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### **FOREWORD**

Dear Colleagues,

As nurses and midwives, the continuous improvement of patient/client care is a central component of our ethical responsibility, professional accountability and nursing and midwifery values. Every day we engage in numerous healthcare interventions where our knowledge, clinical expertise and professional judgement guide our practice to ensure high quality, safe care delivery. Knowing however what quality nursing and midwifery care is, and how to measure it has always been a challenge, both in Ireland and internationally.

Many quality improvement approaches in healthcare tend to focus on outcomes, such as morbidity, length of stay, readmission rates, infection rates, number of medication errors and pressure ulcers. Measuring outcomes is an important indicator for healthcare and provides a retrospective view of the quality and safety of care. To determine however the quality of nursing and midwifery care, and in particular our contribution to patient safety and continuous quality improvement, we need to be able to clearly articulate and measure what it is that we do. These are the important aspects of our daily professional practice, the fundamentals of care, often referred to as our clinical care processes.

In 2016, my Office commissioned a national research study to establish from both the academic literature and the consensus of front-line nurses and midwives, the important dimensions of nursing and midwifery care that should be measured, reflecting on the processes by which we provide care, and the values underpinning our practice. The voice of nurses and midwives in this research has been the major force to communicate the professional standards for excellence in care quality. The culmination of this work has resulted in a suite of seven Quality-Care Metrics reports.

I wish to acknowledge the clinical leadership of all the nurses and midwives who contributed and engaged in this research. In particular I wish to thank the Directors of Nursing and Midwifery for their support, the Directors and Project Officers of the Nursing and Midwifery Planning and Development Units, members of the work stream working groups and the research teams of University College Dublin, University of Limerick, and the National University of Ireland Galway who guided us through the academic journey. I would also like to acknowledge the Patient Representatives for their contribution and the expert external reviewer, Professor Mary Ellen Glasgow, Dean and Professor of Nursing, Duquesne University, Pittsburgh, USA. Details of the governance structure and membership of the range of stakeholders who supported this work are outlined in the Appendices.

Finally, I wish to convey my thanks to Dr Anne Gallen for taking the national lead to coordinate this significant quality initiative that supports nurses and midwives at the point of care delivery to engage in continuous quality improvement and positively influence the patient/client experience.



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## GLOSSARY/ ABBREVIATION OF TERMS

HSE Health Service Executive MDA Misuse of Drugs Act

NMBI Nursing and Midwifery Board of Ireland

NMPDU Nursing and Midwifery Planning and Development Unit
ONMSD Office of the Nursing and Midwifery Services Director

**QCM** Quality Care-Metrics

**SOP** Standard Operating Procedure

## ACKNOWLEDGEMENTS

The Nursing and Midwifery Quality Care-Metrics Project was commissioned by the HSE Office of Nursing and Midwifery Services. The research team has worked closely with the Nursing and Midwifery Planning and Development Unit (NMPDU) Directors, Project Officers and Work-stream Working Group members. Midwives nationally have contributed greatly to the project by completing the Delphi Rounds. The research team is most grateful to all the NMPDU staff, Workstream Working Group members, Directors of Midwifery, Practice Development Coordinators, Service User and all who have helped develop this evidence-based suite of quality care process metrics and indicators for midwifery. We are particularly grateful to all the midwives who completed the surveys.

We would also like to acknowledge Professor Mary Ellen Glasgow, Duquesne University, Pittsburgh, USA, who contributed as the expert external reviewer to the research study.

### **EXECUTIVE SUMMARY**

#### BACKGROUND

This report presents the methods and findings of the research project, which identified and prioritised the suite of Quality Care-Metrics (QCM) and their associated indicators for midwifery care processes. To achieve this purpose, seven work streams (acute, mental health, public health nursing, children, older people services, intellectual disability and midwifery) were established within a governance structure (Appendix A) within which each stream had an Nursing and Midwifery Planning and Development Unit (NMPDU) support and Academic Steering Group (Appendix B). Governance for the overall Quality Care Metrics Project across workstreams was vested in a National Governance Steering Group (Appendix C). Each stream established an expert Working Group, which was responsible for the development of evidence based standardised Quality Care-Metrics, aligned to the delivery of quality and safe care by midwives and nurses working within that setting. The Midwifery Workstream Working Group membership was representative of all grades of staff and also geographically and service representative (Appendix D).

#### AIM

This study identified and prioritised the suite of Quality Care-Metrics (QCM) and their associated indicators for midwifery care processes.

#### **METHODS**

The study design has four phases as follows:

**Phase 1:** A systematic literature review to identify midwifery care process metrics and the associated measurement indicators for same.

**Phase 2:** A two-round, online Delphi survey of midwives to develop consensus on the set of midwifery care process metrics to be measured.

**Phase 3:** A two-round online Delphi survey of midwives to develop consensus on the indicators that will be used to measure prioritised metrics.

**Phase 4:** A face-to-face consensus meeting with key stakeholders to review the findings and build consensus on metrics and indicators.

#### RESULTS

Following the QCM Midwifery Metrics consensus meeting, 18 metrics and 93 indicators were prioritised for inclusion in the 2018 suite of Midwifery Metrics. Agreed metrics are:

- 1. Midwifery Plan of Care
- 2. Booking
- 3. Abdominal examination (after 24 weeks gestation) on Current or Last Assessment
- 4. Intrapartum Fetal Wellbeing
- 5. Intrapartum Fetal wellbeing cardiotocography (CTG)
- 6. Intrapartum Maternal wellbeing
- 7. Risk assessment for Venous Thromboembolism (VTE) in Pregnancy & the Puerperium
- 8. Immediate post birth care
- 9. Communication (Clinical Midwifery Handover)
- 10. Pain management (other than labour)
- 11. Infant feeding
- 12. Postnatal care (daily midwifery care processes)
- 13. Post birth discharge planning for home
- 14. Medication administration
- 15. Medication, Storage and Custody (excluding MDAs)
- 16. MDA Drugs
- 17. Intravenous fluid therapy
- 18. Clinical Record Keeping

#### CONCLUSION

The research process and final set of metrics and indicators presented in this report reflect the methodologically robust and rigorous process outlined. Importantly, the widespread engagement in the project by midwives of all grades and geographical areas nationally, via the work stream groups and project officers, has ensured that there is a real sense of ownership of the metrics and indicators from midwives across settings.

#### RECOMMENDATION

The development of this suite of process metrics and indicators for midwifery practice provides an opportunity for Ireland to take the lead internationally in generating evidence on the effectiveness of midwifery process metrics and associated indicators.

This initial work presented in this report should be followed up by a rigorous evaluation of the impact of the new suite of metrics on midwifery care processes. Designs which control insofar as possible for confounding variables such as interrupted time series studies should be considered. This should be determined prior to implementation so that opportunities for baseline assessments are not lost prior to implementation.

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## INTRODUCTION

In 2014, demand increased from Directors of Nursing & Midwifery to roll out metrics nationally. As a result, the Office of Nursing & Midwifery Services Director (ONMSD) agreed to provide the national direction and support within a guiding framework to embed a system of nursing and midwifery metrics within healthcare organisations (HSE 2015) across 7 work streams i.e., Community/Public Health, Midwifery, Acute, Older People, Mental Health, Children's and Intellectual Disability.

#### OVERALL AIM

This study identified and prioritised the suite of Quality Care-Metrics (QCM) and their associated indicators for midwifery care processes.

## PHASE 1: Systematic Review

#### AIM

The systematic review sought to identify reported quality care process metrics and associated indicators across across 7 work streams i.e., Public Health Nursing, Midwifery, Acute, Older People, Mental Health, Children's and Intellectual Disability.

#### **METHODS**

#### INCLUSION CRITERIA

**Quality Care Process Metrics** are defined as quantifiable measures that capture quality in terms of how (or to what extent) midwifery or nursing care is performed in relation to an agreed standard.

**Quality Care Process Indicators** are defined as quantifiable measures that capture what midwives or nurses are doing to provide that care in relation to a specific tool or method.

#### DATABASES SEARCHED

Eight databases were searched systematically i.e., PubMed, Excerpta Medica database (EMBASE), PyscINFO, Applied Social Sciences Index and Abstracts (ASSIA), Cumulative Index of Nursing and Allied Health Literature (CINAHL), the Cochrane Database of Systematic Reviews (CDSR), Cochrane Central Register of Controlled Trials (CENTRAL), and the Database of Abstract of Reviews of Effects (DARE). The search strategy was "nurs\*:ab,ti OR midwi\*:ab,ti AND ('minimum data set':ab,ti OR indicator\*:ab,ti OR metric\*:ab,ti OR 'quality measure\*':ab,ti) AND [english]/lim AND [2007-2017]/py." Searches were restricted to 2007-2017. No restrictions on study design, outcomes, controls, comparators or language were applied. Grey literature was obtained from both database searches and unpublished materials literature submitted from working group members or from other maternity units.

#### STUDY SELECTION

Studies were included if participants were (i) registered nurses or midwives working in or (ii) were persons in receipt of nursing or midwifery care within public health nursing, midwifery, acute, older people, mental health, children's and intellectual disability care services and (iii) if the study made clear reference to nursing or midwifery care processes and identified a specific quality process in use or proposed use. Citations identified from the search were screened independently by two reviewers. Any disagreements were resolved by the two reviewers, and a third reviewer consulted where necessary. At full text screening, included studies were tagged to work stream descriptors. Studies relevant to each workstream were reviewed by two reviewers from the appropriate workstream.

#### DATA EXTRACTION

Data were abstracted onto a purposefully designed data extraction form used across all seven work streams. Data abstracted included: study aim/objective, study population, study context/setting, relevant workstream, nursing or midwifery process in current/proposed use, measure (metric/indicator) of nursing or midwifery care process, tool or method used to measure metric, and standard/statement of defined level of quality. Workstream specific data extraction was conducted by two reviewers using a purposefully designed data extraction tool.

#### **RESULTS**

In total, 7,524 unique citations were identified across all workstreams. An additional 42 citations were identified for the midwifery workstream through grey literature searches. All citations were screened independently for inclusion by two reviewers. Of these, 260 were identified for full text screening after which 206 were excluded. These articles were then tagged depending on their relevance to each of the seven workstreams i.e., acute, children, intellectual disability, mental health, midwifery, older person, or public health nursing services. Twelve papers were tagged as relevant to the midwifery workstream; one was later excluded leaving 11 published papers included.1-11 Of the 42 citations identified through grey literature searches, 4 were excluded leaving 38. 12-49 This left 49 papers, in total, included (Figure 1). Significantly, grey literature included the previously existing suite of midwifery care process metrics from the Midwifery Standard Operating Procedure for Nursing and Midwifery Quality Care-Metrics (see Appendix E). The findings of the systematic literature review were discussed by working group members and informed the development of the first round of the Delphi survey instrument.

We identified 22 metrics from the systematic review and these metrics were included in the Phase 2, Round 1 Delphi survey instrument.

Grey literature 44 Citation(s) During Data Extraction 5 Articles Excluded 10 Citation(s) DARES 294 Citation(s) CENTRAL After Title/Abstract Screen 7306 Articles Excluded After Full Text Screen 206 Articles Excluded 149 Citation(s) CDSR 260 Articles Retrieved 7566 Non-Duplicate 49 Articles Included Inclusion/Exclusion Inclusion/Exclusion Citations Screened 2792 Citation(s) Criteria Applied Criteria Applied CINAHL 1297 Citation(s) ASSIA 3846 Citation(s) PubMed 5597 Citation(s) EMBASE 1319 Citation(s) PsychINFO

Figure 1: Study Selection Process Flow Diagram for Midwifery Work Stream

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

## PHASES 2 & 3 DELPHI STUDIES

#### AIM

To conduct two, two-round Delphi surveys (phase 2 & 3) to identify and prioritise a suite of (a) metrics and (b) their indicators for use in measuring the quality of midwifery care processes.

#### **METHODS**

#### **PARTICIPANTS**

The target population was any midwife working in any sphere of midwifery practice in the Republic of Ireland. With the support of the Office of the Nursing and Midwifery Services Director (ONMSD), Senior Clinical Managers distributed an information pack to potential participants within their respective hospital or community area. This information pack provided potential participants with information on the study, invited participation and asked those who wished to participate to complete a short form containing contact details, including their email address, and to return this form to the Senior Clinical Manager. The managers and any potential participants could also contact the research team directly to clarify any issues or seek further information about the survey and the research prior to making a decision to participate. Snowball sampling was used also, whereby participants were asked to forward the invitation to others whom they regarded as meeting the sampling criteria. Two email invitations were sent to all potential participants, one week apart.

There is an absence of guidance on optimal sample size requirements for consensus development studies such as this. We therefore estimated our required completed survey sample sizes based on that which would be required for the sample to be representative of a given total population of 1884 midwives using a 95% confidence level and a confidence interval of  $\pm$  5. Estimates indicated we required 318 completed surveys.

#### PHASE 2: TWO-ROUND DELPHI (PRIORITISING METRICS)

#### **Round 1**

The first-round metric instrument contained a short questionnaire seeking participant demographic data and the rating instrument containing 22 metrics identified in the systematic review. To facilitate the capture of metrics not identified in the systematic review, participants were invited, in this round, to add any further 'new' metrics that they considered important or relevant for inclusion in the metric dataset.

Participants were asked to rate the importance of these metrics for inclusion using a 9-point Likert scale i.e., 1-3 = not important, 4-6 = unsure of importance and 7-9 = important.

#### Round 2

In round 2, participants who responded to round 1 were presented again with all of the metrics after analysis of responses from round 1 (see 'Data analysis' below for details). Additional metrics identified by participants in round 1 were included in round 2. For each metric retained from round 1, the overall rating results (percentages), for each metric was presented. Participants were also sent confidential copies of their individual Round 1 survey responses and asked to re-rate the importance of each metric with knowledge of their and the overall group's previous rating for that metric. In addition, participants were asked to rate outcomes identified newly from round 1. All ratings used the same Likert-type scale used in round 1.

#### **Data analysis**

In round 2 analysis, consensus on inclusion of a metric was determined where 70% or more participants rated the metric a 7 to 9 and less than 15% of participants rated the metric a 1 to 3.

#### PHASE 3: TWO-ROUND DELPHI (PRIORITISING INDICATORS)

#### **Round 1**

The first-round indicator instrument contained a short questionnaire seeking participant demographic data and the rating instrument containing metrics identified in Phase 2 and the indicators for these metrics identified from the systematic review. To facilitate the capture of indicators not identified in the review, participants were invited to add any further 'new' indicators they considered important or relevant for inclusion as an indicator to measure the respective metric(s).

Participants were asked to rate the importance of these indicators for inclusion in the respective metric using a 9-point Likert scale i.e., 1-3 = not important, 4-6 = unsure of importance and 7-9 = important.

#### Round 2

In round 2, participants who responded to round 1 were presented again with all of the metrics and their indicators after analysis of responses from round 1 (see 'data analysis' below for details). Additional indicators identified by participants in round 1 were included in round 2. For each indicator retained from round 1, the rating results (percentages) for each were presented. Participants were sent their individual Round 1 survey responses and asked to re-rate the importance of each indicator with knowledge of their and the overall group's previous rating for that indicator. In addition, participants were asked to rate indicators identified newly from round 1. All ratings used the same Likert-type scale used in round 1.

#### **Data analysis**

In the round 2 analysis, consensus on inclusion of an indicator was determined where 70% or more participants rated the indicator a 7 to 9 and less than 15% of participants rated the indicator a 1 to 3.

#### **Ethics**

Participation in the study was voluntary. All potential participants received a study information sheet, which outlined the purpose of the study, the risks and benefits of participation, time commitment and were afforded the opportunity to ask any questions. All participants had to indicate their explicit consent to participate by clicking on an 'I agree' button at the end of the online participant information sheet before they could access the survey. Ethical approval to conduct this study was received from Research Ethics Committee at National University of Ireland, Galway on the 13th of December 2016.

#### RESULTS

#### PHASE 2: TWO-ROUND DELPHI (PRIORITISING METRICS)

A total of 441 midwives expressed an interest, by email, in participating in round 1 of which 263 participated in round 1 of the metric survey. Most respondents to round 1 (see table 1) were staff midwives (34.6%, n = 91) or Clinical midwife managers (2) (24.3%, n = 64) (see Table 2). A large proportion of participants identified their grade of midwifery as 'other' (12.2%, n=32). Of these, most were either clinical skills facilitators (18.8%, n=6) or clinical placement coordinators (18.8%, n=6).

TABLE 1: MIDWIFERY PARTICIPANTS BY GRADE: ROUND 1 METRICS SURVEY

GRADE	Number of Participants in Round 1	%
Staff Midwife	91	(34.6)
Clinical midwife manager (1)	18	(6.8)
Clinical midwife manager (2)	64	(24.3)
Clinical midwife manager (3)	14	(5.3)
Assistant Director of Midwifery	20	(7.6)
Director of Midwifery	8	(3.0)
Clinical Midwife Specialist	13	(4.9)
Advanced Midwife Practitioner	3	(1.1)
Other	32	(12.2)
Total	263	

Of the 263 respondents who completed round 1, 69.1% (n=183) completed Round 2. Most respondents (see Table 2) to round 2 were staff midwives (26.8%, n=49) or clinical midwife managers (grade 2) (29.5%, n=54). A large proportion of the participants in round 2 also identified their grade of midwifery as 'other' (27.5%, n=38).

TABLE 2: MIDWIFERY PARTICIPANTS BY GRADE AT CLOSE OF ROUND 2

GRADE	Number of Participants per Grade	%
Staff Midwife	49	(26.8)
Clinical Manager (1)	8	(4.4)
Clinical Manager (2)	54	(29.5)
Clinical Manager (3)	8	(4.4)
Assistant Director of Midwifery	17	(9.3)
Director of Midwifery	9	(4.9)
Other	38	(27.5)
Total	183	

Of the 22 metrics included in Round 1, participants rated 21 metrics as important for inclusion in the suite. In addition, 9 metrics were newly identified by participants. These plus the 21 metrics were carried forward to Round 2. In Round 2, participants rated all 30 metrics as important for inclusion in the suite. These 30 metrics were discussed in detail by the Working Group. Of the 30 metrics, three i.e., 'Women's Experience', 'Irish-Maternity Early Warning Score (I-MEWS)' and 'Invasive Medical Devices' were identified as having a separate process either underway or planned for which indicators were and would be developed. Therefore, these were not included in Phase 3 of the project within which indicators to measure adherence to the metrics were developed. In addition, 8 metrics were judged to overlap with other metrics. The remaining 19 metrics were carried forward to Phase 3 and later to the face to face consensus meeting along with participants suggestions for where metrics may overlap.

## PHASE 3: TWO-ROUND DELPHI-DEVELOPING CONSENSUS ON PRIORITISED INDICATORS

A total of 217 midwives participated in the round 3 survey. Most respondents (see Table 3) were staff midwives (30.0%, n=65) and clinical midwife managers (grade 2) (25.4%, n=55).

TABLE 3: MIDWIFERY PARTICIPANTS BY GRADES AT CLOSE OF ROUND 3

GRADE	Number of Participants in Round 1	%
Staff Midwife	65	(30.0)
Clinical Manager (1)	13	(6.0)
Clinical Manager (2)	55	(25.4)
Clinical Manager (3)	15	(6.9)
Assistant Director of Midwifery	17	(7.8)
Director of Midwifery	12	(5.5)
Clinical Midwife Specialist	6	(2.7)
Advanced Midwife Practitioner	3	(1.4)
Other	31	(14.3)
Total	217	

Of the 217 midwives who completed round 3, 69.6% (n=151) completed Round 4. Most respondents (Table 4) to Round 4 were staff midwives (25.89%, n=39) and clinical midwife managers (grade 2) (19.9%, n=30). A large proportion of participants (19.2%, n=29) identified their grade of midwifery as 'other', which consisted largely of clinical placement coordinators (20.7%, n=6).

TABLE 4: MIDWIFERY PARTICIPANTS BY GRADES AT CLOSE OF ROUND 4

GRADE	Number of Participants per Grade	%
Staff Midwife	39	(25.8)
Clinical Manager (1)	13	(8.6)
Clinical Manager (2)	30	(19.9)
Clinical Manager (3)	6	(4.0)
Assistant Director of Midwifery	15	(9.9)
Director of Midwifery	8	(5.3)
Clinical Midwife Specialist	8	(5.3)
Advanced Midwife Practitioner	3	(2.0)
Other	29	(19.2)
Total	151	

Of the 109 indicators included in round 3, participants rated all as important for inclusion in the midwifery metrics suite. In addition, 1 indicator was newly identified by participants. In Round 4, participants rated the 110 indicators as important for inclusion in the suite. Following detailed review and discussion by the working group, 7 indicators were judged to lack clarity, were potentially ambiguous and were removed. The remaining 103 indicators (and the associated 19 metrics), were carried forward to the face to face consensus meeting.

## Phase 4 Consensus meeting

This phase consisted of a face-to-face meeting with key stakeholders (midwives) to review the findings from the Delphi surveys and build consensus on metrics and respective indicators. In total, 19 midwives participated in the face to face consensus meeting. Each of the 19 maternity units in Ireland had a midwifery representative and participants represented all grades of midwives.

At the consensus meeting, participants were provided with paper copies of the list of 19 metrics and 103 indicators following Round 4 of the Delphi survey as well as the percentage rating for each metrics and indicator. Participants were also provided with a Judgement Framework Tool (see Table 5), adapted from Flenady et al. (2016) to guide participants in judging if the metric/indicator was appropriate for inclusion in the final suite of metrics. Consensus meeting participants voted YES or NO on whether each metric and indicator should be included in the final suite using an electronic voting app. Metrics and indicators were required to be voted YES by 70% or more participants to be included in the final suite of metrics and indicators.

TABLE 5: NURSING AND MIDWIFERY QUALITY CARE-METRICS JUDGEMENT FRAMEWORK TOOL

DOMAIN	
01	PROCESS FOCUSED  The metrics/ indicator contributes clearly to the measurement of nursing or midwifery care processes.
02	IMPORTANT  The data generated by the metric/indicator will likely make an important contribution to improving nursing or midwifery care processes.
03	OPERATIONAL  Reference standards are developed for each metric or it is feasible to do so. The indicators for the respective metric can be measured.
04	FEASIBLE It is feasible to collect and report data for the metric/indicator in the relevant setting.

(adapted from Flenady et al. 2016)

At the conclusion of the consensus meeting 18 metrics with 93 associated indicators were agreed to be included in the suite of final suite of Midwifery Quality Care-Metrics (see Table 6). In addition, three metrics i.e., 'Women's Experience', 'Irish-Maternity Early Warning Score (I-MEWS)' and 'Invasive Medical Devices' were identified as having a separate national process either underway or planned for which indicators were or would be developed. Therefore, these were not included in the final suite agreed within this project.

## Table 6: Agreed Metrics and Indicators Following Midwifery Consensus Meeting

METRIC (N=18)	INDICATORS	
Midwifery	1 A midwife's plan of care is evident and reflects the woman's current conditio including referral where appropriate	n
Plan of Care	2 Appropriate midwifery care based on the assessment and plan is reordered	
	1 The woman's name and healthcare record number are on each page/screen	
	2 All previous pregnancies and outcomes are recorded	
	3 Past medical/surgical/family/genetic/social/medication (as appropriate) histories are recorded	
	4 The allergy status is recorded	
	5 Infection status /alert is recorded	
	6 The blood pressure, and gestation at booking is recorded	
Booking	7. There is evidence of assessment of antenatal risk factors recorded	
	8 Whether a blood transfusion is acceptable to the woman is recorded	
	9 There is evidence of assessment for mental health illnesses recorded	
	10 There is evidence of routine inquiry for domestic violence recorded	
	11 There is evidence that infant feeding has been discussed with the woman ar recorded	nd
	12 There is evidence that health information relating to pregnancy has been given and recorded	ver
	1 Abdominal inspection findings are recorded	
	2 Palpation-Fundal height in cms (where appropriate) is recorded	
Abdominal	3 Palpation-Lie is recorded	
examination	4 Palpation-Presentation (where appropriate) is recorded	
(after 24 weeks	5 Palpation-Position (where appropriate) is recorded	
gestation) on Current	6 Palpation-Engagement (where appropriate) is recorded	
or Last Assessment	7 Palpation-Fetal activity (if present) is recorded	
	8 Auscultation-Fetal heart rates-Use of Pinard or hand held Doppler with a reconfetal heart rate in beats per minute (BPM)	ord
	1 There is recorded evidence of fetal heart monitoring with Pinard/Doppler or initial assessment	1
Intrapartum Fetal Wellbeing	When using intermittent auscultation, the fetal heart is recorded at least even 15 minutes in the 1st stage of labour and at least every 5 minutes in the 2nd stage of labour	
•	3 There is recorded evidence of date and time of infant's birth in the labour record	
	4 Colour and volume of liquor are recorded	
	1 There is recorded evidence of indication for cardiotocography (CTG)	
	2 The date/time is validated and recorded at the start of CTG	
Intrapartum	3 The woman's name and hospital number are recorded on the CTG by the midwife	
Fetal wellbeing cardiotocography (CTG)	4 The maternal pulse is recorded on the CTG strip on commencement of the C tracing	:TG
	5 There is recorded evidence of systematic CTG interpretation occurring hourl (baseline, variability, accelerations, decelerations, uterine activity and plan ocare)	
	6 There is recorded evidence that CTGs of concern have been reviewed by the senior midwife and/or obstetrician	!

	1	There is recorded evidence of recording of maternal vital signs during labour according to the woman's condition
	2	A narrative is recorded at least hourly, to provide a record of the woman's condition
	3	Indication for vaginal examination is recorded
	4	Consent to perform vaginal examination is recorded
	5	There is recorded evidence of abdominal examination prior to vaginal examination.
	6	There is evidence of systematic record keeping of the findings of all vaginal examinations
	7	There is recorded evidence that a discussion has occurred with the woman about her care to include birth preferences
	8	There is recorded evidence of contraction assessment at least every 30 minutes
Intrapartum	9	There is recorded evidence of date and time of onset of each stage of labour
Maternal wellbeing	10	The name and designation of the person professionally requested to review the woman is recorded (as appropriate)
3	11	Indication for amniotomy is recorded
	12	Consent for amniotomy is recorded
	13	Indication for administration of oxytocin is recorded
	14	Consent for administration of oxytocin is recorded
	15	There is recorded evidence that oxytocin infusion has been reduced or stopped when uterine tachystystole is present
	16	Where a CTG is of concern, there is recorded evidence that the oxytocin infusion was reduced or discontinued and a medical review was undertaken
	17	There is recorded evidence of findings of assessment for perineal trauma
	18	Where perineal repair is necessary and is performed by midwife, there is recorded evidence of repair
	19	There is recorded evidence of estimated blood loss at birth
	20	The date, time and method of birth are recorded
Risk assessment		
for Venous Thromboembolism	1	There is recorded evidence of venous thromboembolism (VTE) assessment on admission
(VTE) in Pregnancy & the Puerperium	2	There is recorded evidence of VTE assessment postnatally
	1	Maternal vital signs are recorded on the IMEWS chart, prior to transfer to the postnatal ward
	2	Maternal urinary output is recorded
Immediate post	3	Skin to skin contact is recorded
birth care	4	Breast feeding initiation time is recorded for a woman who chooses to breastfeed
	5	Neonatal condition at birth (live, neonatal death, fetal death) is recorded
	6	Findings of initial systematic examination of the newborn is recorded
Communication (Clinical Midwifery Handover)	1	Mother-Identification of risk factors in handover is recorded
	2	Baby- Confirmation of identify band checking is recorded
	3	Baby- Gender of newborn is recorded
Hallaovel/	4	Baby- Security tag is recorded as present and active
Pain management (other than labour)	1	Woman's response to actions taken to reduce pain are recorded
	1	Method of infant feeding is recorded
Infant feeding	2	Assessment of effectiveness of baby feeding is recorded
	3	The actions taken if feeding is ineffective are recorded

	1 There is recorded evidence of ongoing postnatal education being offered to the woman
Postnatal care (daily midwifery	2 There is recorded evidence of daily assessment of the mother (as per national health care record/local policy)
care processes)	3 There is recorded evidence of how well the woman is coping postnatally
	4 There is recorded evidence of daily assessment of the neonate (as per national health care record/local policy)
	1 Discharge date and time are recorded
	2 The name of midwife completing discharge is recorded
Post birth	3 The destination of the woman is recorded on discharge
discharge planning for	4 Referral for professional skilled services (e.g. lactation consultant, physio, social work, speciality clinic, if required) is recorded
home	5 There is recorded evidence of neonatal pulse oximetry screening having been performed (if appropriate)
	6 There is recorded evidence of discharge advice/discussion on health and wellbeing of self and baby
Medication	1 The allergy status is clearly identifiable on the front page of prescription chart.
administration	2 All prescribed medication is administered in accordance with local and nation policies, procedures, protocols and guidelines (PPPGs)
Medication,	
Storage and	1 A registered midwife is in possession of the keys for medicinal product storage
Custody (excluding MDAs)	2 All medicinal products are stored in a locked cupboard or locked room
	1 MDA drugs are checked & signed at each changeover of shifts by midwifery staff
MDA Drugs	2 Two signatures are entered in the MDA drug register for each administration of an MDA drug
	3 The MDA drug cupboard is locked and keys for MDA cupboard are held by designated midwife
	4 MDA drug keys are kept separate from other medication keys
Intravenous fluid therapy	1 Fluid balance charts are completed accurately and totalled
	1 All entries are dated and timed (using 24 hour clock)
	2 All written records are legible, in permanent ink and signed
	3 All entries are in chronological order
Clinical Record	4 All abbreviations/grading systems are from a national or local approved list/system
Keening	3)3(211)
Keeping	<ul> <li>5 Alterations/corrections are as per HSE standards and recommended practices for healthcare records management</li> </ul>

Additional metrics agreed to be included with indicators identified from external sources. NB: Indicators will be taken from said external sources.

- Women's Experience Quality Care-Metric To be measured with HIQA/HSE National Women's Experience Survey when developed.
- Invasive Medical Devices to be recorded as part of peripheral lines and urinary catheters care bundles.
- IMEWS/Observation To be recorded in new IMEWS Guideline Audit Tool.

## CONCLUSION

The research process and final set of metrics and indicators presented in this report reflect the methodologically robust and rigorous process outlined. Importantly, the widespread engagement in the project by midwives of all grades and geographical areas nationally, via the work stream groups and project officers, has ensured that there is a real sense of ownership of the metrics and indicators from midwives across settings.

## RECOMMENDATIONS

The development of this suite of process metrics and indicators for midwifery practice provides an opportunity for Ireland to take the lead internationally in generating evidence on the effectiveness of midwifery process metrics and associated indicators.

This initial work presented in this report should be followed up by a rigorous evaluation of the impact of the new suite of metrics on midwifery care processes. Designs which control insofar as possible for confounding variables such as interrupted time series studies should be considered. This should be determined prior to implementation so that opportunities for baseline assessments are not lost prior to implementation.

### REFERENCES

- Brennan RA, Callaway S. Innovations in Practice: Supporting the Breastfeeding Dyad in Labor & Delivery. Journal of Obstetric, Gynecologic & Neonatal Nursing 2014; 43(1) S62-3.
- Brown MJ, Sinclair M, Hill AJ, Stockdale J. Motivating pregnant women to eat healthily and engage in physical activity for weight management: an exploration of routine midwife instruction. Evidence Based Midwifery 2013; 11 (4) 120-127.
- 3. De Bruin-Kooistra M, Amelink-Verburg MP, Buitendijk SE, Wester GP. Finding the right indicators for assessing quality of midwifery care. International Journal for Quality in Health Care 2012; 24 (3) 301-310.
- 4. Gephart SM, McGrath JM, Effken JA Failure to Rescue in Neonatal Care. J. Perinatal Neonat Nurs 2011; 25 (3) 275-282.
- 5. Grier G, Geraghty S. Intimate partner violence and pregnancy: How midwives can listen to silenced women. British Journal of Midwifery 2015; 23:6, 412-416.
- 6. Haines HM, Baker J, Marshall D. Continuity of midwifery care for rural women through caseload group practice: Delivering for almost 20 years. Aust J. Rural Health 2015; 23: 339-345.
- 7. Hatten-Masterson SJ, Griffiths ML. SHARED maternity care: enhancing clinical communication in a private maternity hospital setting. Med J Aust. 2009 Jun 1; 190(11 Suppl): S150-1.
- 8. Hodnett ED, Stremler R, Willian AR, Weston JA, Lowe NK, Simpson KR, Fraser WD, Gafni A. Effect on birth outcomes of a formalised approach to care in hospital labour assessment units: international, randomised controlled trial. BMJ 2008; 337:a1021.
- 9. Homer CSE. Models of maternity care: evidence for midwifery continuity of care. MJA 2016; 205 (8): 370-374.
- 10. Jallo N, Bray K, Philpotts Padden M, Levin D. A Nurse-Driven Quality Improvement Program to Improve Perinatal Outcomes. J Perinat Neonat Nus 2009; 23: 241-250.
- 11. Lucas MTB, Rocha MJF, Costa KMM, Oliveria GG (2015). Nursing care during labor in a model maternity unit: cross sectional study. Online Brazalian Journal of Nursing 14 (1): 32-40. Available from: http://www.objnursing.uff.br/index .php/nursing/article/view/5067.
- 12. An Bord Altranais (2007) Guidance to Nurses and Midwives on Medication Management. An Bord Altranais: Dublin.
- 13. Becker G. (2015) Baby Friendly Hospital Ireland (BFHI) Audit Tool for Step 4.
- 14. Department of Health (2014) Communication (Clinical Handover) in Maternity Services National Clinical Guideline No. 5. Department of Health: Dublin.
- 15. Department of Health (2014) The Irish Maternity Early Warning System (IMEWS) National Clinical Guideline No. 4.

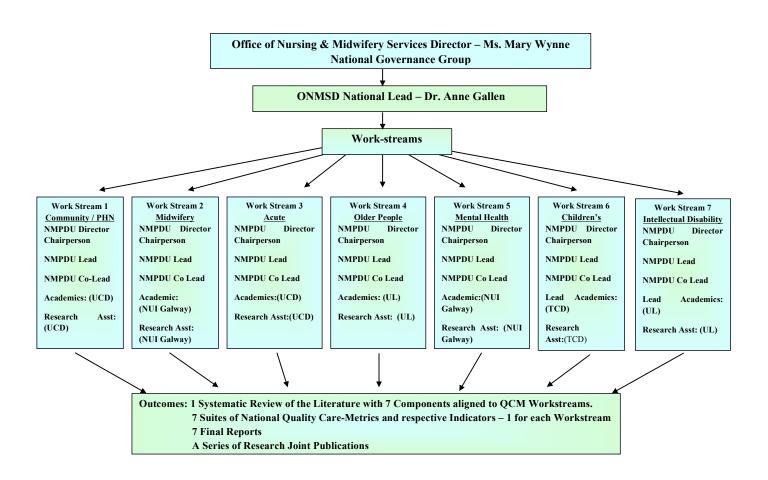
- 16. Department of Health (2016) National Maternity Strategy: Creating a better future together 2016-2026. Department of Health: Dublin.
- 17. Faculty of Paediatrics and Health Service Executive (year not given) Pulse Oximetry Testing for Newborn CHD: Clinical Care Pathway.
- 18. Health Information and Quality Authority (2016) Draft National Standards for Safer Better Maternity Services.
- 19. Health Service Executive (2010) Code of Practice for Healthcare Records Management.
- 20. Health Service Executive, Dublin West Public Health Nursing Department CHO 7, (2016) Guidelines for Care of Umbilical Cord Revision No. 2 Reference No. 15.
- 21. Health Service Executive, (2015) Infant Feeding Policy for Maternity and Neonatal Services HSE. Available at www.breastfeeding.ie; www.babyfriendly.ie
- 22. Health Service Executive (2012) National Policy for Nurse and Midwife Medicinal Product Prescribing in Primary, Community and Continuing Care. Office of the Nursing and Midwifery Services Director.
- 23. Health Service Executive (2014) Integrated Care Guidance: A Practical Guide to Discharge and Transfer from Hospital, v2, p17.
- 24. Health Service Executive (2017) The Specialist Perinatal Mental Health: Model of Care for Ireland. HSE: Dublin.
- 25. Health Service Executive-Clinical Programme for Obstetrics and Gynaecology, (2017) Irish Maternity Indicator System (IMIS) Revised version 1.2.
- Health Service Executive-Health Protection Surveillance Centre (2010) Prevention of Intravascular Catheter-related Infection in Ireland SARI Prevention of Intravascular Catheter-related Infection Sub-Committee, December 2009, Updated February 2010.
- 27. Health Service Executive (2011) National Policy for Nurse and Midwife Medicinal Product Prescribing in Primary, Community and Continuing Care.
- 28. Health Service Executive (2015) Breastfeeding Policy for Primary Care Teams and Community Healthcare Settings.
- 29. Health Service Executive (2016) National Standards for Bereavement Care Following Pregnancy Loss and Perinatal Death, Version 1.15.
- 30. Health Service Executive (2017) National Service Plan.
- 31. Health Service Executive (undated) Draft Guideline for the Management of Shoulder Dystocia; HSE Home Birth Service.
- 32. Health Service Executive (undated) Draft Guideline on Record Keeping Home Birth Service.
- 33. Health Service Executive (undated) Draft Guideline on the Management of Perineal Repair HSE Home Birth Service.
- 34. Health Service Executive (undated) Draft Guideline on the Management of Postpartum Haemorrhage HSE Home Birth Service.
- 35. Health Service Executive (undated) Draft Guideline on the Management of Water Birth HSE Home Birth Service.

- 36. Health Service Executive (undated) Draft Policy and Procedure for Notification of Infants born under the HSE Home Birth Service to the National Newborn Hearing Screening Programme.
- 37. Health Service Executive (undated) Draft Policy and Procedure on the Administration of Vitamin K (Konakion MM Paediatric) Prophylaxis for Newborn Infants Health Service Executive Home Birth Service.
- 38. Health Service Executive (undated) Draft Policy and Procedure to support the SECM with the transfer of women and/ or babies from home to hospital maternity services.
- 39. Health Service Executive (undated) Draft Self Employed Community Midwives Midwifery Practice Guidelines HSE Home Birth Service.
- 40. Health Service Executive-Mayo General Hospital (2012) Nursing Metrics in Mayo General Hospital.
- 41. Institute of Obstetricians and Gynaecologists and Health Service Executive (2012) Antenatal routine enquiry regarding violence in the home. Clinical practice guideline: Dublin.
- 42. Institute of Obstetricians and Gynaecologists, Health Service Executive & Irish Haematology Society (2013) Venous thromboprophylaxis in pregnancy. Clinical practice guideline. Institute of Obstetricians and Gynaecologists and Health Service Dublin.
- 43. The National Institute for Healthcare and Excellence (2008) Antenatal care for uncomplicated pregnancies, Clinical guideline [CG62]. NICE: London.
- 44. The National Institute for Healthcare and Excellence (2014) Intrapartum care: Care of healthy women and their babies during childbirth, Clinical Guideline 190. NICE: London.
- 45. Nursing and Midwifery Board of Ireland (2015) Recording Clinical Practice: Professional guidance. NMBI: Dublin.
- 46. Nursing and Midwifery Board of Ireland (2015) Practice Standards for Midwives. NMBI: Dublin.
- 47. Health Protection Surveillance Centre (2011) Guidelines for the Prevention of Catheterassociated Urinary Tract Infection.
- 48. Institute of Obstetricians and Gynaecologists, Health Service Executive (2012) Intrapartum Fetal Heart Rate Monitoring, Clinical Guideline 6.
- 49. Health Service Executive (2017) Draft Irish Maternity Early Warning System Audit Tool.
- 50. Flenady V, Wojcieszek AM, Fjeldheim I, Friberg IK, Nankabirwa V, Jani JV, Myhre S, Middleton P, Crowther C, Ellwood D, Tudehope D, Pattinson R, Ho J, Matthews J, Bermudez Ortega A, Venkateswaran M, Chou D, Say L, Mehl G, Frøen JF. (2016) eRegistries: indicators for the WHO Essential Interventions for reproductive, maternal, newborn and child health. BMC Pregnancy Childbirth. 16(1):293.

## APPENDICES



## APPENDIX A: NURSING AND MIDWIFERY QUALITY CAREMETRICS GOVERNANCE FLOW CHART



## APPENDIX B: NURSING & MIDWIFERY QUALITY CARE-METRICS - ACADEMIC & NMPD STEERING GROUP MEMBERSHIP

OFFICE OF NURSING & MIDWIFERY SERVICE DIRECTOR	<b>Ms. Mary Wynne</b> , HSE, Interim Nursing and Midwifery Services Director & Assistant National Director, Office of the Nursing & Midwifery Services Director
NATIONAL LEAD	<b>Dr. Anne Gallen,</b> Director, NMPDU, HSE North West
PUBLIC HEALTH NURSING WORKSTRI	EAM:
NMPD DIRECTOR – CHAIRPERSON:	Ms. Carmel Buckley, Director, NMPDU, HSE South (Cork/Kerry)
NMPD LEAD – CURRENT :  NMPD LEAD(S) - PREVIOUS:	Ms. Margaret Nadin, QCM Project Officer, NMPDU, HSE Dublin North East Ms. Martina Giltenane, QCM Project Officer, NMPDU, HSE Dublin North
NMPD CO-LEAD – CURRENT :  NMPD CO-LEAD – PREVIOUS:	Ms. Caroline Kavanagh, QCM Project Officer, NMPDU, HSE Dublin North Ms. Aoife Lane, QCM Project Officer, NMPDU, HSE South (Cork/Kerry)
LEAD ACADEMIC (S)	Prof. Laserina O`Connor, University College Dublin Prof. Valerie Smith, Trinity College Dublin
RESEARCH ASSISTANT	Ms. Lisa Rogers, University College Dublin Ms. Bianca vanBavel, University College Dublin
MIDWIFERY WORKSTREAM:	
NMPD DIRECTOR – CHAIRPERSON	Ms. Mary Frances O`Reilly, Director, NMPDU, HSE West/Mid-West
NMPD LEAD	<b>Ms. Margaret Nadin,</b> QCM Project Officer, NMPDU, HSE Dublin North East
NMPD CO-LEAD	<b>Ms. Gillian Conway,</b> QCM Project Officer, NMPDU , HSE West/Mid-West
LEAD ACADEMIC (S)	<b>Prof. Declan Devane,</b> National University of Ireland Galway <b>Prof. Valerie Smith,</b> Trinity College Dublin
RESEARCH ASSISTANT	Ms. Nora Barrett, National University of Ireland, Galway

ACUTE WORKSTREAM:	
NMPD DIRECTOR – CHAIRPERSON – CURRENT: NMPD DIRECTOR – CHAIRPERSON – PREVIOUS:	Dr. Mark White, Interim Area Director, NMPD, HSE South  Ms. Miriam Bell, Interim Director, NMPDU, HSE South
NMPD LEAD -CURRENT : NMPD LEAD(S) - PREVIOUS:	Ms. Leonie Finnegan, QCM Project Officer, NMPDU, HSE South East Ms. Paula Kavanagh, QCM Project Officer, NMPDU, HSE North West
NMPD CO-LEAD – CURRENT :  NMPD CO-LEAD – PREVIOUS:	Ms. Ciara White, QCM Project Officer, NMPDU, HSE Dublin North Ms. Angela Killeen, QCM Project Officer, NMPDU, HSE North West Ms. Aoife Lane, QCM Project Officer, NMPDU, HSE South (Cork/Kerry) Ms. Loretto Grogan, QCM Project Officer, NMPDU, Dublin South, Kildare & Wicklow
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OLDER PERSONS WORKSTREAM:	
NMPD DIRECTOR – CHAIRPERSON –	Ms. Joan Donegan, Director, NMPDU, HSE North East
CURRENT: NMPD DIRECTOR – CHAIRPERSON – PREVIOUS:	<b>Ms. Deirdre Mulligan,</b> Interim Area Director, NMPDU, HSE North East
NMPD LEAD -CURRENT :	Ms. Mary Nolan, QCM Project Officer, NMPDU, HSE Midlands
NMPD CO-LEAD – CURRENT : NMPD CO-LEAD – PREVIOUS:	<b>Ms. Angela Killeen,</b> QCM Project Officer, NMPDU, HSE North West <b>Ms. Paula Kavanagh,</b> QCM Project Officer, NMPDU, HSE North West
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RESEARCH ASSISTANT	<b>Dr. Duygu Sezgin,</b> Postdoctoral Researcher, University of Limerick
MENTAL HEALTH WORKSTREAM:	
NMPD DIRECTOR – CHAIRPERSON –	Ms. Anne Brennan, Director, NMPDU, HSE Dublin North
CURRENT: NMPD DIRECTOR – CHAIRPERSON – PREVIOUS:	Mr. James Lynch, Interim Director, NMPDU, HSE Dublin North
NMPD LEAD	<b>Ms. Gillian Conway,</b> QCM Project Officer, NMPDU , HSE West/Mid-West
NMPD CO-LEAD - CURRENT  NMPD CO-LEAD(S) - PREVIOUS:	Ms. Caroline Kavanagh, QCM Project Officer, NMPDU, HSE Dublin North Ms. Martina Giltenane, QCM Project Officer, NMPDU, HSE Dublin North
LEAD ACADEMIC (S)	Dr. Andrew Hunter, National University of Ireland Galway

CHILDREN`S WORKSTREAM:		
NMPD DIRECTOR – CHAIRPERSON – CURRENT: NMPD DIRECTOR – CHAIRPERSON – PREVIOUS:	Ms. Susanna Byrne, Director, NMPDU, HSE Dublin South, Kildare & Wicklow Ms. Aine Lynch, Interim Director, NMPDU, HSE Dublin South, Kildare & Wicklow	
NMPD LEAD –CURRENT : NMPD LEAD(S) - PREVIOUS:	Ms. Ciara White, QCM Project Officer, HSE Dublin North Ms. Loretto Grogan, QCM Project Officer, NMPDU, HSE Dublin South, Kildare & Wicklow	
NMPD CO-LEAD – CURRENT :	Ms. Mary Nolan, QCM Project Officer, NMPDU, HSE Midlands	
LEAD ACADEMIC (S)	Dr. Maria Brenner, Trinity College Dublin	
RESEARCH ASSISTANT(S)	Dr. Catherine Browne, University College Dublin	
INTELLECTUAL DISABILITY WORKSTREAM:		

RESEARCH ASSISTANT(S)	Dr. Catherine Browne, Onliversity College Dublin	
INTELLECTUAL DISABILITY WORKSTREAM:		
NMPD DIRECTOR – CHAIRPERSON – CURRENT:	Ms. Judy Ryan, Interim Director, NMPDU, HSE Midlands	
NMPD DIRECTOR – CHAIRPERSON – PREVIOUS:	Ms. Eilish Croke, Director, NMPDU, HSE Mid-Leinster	
NMPD LEAD -CURRENT :	Ms. Johanna Downey, QCM Project Officer, NMPDU, HSE South (Cork/Kerry)	
NMPD LEAD(S) - PREVIOUS:	Ms. Aoife Lane, QCM Project Officer, NMPDU, HSE South (Cork/Kerry)	
	Ms. Mary Nolan, QCM Project Officer, NMPDU, HSE Midlands Ms. Martina Giltenane, QCM Project Officer, NMPDU, HSE Dublin North	
NMPD CO-LEAD – CURRENT : NMPD CO-LEAD – PREVIOUS:	<b>Ms. Mary Nolan,</b> QCM Project Officer, NMPDU, HSE Midlands <b>Ms. Margaret Nadin,</b> QCM Project Officer, NMPDU, HSE Dublin North East	
LEAD ACADEMIC (S)	Prof. Fiona Murphy, University of Limerick Dr. Owen Doody, University of Limerick Ms. Rosemary Lyons, University of Limerick	
RESEARCH ASSISTANT	<b>Dr. Duygu Sezgin,</b> Postdoctoral Researcher, University of Limerick	
ADDITIONAL MEMBERS:		
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ADMINISTRATION	Ms. Anita Gallagher, NMPDU, HSE, North West	

# APPENDIX C: NURSING & MIDWIFERY QUALITY CARE-METRICS – NATIONAL GOVERNANCE STEERING GROUP MEMBERSHIP

Chairperson	<b>Ms. Mary Wynne,</b> HSE, Interim Nursing and Midwifery Services Director & Assistant National Director, Office of the Nursing & Midwifery Services Director
Area Director NMPD	Ms. Catherine Killilea, Area Director, HSE, NMPDU South
ONMSD National Lead QCM	<b>Dr. Anne Gallen,</b> Director, HSE, NMPDU, North West
QCM Academic Group Representative	Prof. Laserina O`Connor, University College Dublin
QCM NMPD Project Officers Representative	<b>Ms. Gillian Conway,</b> QCM Project Officer, NMPDU, HSE West/Mid-West
Hospital Group Chief Nurse Representatives / IADNAM DON/M Representatives:  • Acute Care  • Midwifery  • Children's Nursing  • Older Persons	Ms. Julie Nohilly, Director of Nursing, Galway University Hospital Ms. Mary Brosnan, Director of Midwifery & Nursing, The National Maternity Hospital, Adjunct Associate Professor, UCD School of Nursing, Midwifery and Health Systems, Ms. Suzanne Dempsey, Chief Director of Nursing, Children's Hospital Group Ms. Georgina Bassett, National Leadership & Innovation Centre for Nursing and Midwifery NLIC, Office of the Nursing & Midwifery Services Director ONMSD
Area Director of Mental Health Nursing Representative	<b>Ms. Catherine Adams,</b> Office of the Area Director of Nursing, Mid-West Mental Health Services
Director of Public Health Nursing	<b>Ms. Mary B Finn-Gilbride,</b> Director Public Health Nursing, HSE South, Upper George's Street, Wexford
Director of Nursing Intellectual Disability	<b>Ms. Theresa O'Loughlin,</b> Oakridge Children's Services Manager, Daughters of Charity Disability Support Services
HSE Quality Improvement Division Representative	<b>Dr. Jennifer Martin,</b> Quality Improvement Division Lead on Measurement for Improvement, Stewart's Hospital, Dublin
HSE ICT Representative	Mr. Pat Kelly, Corporate IT Delivery Director, Office of the CIO
INMO Representative	<b>Ms. Martina Harkin-Kelly,</b> President, Irish Nurses & Midwives Organisation
PNA Representative	<b>Ms. Aisling Culhane,</b> Research and Development Advisor, Psychiatric Nurses Association
SIPTU Representative	Ms. Aideen Carberry, Assistant Organiser, SIPTU Health Division
Patient Representative	<b>Ms. Anne Harris,</b> Development & Case Support - Southern Area, SAGE (Support & Advocacy Service)
Secretary to the Group	Ms. Anita Gallagher, HSE, NMPDU, North West

# APPENDIX D: NURSING & MIDWIFERY QUALITY CARE-METRICS – MIDWIFERY WORKSTREAM WORKING GROUP MEMBERSHIP

OFFICE OF NURSING & MIDWIFERY SERVICE DIRECTOR	<b>Ms. Mary Wynne,</b> HSE, Interim Nursing and Midwifery Services Director & Assistant National Director, Office of the Nursing & Midwifery Services Director
NATIONAL LEAD	<b>Dr. Anne Gallen,</b> Director, NMPDU, HSE North West
MIDWIFERY WORKSTREAM:	
NMPD DIRECTOR – CHAIRPERSON	Ms. Mary Frances O`Reilly, Director, NMPDU, HSE West/Mid-West
NMPD LEAD	<b>Ms. Margaret Nadin,</b> QCM Project Officer, NMPDU, HSE Dublin North East
NMPD CO-LEAD	<b>Ms. Gillian Conway,</b> QCM Project Officer, NMPDU , HSE West/Mid-West
LEAD ACADEMIC (S)	Prof. Declan Devane, National University of Ireland Galway Prof. Valerie Smith, Trinity College Dublin
RESEARCH ASSISTANT	Ms. Nora Barrett, National University of Ireland, Galway
SERVICE USER REPRESENTATIVE	Ms. Marie Cregan Ms. SheilaSugrue, ONMSD, HSE Dr. Linda Biesty, Lecturer in Midwifery, National University of Ireland Galway Ms. Rebecca, O'Donovan, A/National Breast Feeding Coordinator Ms. Olive Long, Director of Midwifery, Cork University Maternity, Hospital Ms. Rosaline O'Donovan, Ass Director of Midwifery, Cork University Maternity, Hospital Ms. Katie Bourke, Assistant Director of Midwifery, Cork University Maternity, Hospital Ms. Kate Lyons, Clinical Skills Facilitator, Cork University Hospital Ms. Anna Maria Verling, Bereavement, Loss Midwife, Cork University Maternity, Hospital Ms. Sinead Heaney, Director of Midwifery, South Tipperary University Hospital Ms. Breda Crotty, Clinical Midwife Manager 3, Waterford University Hospital Ms. Janet Murphy, Registered Advance Midwife Practitioner, Waterford University Hospital Ms. Ann Holly, Practice Development Coordinator, Kerry University Hospital Ms. Mary Brosnan, Director of Midwifery, National Maternity Hospital Ms. Luicille Sheehy, Clinical Practice Development Coordinator, National Maternity Hospital

**Ms. Caroline Lloyd Carey,** Clinical Midwife Manager 2, Midlands Regional Hospital, Mullingar

**Ms. Connie McDonagh,** Director of Midwifery, St. Luke's Hospital, Kilkenny

Ms. Niamh Doyle, Clinical Midwife Manager 2,

Wexford Maternity Unit

Ms. Helen McLoughlin, Clinical Midwife Manager 3,

Wexford Maternity Unit

Ms. Margaret Philbin, Director of Midwifery, Rotunda Hospital

Ms. Mary O'Reilly, Practice Development Coordinator,

Rotunda Hospital

**Ms. Charmaine Scallan,** Clinical Skills Facilitator, Rotunda Hospital

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Ms. Margaret Coohill, Practice Development Coordinator,

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Coordinator, Portiuncula University Hospital, Maternity Unit

**Ms. Siobhan Canny,** Director of Midwifery, Portiuncula University Hospital, Maternity Unit

Ms. Margaret Quigley, Director of Midwifery,

University Maternity Hospital, Limerick

Ms. Mary Doyle, Midwifery Practice Development Coordinator,

University Maternity Hospital, Limerick

Ms. Helen Coe, Community Midwife,

University Maternity Unit, Limerick

Ms. Fidelma McSweeney, Assistant Director of Midwifery,

Coombe Hospital

Ms. Ann Bowers, Acting Practice Development Coordinator,

Coombe Hospital

Ms. Maureen Revilles, Interim Director of Midwifery,

Midlands Regional Hospital, Portlaoise

Ms. Helen Murphy, Director of Midwifery,

University Hospital, Galway

#### APPENDIX E: Existing Midwifery Metrics at the Start of Quality Care-Metrics Process

METRIC	INDICATORS			
MEDICATION STORAGE AND CUSTODY	<ul> <li>A registered midwife is in possession of the keys for Medicinal Product Storage</li> <li>All Medicinal products are stored in a locked cupboard or locked room.</li> <li>All medication trolleys are locked and secured as per local organisational policy and open shelves on the medication trolley are free of medicinal products when not in use.</li> <li>A Drug Formulary is available on all Med Trolleys.</li> </ul>			
MDA DRUGS	<ul> <li>MDA drugs are checked &amp; signed at each changeover of shifts by midwifery staff. (By member of Day Staff &amp; Night Staff).</li> <li>Two signatures are entered in the MDA Drug Register for each administration of an MDA drug.</li> <li>The MDA Drug cupboard is locked and keys for MDA cupboard are held by designated Midwife.</li> <li>MDA drug keys are kept separate from other medication keys.</li> </ul>			
MEDICATION ADMINISTRATION	<ul> <li>The Individual's prescription documentation provides details of individual's legible name and health care record number.</li> <li>The Individuals' identification band has correct and legible name and healthcare record number or photo ID is in use.</li> <li>The Allergy Status is clearly identifiable on the front page of the prescription chart.</li> <li>Prescribed Medication not administered have an omission code entered.</li> <li>The individuals' locker and bedside/ or surrounding environment are free of unsecured prescribed medicinal products.</li> </ul>			
MEDICATION PRESCRIPTION	<ul> <li>The Generic name is used for each drug prescribed</li> <li>The Start date is recorded</li> <li>The Prescription is written in capital letters</li> <li>The correct legible Dose of the drug is recorded and not abbreviated</li> <li>The Route and/or Site of Administration is recorded</li> <li>The Frequency of Administration is recorded &amp; correct timings indicated</li> <li>The minimum dose interval and/or 24-hour maximum dose is specified for all "as required" or PRN drugs</li> <li>The Prescription has a legible Prescriber's Signature (in ink)</li> <li>Discontinued drugs are crossed off, dated and signed by prescriber.</li> </ul>			

MIDWIFERY PLAN OF CARE: PERSONAL DETAILS	<ul> <li>The Individuals Name and Healthcare Record Number are on each page/screen.</li> <li>Reason for admission/attendance is recorded and the admission date and time are Recorded.</li> <li>All previous pregnancies and out comes are documented.</li> <li>Past medical/surgical history are recorded</li> <li>The Allergy Status is clearly identifiable on relevant nursing documentation.</li> <li>Infection Status /Alert is recorded.</li> <li>There is evidence that the booking bloods results are recorded.</li> <li>There is evidence that infant feeding has been discussed with the woman.</li> <li>There is evidence that health information relating to pregnancy has been given.</li> </ul>
MIDWIFERY PLAN OF CARE	<ul> <li>A Midwife's plan of Care is evident and reflects the individuals' current condition.</li> <li>All risk assessments have been completed within the set time frames as per local policy.</li> <li>When a woman is considered high risk, there is documented evidence that she is referred to the appropriate medical team/obstetric team/service.</li> <li>Midwives Interventions are individualised, dated, timed and signed.</li> <li>Timely Evaluation of the Midwife's plan of care is evident and has been updated accordingly.</li> </ul>
NMBI GUIDANCE	<ul> <li>All entries are dated and timed (24-hour clock).</li> <li>All written records are legible, in permanent ink and signed.</li> <li>All entries are in chronological order.</li> <li>All abbreviations/grading systems are from a national or local approved list/system.</li> <li>Alterations/corrections are as per NMBI Guidance.</li> <li>Student midwives' entries are countersigned by the supervising midwife.</li> </ul>
MONITORING IN LABOUR	<ul> <li>Indication and Consent to perform vaginal examinations are recorded.</li> <li>Indication and consent for type of fetal monitoring is documented</li> <li>There is evidence of fetal heart monitoring with Pinard/doptone/doppler on initial Assessment.</li> <li>Birthplans are dated and timed and signed by attending midwife.</li> <li>The name and designation of the person professionally requested to review the woman is documented.</li> <li>A narrative is recorded at least hourly, to provide a record of the woman's condition</li> </ul>
PARTOGRAM MONITORING	<ul> <li>The partogram was commenced on diagnosis of labour onset.</li> <li>Maternal blood pressure, pulse and temperature are recorded on the partogram.</li> <li>The fetal heart is recorded every 15 minutes in the first stage of labour and every 5 minutes in the 2nd stage.</li> <li>The frequency of uterine activity was recorded for 10 minutes at least every 30 minutes up to time of birth.</li> </ul>

CTG MONITORING	<ul> <li>The date/time is validated at the start of the CTG.</li> <li>The woman's name and hospital number are recorded on the CTG strip by the midwife.</li> <li>The maternal pulse is recorded on the CTG strip on commencement of the procedure.</li> <li>There is documented evidence that a pathological CTG pattern was reviewed by the Senior midwife and Registrar.</li> <li>The date, time and method of birth are recorded at the end of the trace and the CTG is stored securely either electronically or at the back of chart securely.</li> </ul>					
OXYTOCIN MONITORING	<ul> <li>Indication and consent for use of oxytocin is recorded.</li> <li>Oxytocin infusion has been reduced when contraction frequency has exceeded 5 in 10 Minutes.</li> <li>For a pathological CTG there is evidence that the oxytocin infusion was discontinued and a medical review was undertaken.</li> </ul>					
MIDWIFERY PLAN OF CARE: POST DELIVERY	<ul> <li>Maternal observations, temperature, pulse, BP, respirations were recorded on the Early Warning Chart, prior to transfer to the postnatal ward.</li> <li>Uterine involution, blood loss, condition of perineum and urinary out put are documented.</li> <li>Skin to skin contact is recorded.</li> <li>Infant temperature is recorded.</li> <li>Breast-feeding initiation time is recorded for a woman who chooses to breastfeed.</li> </ul>					
IMEWS/OBSERVATION	<ul> <li>The woman's name, date of birth and healthcare record number are on both sides of the observation chart.</li> <li>Observations are dated, timed and signed.</li> <li>The booking blood pressure and gestation at booking is recorded.</li> <li>The IMEWS are recorded using the 24 hour clock for each entry.</li> <li>In each entry, Respiratory Rate, Temperature, Maternal heart rate, systolic and diastolic blood pressure, SPO2, urinalysis, pain score and AVPU are recorded.</li> <li>In each entry, the IMEWS is completed and totalled correctly</li> <li>There is evidence that the care was escalated to the appropriate level as per escalation protocol (Team/On Call SHO/Registrar/Consultant as appropriate).</li> <li>There is evidence of an increase in the frequency of monitoring and recording of vital signs in response to the detection of abnormal physiology.</li> <li>24hr cumulative balances are evident on all fluid balance charts.</li> </ul>					
INVASIVE MEDICAL DEVICES	<ul> <li>An assessment of the insertion site is recorded daily on care plan.</li> <li>The Clinical Indication for insertion of the indwelling urinary catheter is recorded.</li> </ul>					
DISCHARGE PLANNING	<ul> <li>There is evidence that the woman has been given information on reasons for presenting to hospital outside of appointment times.</li> <li>There is documented evidence that discharge advise has been discussed with the Woman.</li> <li>A Predicted Date of Discharge is documented.</li> </ul>					

#### WOMEN'S EXPERIENCE QUALITY CARE-METRIC

- 1. Are you satisfied with the cleanliness of the ward?
- 2. Have you observed the midwives perform hand hygiene?
- 3. Have you received adequate information from midwives about your medication?
- 4. Have midwives given you enough privacy when being examined or treated?
- 5. Do midwives treat you with respect and dignity on this ward?
- 6. Do you feel your pain has been managed appropriately
- 7. When using the Midwife Call bell/buzzer, is it answered within the appropriate timeframe?
- 8. Have midwives on the ward talked to you about going home?
- 9. Would you recommend this hospital/service to your family or friends?

## APPENDIX F: DESCRIPTION OF NURSING & MIDWIFERY GRADES

Grade	Description				
Staff Nurse / Staff Midwife / Registered Nurse Community / Registered Midwife Community	Relates to a nurse or midwife registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. The role includes assessing, planning, implementing and evaluation of care to the highest professional and ethical standards within the model of care relevant to the care setting. Generally reports to a Clinical Nurse/Midwife Manager grade and is professionally accountable to nursing/midwifery management levels.				
Public Health Nurse (PHN)	Registered in the PHN division of the professional register of the Nursing & Midwifery Board of Ireland. Works as a member of the primary care team and provides a range of nursing and midwifery services to people of all ages in the community. Reports to the Assistant Director of Public Health Nursing				
Clinical Nurse/ Midwife Manager 1 (CNM/CMM 1)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Provides clinical and professional leadership and development to the nursing/midwifery team. Responsible for the management and delivery of care to the optimum standard within the designated area of responsibility. Generally reports to the Clinical Nurse/Midwife Manager 2 or 3 grades, depending on the structure of the organisation, and is professionally accountable to the Assistant Director or Director of Nursing/Midwifery.				
Clinical Nurse/ Midwife Manager 2 (CNM/CMM2)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Responsible for the management of a nursing/midwifery team and the service delivery within a specific area. Generally reports to a Clinical Nurse/Midwife Manager 3 or Assistant Director of Nursing/Midwifery grade, and is professionally accountable to the Assistant Director or Director of Nursing/Midwifery.				
Clinical Nurse/ Midwife Manager 3 (CNM/CMM 3)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Usually responsible for more than one clinical area within the organisation. The role incorporates resource management and the continuing professional leadership of nursing and midwifery teams. Reports to the Assistant Director or Director of Nursing/Midwifery.				

Clinical Nurse/ Midwife Specialist (CNSp/CMSp)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Works in a clinical area of speciality practice which requires the application of specially focused knowledge and skills for safe care delivery. The specialist practice encompasses a major clinical focus. A level 8 postgraduate qualification and experience in the clinical specialist field are required for appointment. Reports to the Assistant Director or Director of Nursing/Midwifery/PHN.				
Community Mental Health Nurse (CMHN)	Registered in the psychiatric division of the professional register of the Nursing & Midwifery Board of Ireland. Works in a community area of speciality practice which requires the application of specially focused knowledge and skills for safe care delivery. The specialist practice encompasses a major clinical focus. A level 8 postgraduate qualification and experience in the clinical specialist field are required for appointment. Reports professionally and is operationally accountable to the Area Director of Nursing.				
Clinical Skills Facilitator	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Provides clinical support, education and guidance to nurses, midwives and students to support them to achieve/maintain their required clinical skills and competencies.				
Practice Development Co-ordinator (PDC)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Works at the grade of an Assistant Director of Nursing/Midwifery/ PHN with a specific focus on the development of nursing/midwifery practice. Reports to the Director of Nursing/Midwifery/Public Health Nursing				
Advanced Nurse/Midwife Practitioner (AN/MP)	Registered in the AN/MP professional register of the Nursing & Midwifery Board of Ireland. Uses advanced nursing/midwifery knowledge and critical thinking skills as an autonomous practitioner to deliver optimum care through caseload management of acute and chronic illness. The role is an expert in clinical practice, educated to Master's level 9 or above and reports professionally to the Director of Nursing/Midwifery/PHN.				
Assistant Director of Nursing/ Midwifery/ Public Health Nursing (ADON/M/PHN)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Manages the service delivery function and the nursing and midwifery teams within the area of responsibility. The role encompasses strategic planning and development. Reports to the Director of Nursing / Midwifery / Public Health Nursing				
Director of Nursing/ Midwifery/ Public Health Nursing (DON/M/PHN)	Registered in the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Responsible for all of the nursing and midwifery teams within the specific organisation. Works as part of the senior management team to achieve the organisational goals. Reports operationally to the General Manager/CEO. In acute hospital care the professional reporting relationship is to the Chief Director of Nursing/Midwifery.				

Nurse / Midwife
<b>Lecturer /Educator</b>
/ Tutor / Specialist
Co-ordinator

Registered on the Nurse Tutor division of the professional register of the Nursing & Midwifery Board of Ireland. Normally employed within an educational institution with responsibility for the delivery of nursing and midwifery education at undergraduate, postgraduate or continuing professional development level.

#### Director of Centre of Nursing/ Midwifery Education (CNME)

Registered on the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Responsible for overseeing the delivery of continuing professional development education, training and development to enable registered nurses, midwives and healthcare assistants to maintain and develop knowledge, skills and competence.

# Director of Nursing & Midwifery Planning and Development Unit (NMPDU)

Registered on the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. Leads and manages a nursing and midwifery team within a designated regional area to provide strategic, professional, practice, education and clinical leadership to enable the future development of nursing and midwifery services

#### Nursing & Midwifery Planning & Development Officer (NMPD Officer)

Registered on the general, midwifery, children's, psychiatric or intellectual disability division of the professional register of the Nursing & Midwifery Board of Ireland. The role is to support and enhance healthcare delivery through the development of nursing and midwifery in acute hospital and/or community healthcare organisations.

### NOTES



JUNE 2018

Office of the Nursing and Midwifery Services Director Clinical Strategy and Programmes Directorate

Health Service Executive
Dr. Steevens' Hospital
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