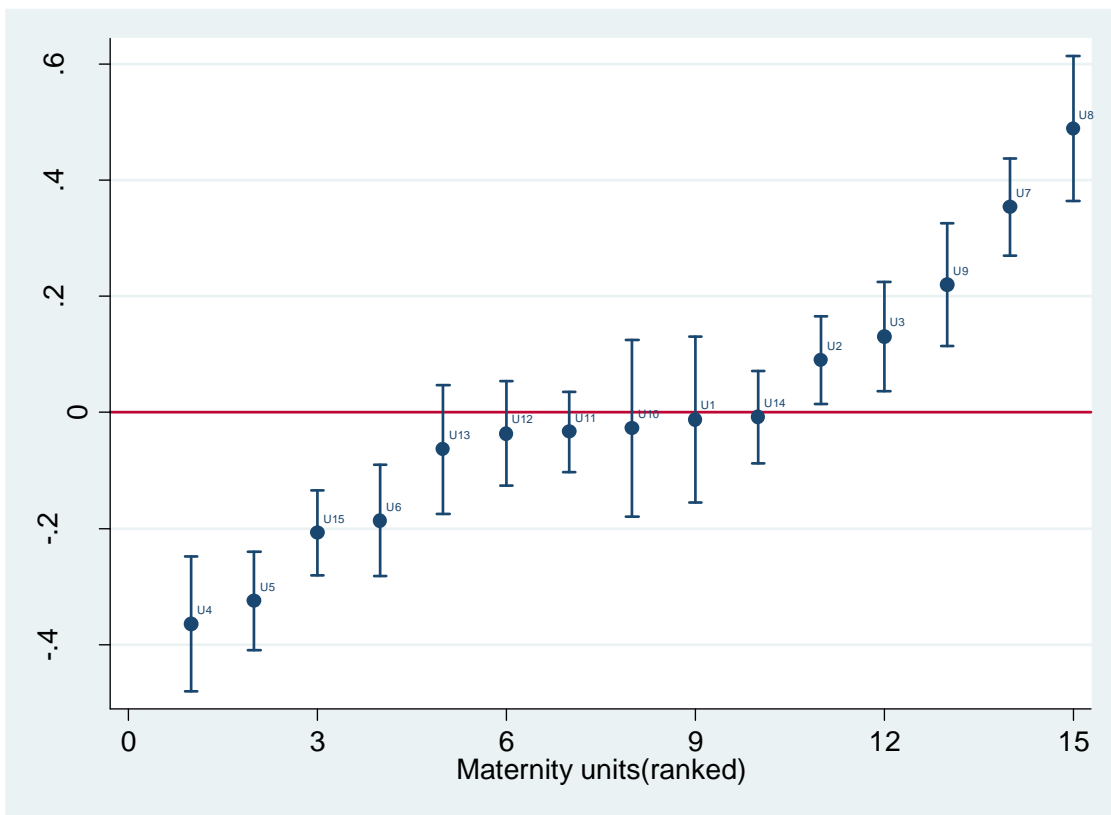
Maternity Unit:	
Date of Local PROMPT Course:	
Total number of staff attending local course:	
Number of Midwives trained:	
Band 5	
Band 6	
Band 7	
Midwifery Managers/Matrons (Band 8 and above)	
Number of Consultant Obstetricians trained:	
Number of Obstetric Trainees trained:	
Number of Obstetric Anaesthetists trained:	
Number of HCA's/MCA's trained:	
Number and types of other staff trained:	
N.B Please attach a copy of your Local PROMPT Course programme to this form and return to the Thistle Study Office in the envelope provided. Thank you.	

Appendix 3: Pre-intervention context



Appendix 3-figure 1: Prevalence rates of Apgar<math><7^5\text{mins}</math> (%) observed between 2000-13 across the large Scottish maternity units

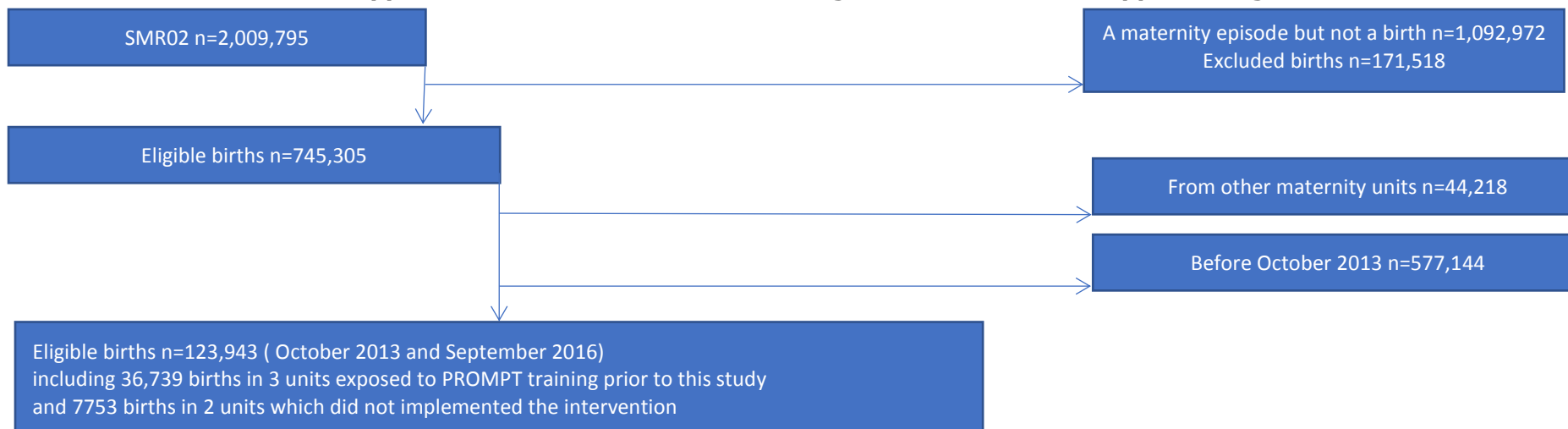
A two-level multilevel logistic regression model with data clustered within maternity units was used to identify units with a rate of Apgar<math><7^5\text{mins}</math> below or above the overall rate observed between 2000-2013 (using the unit residuals). Units below, above or not different from the overall rate were respectively considered as having a low, high or medium “pre-study” Apgar<math><7^5\text{mins}</math> rate status.



Appendix 3-figure 2: Comparison of each maternity unit prevalence rate of Apgar<math><7^5\text{mins}</math> observed in each maternity unit to the overall prevalence rate observed between 2000-13 across the 15 large Scottish maternity units*

*units with a confidence interval below/above the red line have a lower/higher Apgar<math><7^5\text{mins}</math> rate than the overall prevalence rate observed across the country.

Appendix 4: Detailed Consort flow diagram of the Thistle Stepped-Wedge trial



Units	Control period				Intervention period 1				Intervention period 2				Intervention period 3				Follow-up period 1				Follow-up period 2			
	Birth (n=)	Apgar <7 _{5mins} (n=)	Missing Apgar score (n=)	Local training session (n=)	Birth (n=)	Apgar <7 _{5mins} (n=)	Missing Apgar score (n=)	Local training session (n=)	Birth (n=)	Apgar <7 _{5mins} (n=)	Missing Apgar score (n=)	Local training session (n=)	Birth (n=)	Apgar <7 _{5mins} (n=)	Missing Apgar score (n=)	Local training session (n=)	Birth (n=)	Apgar <7 _{5mins} (n=)	Missing Apgar score (n=)	Local training session (n=)	Birth (n=)	Apgar <7 _{5mins} (n=)	Missing Apgar score (n=)	Local training session (n=)
Maternity unit 1*	538	5	2	0	508	8	3	0	461	6	2	0	511	6	0	0	477	18	1	0	519	11	2	0
Maternity unit 2	1758	40	2	0	1901	36	2	0	1790	44	2	0	1778	53	1	2	1704	44	5	4	1773	41	7	4
Maternity unit 3	1023	24	3	0	1074	20	2	1	988	31	1	1	1069	39	0	1	991	33	2	1	1013	36	6	1
Maternity unit 4	1268	4	8	0	1348	4	18	0	1219	6	27	0	1290	5	17	1	1282	6	26	2	1353	3	99	0
Maternity unit 5	2105	22	21	0	2424	27	41	0	2059	23	43	0	2170	22	56	0	1947	23	41	1	1981	33	34	0
Maternity unit 6	1326	16	9	0	1368	15	8	0	1363	13	5	6	1354	9	4	4	1327	12	8	2	1327	10	6	3
Maternity unit 7	1209	14	0	0	1357	26	0	1	1167	23	0	5	1263	19	0	4	1191	27	1	6	1223	27	0	4
Maternity unit 8	437	14	1	0	465	14	1	1	398	10	0	1	450	9	11	1	473	18	3	0	433	12	1	0
Maternity unit 9*	739	15	0	0	858	13	2	0	794	9	1	0	775	7	1	0	784	13	0	0	789	10	0	0
Maternity unit 10	473	2	4	0	444	3	2	0	398	2	1	2	455	4	0	2	402	2	1	2	420	3	4	2
Maternity unit 11	2091	16	9	0	2375	26	33	0	2017	28	25	0	2308	24	34	1	2098	16	23	0	2261	20	4	2
Maternity unit 12	1435	17	1	0	1416	23	1	0	1363	13	5	2	1369	27	4	2	1292	15	0	3	1395	22	3	2
Maternity unit 13	1423	14	10	2	1671	24	0	2	1475	22	6	2	1475	18	9	3	1396	22	4	2	1513	22	1	3
Maternity unit 14	1831	29	4	2	1987	27	6	2	1864	36	9	3	1992	30	6	2	1814	29	8	3	1957	20	2	2
Maternity unit 15	2758	25	19	2	2855	38	20	3	2570	37	22	3	2764	24	8	1	2651	28	17	2	2743	29	25	3

* refused to implement the intervention Not exposed to the intervention Exposed to the intervention Exposed to the intervention prior to this study

Appendix 5: Intervention implementation and authenticity

Appendix 5 - table 1: Number of local PROMPT courses delivered by 'in-house' trainers per unit, and numbers of staff trained by professional group*

	Staff trained	Courses	Midwives**	Senior Midwives***	Consultant Obstetricians	Obstetric trainees	Anaesthetists	HCA's#	Other staff##
1	Declined to participate								
2	93	9	62	0	1	13	2	13	2
3	120	5	51	0	6	20	25	2	16
4	41	3	15	1	4	10	7	0	4
5	24	1	10	0	4	5	5	0	0
6	365	15	208	7	14	31	33	63	9
7	238	20	179	0	14	19	9	0	17
8	38	5	30	0	2	1	0	0	5
9	Declined to participate								
10	189	8	105	0	5	21	26	20	12
11	70	3	33	0	5	14	12	4	2
12	214	9	151	2	5	29	11	1	15
13~	410	13	319	3	5	47	28	0	8
14~	336	12	245	0	2	35	13	24	17
15~	354	12	220	0	13	55	58	2	6

* For anonymity reasons and ease of implementation, training data were collected after each training session as total number of staff attending by staff group. This included full and part-time staff. We cannot tell from the information provided in the local training records if staff attended more than once during the study period.

** NHS pay scale Band 5, 6, 7

*** NHS pay scale Band 8

Health Care Assistant

Includes theatre staff, operating department practitioner, paramedics, A&E, anaesthetic, theatre or neonatal nurse, student midwife or doctor, advanced neonatal nurse practitioners and neonatologist.

~Units 13-15 were trained prior to this study, but have been running regular, local multi-professional training. The totals provided for those units correspond to the training sessions implemented during the timeframe defined by the intervention period 1 and follow-up 2 periods

Appendix 5 - table 2: Information on local implementation of PROMPT Courses taken from THISTLE local training records and example programmes

Maternity Unit	• Multi-professional attendance? • Total staff trained in the study period	Inclusion of PROMPT electronic fetal monitoring training?	Inclusion of shoulder dystocia training?	Inclusion of team working?	• Early or late adopter?# • No of attendees per course • Total number of courses during study period
1	Declined to participate				
2	• YES initially • 93 staff	NO	YES	Human Factors lecture + multiprofessional teams for drills	• Late adopter • 12 -15 attendees • 9 training days
3	• YES • 120 staff	YES	YES	Comments on importance of good communication	• Early adopter • 25 – 30 attendees • 5 training days
4	• YES • 41 staff	NO	In 1/3 of sessions	Multiprofessional teams for drills	• Late adopter • 15 -20 attendees per course • 3 training days
5	• YES • 24 staff	NO	YES	Multiprofessional teams for drills	• Late adopter • 25 attendees • 1 training day
6	• YES • 365 staff	NO	YES	Teamwork lecture + multiprofessional teams for drills	• Early adopter • 25 – 30 attendees • 15 training days
7	• YES • 238 staff	NO	YES	Teamwork lecture + multiprofessional teams for drills	• Early adopter • 10 -12 attendees 20 training days
8	• NO • 38 staff	For first 2(of 5) sessions only	NO	Teamwork lecture + multiprofessional teams for drills but mostly only midwives attending	• Early adopter • 6-10 attendees • 5 sessions
9	Declined to participate				
10	• YES • 189 staff	NO	YES	Teamwork lecture + multiprofessional teams for drills	• Early adopter • 20 – 25 attendees • 8 sessions
11	• YES • 70 staff	NO	YES	Teamwork lecture + multiprofessional teams for drills	• Late adopter • 25 - 30 attendees • 3 sessions
12	• YES • 214 staff	NO	YES	Teamwork lecture + multiprofessional teams for drills	• Early adopter • 25 – 30 attendees • 9 sessions

13~	<ul style="list-style-type: none"> • YES • 410 staff 	NO	Alternate years	Teamwork lecture + multiprofessional teams for drills	<ul style="list-style-type: none"> • 25 -30 attendees • 13 sessions
14~	<ul style="list-style-type: none"> • YES • 336 staff 	YES	YES	Teamwork lecture + multiprofessional teams for drills	<ul style="list-style-type: none"> • 25 – 30 attendees • 12 sessions
15~	<ul style="list-style-type: none"> • YES • 354 staff 	YES	YES	Teamwork lecture + multiprofessional teams for drills	<ul style="list-style-type: none"> • 30 - 35 attendees 12 sessions

#Randomised maternity units started prior to the start date of their allocated intervention step or during the intervention step were considered as early intervention adopters. Units starting after the end of their allocated intervention step were considered as late adopters.

~Units 13-15 were trained prior to this study, but have been running regular, local multi-professional training.