

**RCN International Nursing Research
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Developing a Quality Care-Metric to Measure Public Health Nursing Practice

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Ms. Martina Giltenane PhD Student
Dr. Kate Frazer Supervisor



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Public Health Nursing Practice

- Within the child and maternal health role of the public health nurse, the first postnatal visit is acknowledged as the most important contact a PHN has with a new mother and baby.

(Leahy-Warren, 2005)

- Little is known about the effectiveness and quality of care provided by PHNs to New Mothers and their babies.

(Eaton 2001, Aston 2002, HSE 2005, Leahy Warren 2005, Byrd 2006, Haycock-Stuart & Kean 2012, HSE 2013a, HSE, 2013b, McGuinness et al. 2014)

PHN Practice at the First Postnatal Visit

- The first postnatal visit is a care practice carried out by the PHN within 72 hours of a woman being discharged from hospital following the birth of her baby.
- The transition to motherhood is life changing causing some degree of crisis or difficulty

(Morse et al. 2003, Hunter 2004, Leahy Warren 2005, Appleton & Cowley 2008, Haycock-Stuart & Kean 2012).

- Nursing care in the postnatal period is considered critical in helping mothers to cope with the transition to motherhood (HSE, 2005).

PHN Practice at the First Postnatal Visit

- The PHN provides:

- Education
- Emotional Support
- Social Support
- Practical Care

(HSE 2013a, HSE 2013b, McGuinness et al. 2014, Phelan, 2014).

- Open Communication and Reassurance reduces:

- anxiety
- maternal fatigue,
- stress

(Jacknik et al. 1983, Hunter 2004, HSE 2005, Leahy Warren, 2005, Byrd 2006).

Quality Care-Metrics (QCMs)

- Measures of nursing and midwifery care processes aligned to evidenced based standards.

(HSE, 2015)

- Made up of process performance indicators as opposed to quantitative outcomes.
- Measuring care practices through quality indicators promotes quality improvement in care delivery and is an integral component of effective healthcare.

(Donabedian, 1988; Campbell et al., 2002, Sunderland, 2009, HIQA, 2013)

Aim

- To identify process indicators for inclusion in a QCM to measure the practice of the PHN at the first postnatal visit

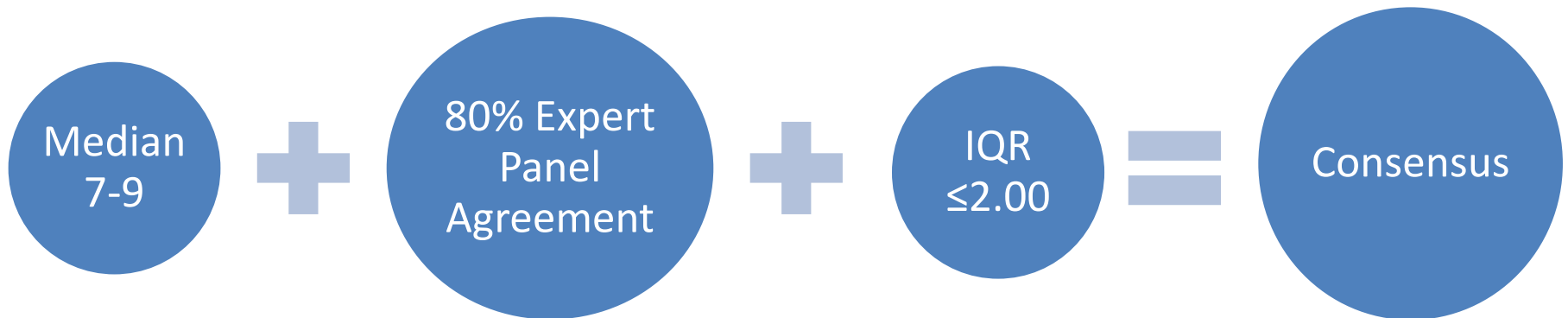


Methods

- Ethical approval Human Research Ethics Committee (UCD).
- Second Phase of a multiphase study
- Two Round 'Modified Delphi' Study from May 2016 to August 2016
- Recruitment of Delphi Panel December 2015 to April 2016
- Following qualitative interviews with PHNs and new mothers combined with evidence based literature a total of 59 statements were reviewed for consensus, agreement and priority ranking.

RAND Appropriateness Technique

- Modified Delphi Process
- Combines expert opinion and evidence (Naylor, 1998)
- Extensively used method of choice for validating indicators
- 9 point rating scale



(Fitch *et al.* 2001, Campbell *et al.* 2002, Kroger *et al.* 2007, Avery *et al.* 2011, Ferrua *et al.* 2012, Von der Gracht 2012, Ahn *et al.* 2013, van Riet Paap *et al.* 2014, Kroger *et al.* 2015).

Priority Ranking

- Priority ranking was used as a means of reducing indicators for inclusion in a QCM.
- The panellists' mean was used to rank indicators in ascending order of priority, one being the highest priority rank .
- Indicators achieving consensus and included in a QCM were those ranked in the top five with $\geq 75\%$ consensus in the second round.
- Decreasing standard deviation indicated increasing consensus in the variable rankings.
- Kendall's tau-*b* correlation was computed to measure the degree of association between indicator ranks between rounds

(Doke & Swanson 1995, Hinkin *et al.* 1997, National Council for the Professional Development of Nursing and Midwifery 2005, Katcher *et al.* 2006, Keeney *et al.* 2006, Lapata 2006, Chao 2012, Kalaian & Kasim 2012, Pallant 2013, Field 2015).



Profile and Characteristics of the Expert Panel

n=21

Current Professional Role % (n)

Director of Public Health Nursing	4.8 (1)
Assistant Director of Public Health Nursing	28.6 (6)
Registered Public Health Nurse	19.0 (4)
Practice Development Coordinator	9.5 (2)
Academic Public Health Nurse or Health Visitor	23.8 (5)
Senior Public Health Nurse Managers	14.3 (3)

Years Qualified as a PHN or Health Visitor

Mean (Minimum-Maximum)	19.95 (5-36)
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Years Qualified as an RGN

Mean (Minimum-Maximum)	31.24 (17-47)
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Additional Professional Qualifications * % (n)

Midwifery	85.7 (18)
Children's Nursing	9.5 (2)
Nurse Tutor	4.7 (1)

Highest Academic Qualification % (n)

Postgraduate Diploma	42.9 (9)
Master's Degree	38.1 (8)
Doctoral Degree	19.0 (4)



An open red envelope is shown from a top-down perspective. The envelope is open, revealing a light brown cardboard interior. A white card is placed inside the envelope, partially covering the cardboard. The card has the text "THE RESULTS ARE IN..." printed in a bold, blue, serif font. The envelope is set against a plain white background.

**THE RESULTS
ARE IN...**

105 Topics Identified from Phase 1 Qualitative Data Analysis

Reduced to 58 +1* Indicators for Pilot Study

Reduced to 57+1 Indicators Post Pilot Study

Care of the New Mother
Round 1
28+1 Indicators

26 Indicators Judged Appropriate with over 80% Agreement

3 Indicators submitted for second round of Rating

27 Indicators Accepted after 2 Rounds

Care of the New Mother
Reduced to 13 Indicators

Care of the Baby
Round 1
29 Indicators

All Indicators Judged Appropriate with over 80% Agreement

1 New Indicator for Second Round of Rating

30 Indicators Accepted after 2 Rounds

Care of the Baby
Reduced to 15 Indicators

Qualitative Focus Groups and Interviews

2 Round 'modified Delphi' (Rating & Priority Ranking)

Final QCM

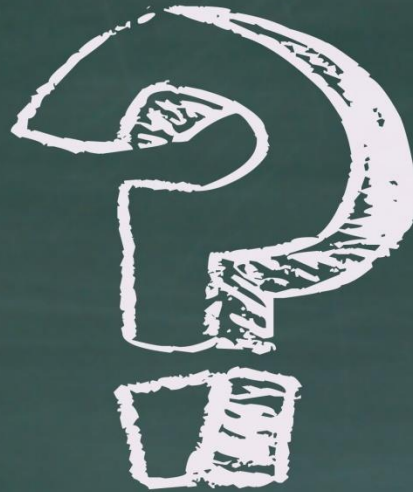
Care of the New Mother	Pri	Mean (SD)	Expert	Tau
Indicator Topic n=21	Rank		(%)*	-b
Section 1 Communication and Relationship Building				
Birth Notification	1	1.19 (0.51)	100%	.17
Individualised Care to Empower New Mother	2	2.52 (1.21)	100%	.31
Arrangement of Postnatal Visit	3	3.86 (1.65)	90%	.35
Collaborative Communication	4	3.86 (1.24)	81%	.30
Section 2 Practical Care of New Mother				
Care Plans and Referrals	1	2.04 (1.96)	90%	.22
Consent	2	2.55 (2.06)	85%	.40
Life Threatening Conditions	3	3.95 (2.38)	76%	-.02
Vaginal Blood Loss	4	4.45 (1.28)	76%	-.01
Wound Care**	5	5.53 (2.84)	57%	.26
Section 3 Health Promotion for New Mother				
Emotional Wellbeing	1	1.00 (0.00)	100%	.
Encouraged to Report Changes in Mood	2	2.42 (0.90)	100%	.28
Postnatal Depression	3	3.11 (0.81)	95%	.28
Pelvic Floor Exercise	4	3.84 (0.90)	95%	.53

Care of the Baby		Pri	Mean (SD)	Expert	Tau
Indicator Topic	n=21	Rank		(%)*	- <i>b</i>
Section 1 Infant Feeding (breastfeeding & formula)					
Observing a Breastfeed and Positive Encouragement		1	1.05 (0.22)	100%	- .11
Preventing, Identifying and Treating Breastfeeding Concerns		2	2.71 (0.90)	81%	.15
Infant Led Feeding		3	3.00 (0.95)	81%	- .07
Formula Feeding Practical Advice		1	1.10 (0.30)	100%	.36
Quantity and Frequency of Bottle Feeding		2	2.00 (0.45)	95%	.00
Section 2 Practical Care of Baby					
Physical Examination of the Baby		1	1.45 (2.01)	95%	- .18
Percentile Charts		2	2.40 (0.60)	100%	.50
Parental Concerns and Infant History		3	3.30 (1.17)	95%	.24
Jaundice		4	3.85 (0.75)	100%	- .03
Baby's General Health		5	4.90 (1.29)	80%	.42

Summary & Next Steps

- Identified process indicators for inclusion in a QCM to measure the practice of the PHN at the first postnatal visit
- Second phase of a Multiphase Mixed Method Study
- Next Step is to test the QCM in one Community Health Area in Ireland to measure the processes of PHN practice during a first postnatal visit and assess:
 - Feasibility
 - Reliability
 - Acceptability
 - Sensitivity to Change

QUESTIONS



Email: martina.giltenane@ucdconnect.ie

