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NURSING AND MIDWIFERY QUALITY CARE-METRICS:

OLDER PERSONS SERVICES RESEARCH REPORT

JUNE 2018



NURSING & MIDWIFERY
QUALITY
CARE-METRICS



Office of the
Nursing & Midwifery
Services Director

Tús Áite do
Shábháilteacht 1 Othar
Patient Safety 1 First



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



NURSING AND MIDWIFERY
QUALITY CARE-METRICS:

OLDER PERSONS SERVICES RESEARCH REPORT

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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 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 co-ordinate 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.



Mary Wynne

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Agallen.

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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. Nurses within the Older Persons Services have also contributed tremendously to the project by completing the Delphi Rounds. The team is most grateful to all the NMPDU staff, Work-stream Working Group members and all participants who have helped develop this evidence based suite of quality care process metrics and indicators for the Older Persons Services.

We would also like to acknowledge the contribution of Professor Mary Ellen Glasgow, Dean and Professor of Nursing, Duquesne University, Pittsburgh, USA, who contributed as the international expert reviewer to the research study.

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GLOSSARY/ ABBREVIATION OF TERMS

ANA	American Nurses Association
ASSIA	Applied Social Sciences Index and Abstracts
BMI	Body Mass Index
CALNOC	Collaborative Alliance for Nursing Outcomes
CDSR	Cochrane Database of Systematic Reviews
CENTRAL	Cochrane Central Register of Controlled Trials
CINAHL	Cumulative Index of Nursing and Allied Health Literature
CNM1	Clinical Nurse Manager 1
CNM2	Clinical Nurse Manager 2
CNM3	Clinical Nurse Manager 3
CNSp	Clinical Nurse Specialist
CNU	Community Nursing Unit
DARE	Database of Abstract of Reviews of Effects
Embase	Excerpta Medica Database
HIQA	Health Information and Quality Authority
HSE	Health Service Executive
IADNAM	Irish Association of Directors of Nursing and Midwifery
ISBAR	Identify, Situation, Background, Assessment and Recommendation
MDA	Misuse of Drugs Act
MDT	Multidisciplinary Team
ND	No Date
NHS	National Health Service
NMBI	Nursing and Midwifery Board of Ireland
NMPDU	Nursing and Midwifery Planning and Development Units
NUI	National University of Ireland
ONMSD	Office of the Nursing and Midwifery Services Director
OPS	Older Persons Services
PDF	Portable Document Format
PHN	Public Health Nurse
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PRN	Pro re nata/ When necessary
Pubmed	Public Medline
PyscINFO	Psychological Information Database
QCM	Quality Care-Metrics
SOP	Standard Operating Procedure
SSKIN	Skin-Surface-Keep moving-Incontinence-Nutrition& Hydration
TPN	Total parenteral nutrition
UCD	University College Dublin
UK	United Kingdom
UL	University of Limerick
US	United States
WSWG	Workstream Working Group

EXECUTIVE SUMMARY

BACKGROUND

This report presents the findings of a Nursing and Midwifery Quality Care-Metrics project for Older Persons Services (OPS) in Ireland. The aim of the project was to identify a final suite of nursing quality care process metrics and associated indicators. To achieve this purpose, seven work-streams (acute, mental health, public health nursing, children, older persons services, intellectual disability and midwifery) were established and led by Nursing and Midwifery Planning and Development (Appendix 1, 2, 3). Academic support was provided from three universities in Ireland. It was agreed that a Quality Care Process Metric is a quantifiable measure that captures quality in terms of how (or to what extent) nursing care is being done in relation to an agreed standard. A Quality Care Process Indicator is a quantifiable measure that captures what nurses are doing to provide that care in relation to a specific tool or method.

DESIGN

A two-stage project design approach was taken consisting of a systematic review of the literature and a Delphi consensus process. Ethical approval was obtained and project governance processes were established. The systematic literature review was initially conducted to identify process metrics and relevant indicators across all seven work-streams nationally. Eight databases were included in the initial search. For OPS specific metrics and indicators, grey literature was sourced from OPS services nationally and supplemented by hand searching to ensure a comprehensive search strategy. A total of 51 documents related to OPS were included in the review.

Following this, 16 existing and 17 new OPS metrics were identified to be put forward to the second stage of the project which was the Delphi process.

The Delphi process consisted of four survey rounds. The first two rounds asked participants to rate the presented metrics for inclusion in the final suite of OPS metrics while the third and fourth rounds asked participants to rate the associated indicators. 404 OPS nurses were recruited with the overall response rate being over 50% for all of the rounds. At the end of the four Delphi survey rounds, 20 OPS metrics and 90 associated indicators were identified. The survey rounds were followed by a consensus meeting conducted on 29th of November 2017. A total of 13 workstream working group (WSWG) members including academics, NMPDU project officers, Directors of Nursing, clinical practitioners, and other invited experts voted anonymously for each metric and its associated indicators. Each metric and indicator

were discussed and then voted on by the WSWG members with each metric and indicator having to achieve 70% of the votes to be included in the final suite.

FINDINGS

A total of 19 metrics and 80 indicators reached the 70% threshold and were included in the final suite of Nursing and Midwifery Quality Care-Metrics for OPS (Figure 1).

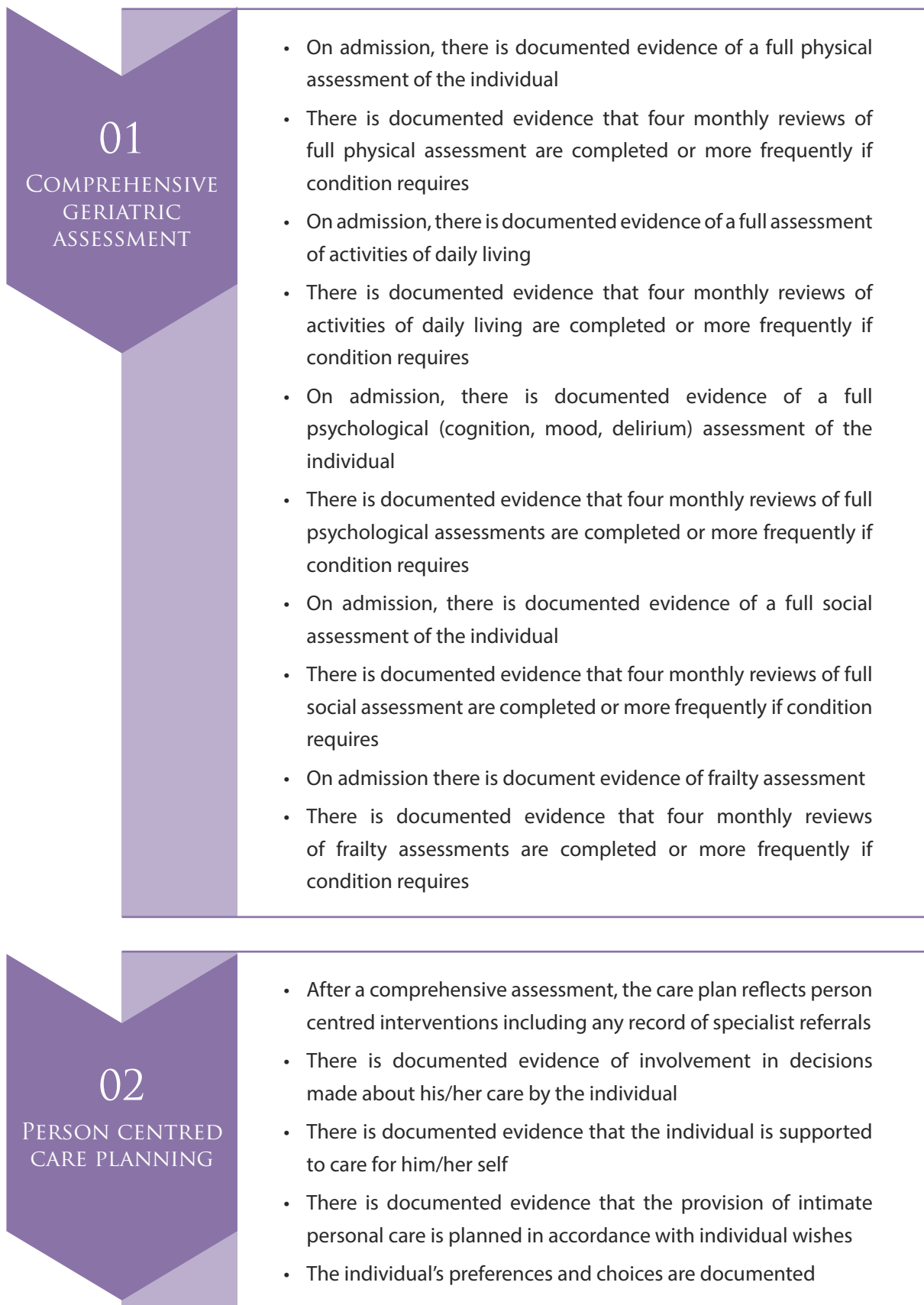
CONCLUSION

The aim of the Nursing Quality Care-Metrics project was to identify a final suite of nursing quality care process metrics and associated indicators for OPS to facilitate providing evidence of the nursing contribution to high quality, safe, patient care. Through a robust approach of a systematic literature review and a Delphi consensus process, a total of 19 nursing care process metrics and 80 indicators for OPS were identified. It is recommended that this suite of metrics and indicators are piloted before implementation.

RECOMMENDATION

The implementation of these process metrics and indicators into the healthcare setting is due to begin in 2018. An evaluation of the developed metrics and indicators from the Nursing and Midwifery Quality Care-Metrics Project is recommended using a robust research design. This will enable the examination of the impact of the metrics and indicators on nursing and midwifery care processes, while attempting to control for risk of biases.

Figure 1: Final Suite of Older Person Services Nursing Metrics and Associated Indicators



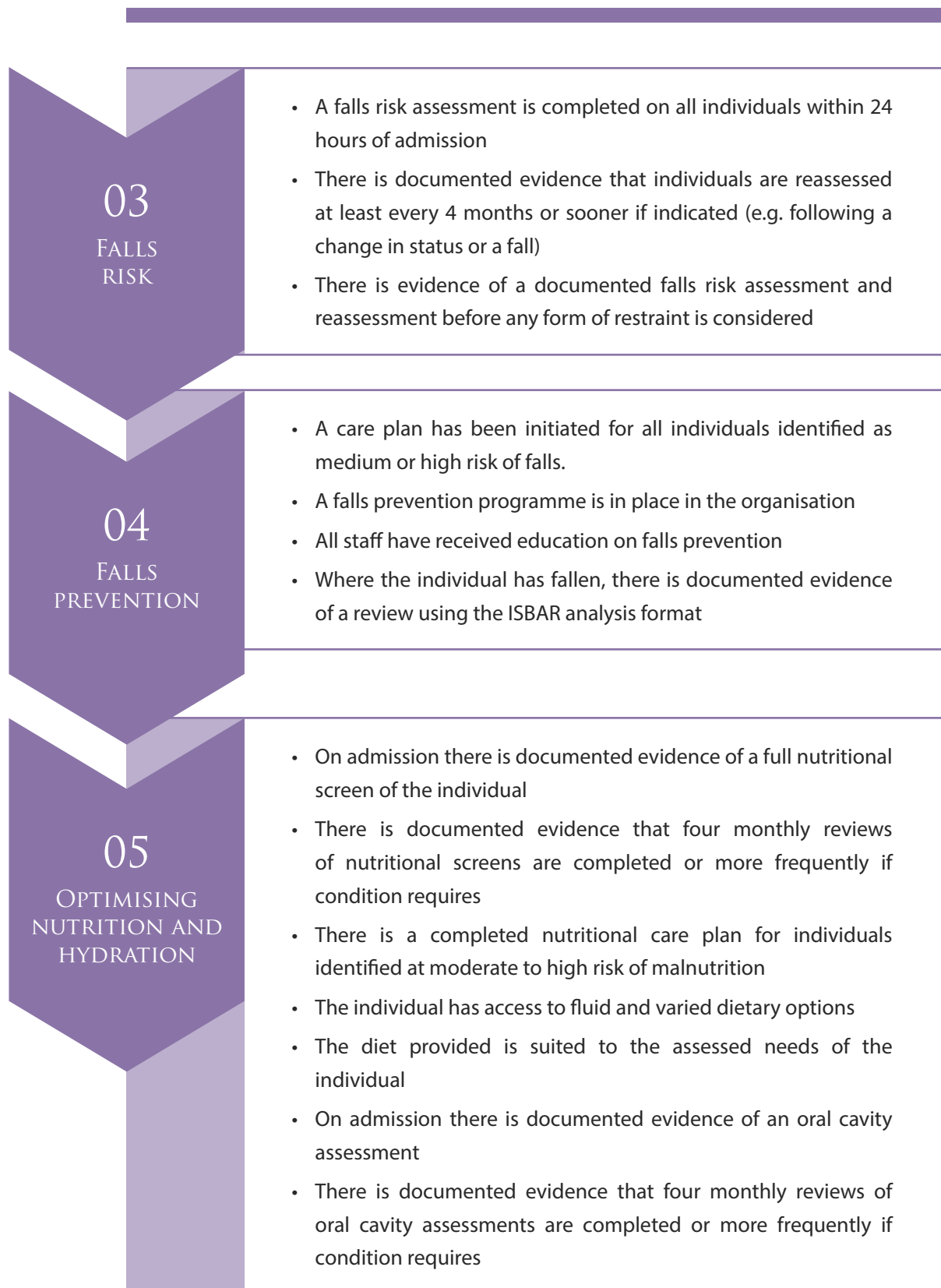


Figure 1: Final Suite of Older Persons Services Nursing Metrics and Associated Indicators (continued)

<p>06</p> <p>ASSESSMENT AND MANAGEMENT OF PRESSURE ULCERS</p>	<ul style="list-style-type: none"> • On admission and transfer there is documented evidence of a Pressure Ulcer risk assessment • If a pressure ulcer is present, the grade is documented • The pressure ulcer risk was re-assessed and documented in response to any changes to the individual's condition • For at risk individuals, commencement on Skin-Surface-Keep moving-Incontinence-Nutrition & Hydration (S.S.K.I.N) bundles for pressure ulcer prevention & management are evident • Pressure relieving devices and alternative pressure therapies are in use if indicated in the risk assessment
<p>07</p> <p>CONTINENCE ASSESSMENT, PROMOTION AND MANAGEMENT</p>	<ul style="list-style-type: none"> • On admission, transfer and discharge a continence assessment is conducted • There is documented evidence that four monthly reviews of continence assessments are completed or more frequently if condition requires • A continence promotion care plan is in place if indicated by continence assessment
<p>08</p> <p>PAIN ASSESSMENT AND MANAGEMENT</p>	<ul style="list-style-type: none"> • On admission pain is assessed and documented using a validated tool • There is documented evidence that the individual's pain is reassessed as required • There is documented evidence of a pain management care plan including the pharmacological and non-pharmacological interventions
<p>09</p> <p>ACTIVITIES <i>(Holistic)</i> SOCIAL/ ENGAGEMENT <i>(family centred/ included, social engagement and support)</i></p>	<ul style="list-style-type: none"> • There is documented evidence in a social activity plan of the individuals interests and hobbies • There is documented evidence that four monthly reviews of social activity plans are completed or more frequently if required • There is documented evidence of the individual's involvement in the development of their social activity plan • There is documented evidence of the individual's participation in the social activity plan

Figure 1: Final Suite of Older Persons Services Nursing Metrics and Associated Indicators (continued)

<p>10 SKIN INTEGRITY</p>	<ul style="list-style-type: none"> • On admission, transfer and prior to discharge a skin care inspection has been completed • There is documented evidence that risk factors associated with impaired skin integrity e.g. malnutrition, continence, mobility are identified and managed
<p>11 MEDICINES ADMINISTRATION</p>	<ul style="list-style-type: none"> • The medicines administration record provides details of the individual's legible name and health care record number • The Allergy Status is clearly identifiable on the front page of the prescription chart and/or medication administration record • Prescribed medicines not administered have an omission code entered and appropriate action taken • There are no unsecured prescribed medicinal products in the individual's environment • The frequency of medicines administration is as prescribed
<p>12 MEDICINES PRESCRIBING</p>	<ul style="list-style-type: none"> • On admission, transfer or prior to discharge there is documented evidence of medication reconciliation • There is documented evidence of a 4 monthly review of medicines • The prescription is legible with correct use of abbreviations • The minimum dose interval and/or 24 hour maximum dose is specified for all PRN medicines • Discontinued medicines are crossed off, dated and signed by person with prescriptive authority • The Generic name is used for each medicine unless the prescriber indicates a branded medicine and states 'do not substitute'

Figure 1: Final Suite of Older Persons Services Nursing Metrics and Associated Indicators (continued)

<p>13 MDA MEDICINES</p>	<ul style="list-style-type: none"> • Misuse of Drugs Act (MDA) medicines are checked & signed at each changeover of shift by nursing staff (member of day staff & night staff) • Two signatures are entered in the MDA Medicines Register for each administration of an MDA medicine • The MDA medicines cupboard is locked • A designated nurse holds MDA keys separate from other medication keys
<p>14 MEDICINE STORAGE AND CUSTODY</p>	<ul style="list-style-type: none"> • A registered nurse is in possession of the keys for medicinal product storage • All medicinal products are stored in a locked cupboard/room and trolleys are locked and secured as per local policy • An up-to-date medicines formulary resource is available and accessible
<p>15 RESPONSIVE BEHAVIOUR SUPPORT</p>	<ul style="list-style-type: none"> • On admission if evidence of responsive behaviours is identified an assessment of responsive behaviours is completed • There is documented evidence that a four monthly review of responsive behaviours assessment is completed or more frequently if required • There is documented evidence that a responsive care plan is in place • There is documented evidence that PRN psychotropic medicines are administered as a last resort only, following review and employment of non-pharmaceutical interventions • A record of all PRN Psychotropic Medication administered is maintained

Figure 1: Final Suite of Older Persons Services Nursing Metrics and Associated Indicators (continued)

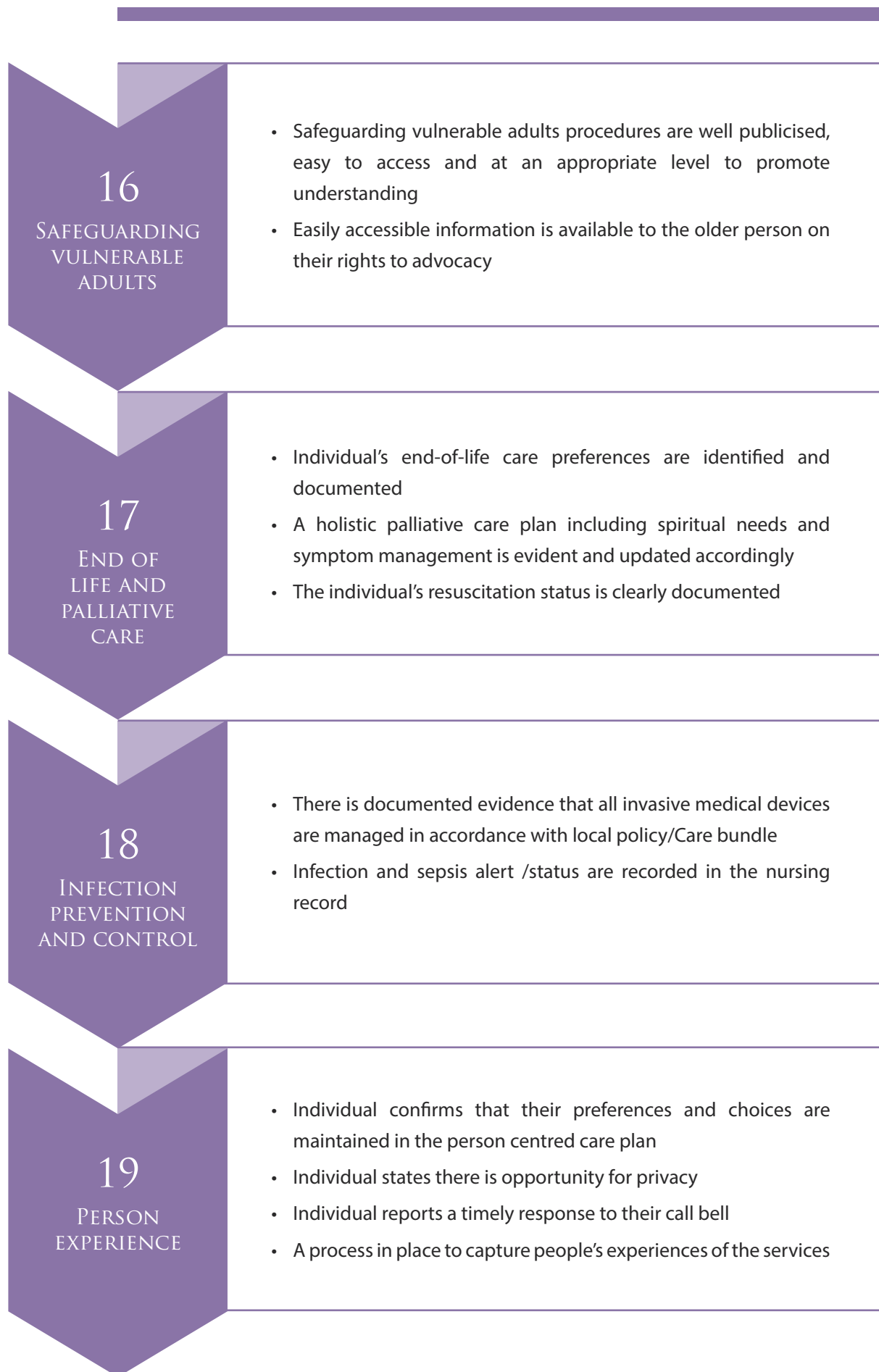


Figure 1: Final Suite of Older Persons Services Nursing Metrics and Associated Indicators (continued)

INTRODUCTION

Measures of nursing and midwifery care processes (metrics and their associated indicators) encompass all transactions associated with how care is provided, from technical delivery to interpersonal relationships of care. In Ireland, a national research project was conducted to develop one common, evidence-based metric system to measure nursing and midwifery quality care processes. Nationally, seven work-streams were identified (acute, mental health, public health nursing, children, older persons services, intellectual disability and midwifery). Each work-stream was led by an NMPDU project officer and consisted of an academic team and key stakeholders including Directors of Nursing and clinical practitioners. The WSWG was chaired by an NMPDU Director. The project aimed to critically review the scope of existing metrics and indicators and to identify additional relevant metrics and indicators for nursing and midwifery quality care processes. It consisted of two stages; a systematic review of the literature and a Delphi study. The Delphi component consisted of a four round survey and a face to face consensus meeting. The first two rounds of the survey were to identify potential metrics with rounds three and four then identifying potential indicators for these metrics. This process culminated in a final consensus meeting with key stakeholders in which a suite of quality care process metrics and indicators were identified for each of the seven work-streams.

This report presents the research findings for Older Persons Services (OPS) Quality Care Nursing Process Metrics and Indicators in which a suite of 19 metrics and 80 associated indicators were identified. The findings of stage 1 (literature review) and stage 2 (the Delphi consensus process) will be presented in turn.

STAGE 1: SYSTEMATIC LITERATURE REVIEW

Initially this was conducted across all seven work-streams and aimed to identify within the literature the quality care process metrics and associated indicators for nursing and midwifery.

It soon became clear that it was essential to establish an agreed definition of metrics and indicators. Following discussion and review of the literature the following definitions were agreed:

A **Quality Care Process Metric** is a quantifiable measure that captures quality in terms of how (or to what extent) nursing care is being done in relation to an agreed standard.

A **Quality Care Process Indicator** is a quantifiable measure that captures what nurses are doing to provide that care in relation to a specific tool or method.

METHODS

Established and robust processes for systematically reviewing literature were used (Moher et al. 2009).

SEARCH STRATEGY

Eight databases were systematically searched including: PyscINFO, Embase, Pubmed, Applied Social Sciences Index (ASSIA), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane Database of Systematic Reviews (CDSR), Cochrane Central Register of Controlled Trials (CENTRAL), and Database of Abstract of Reviews of Effects (DARE). Publications were also identified from hand searching and reviewing relevant OPS grey literature.

The search limits were studies published between 2007 and 2017, in English language where full text were available. For this purpose a systematic review procedure was adapted using the search terms `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`. The search was not limited for study design but widened to comprise all types of sources including grey literature.

SCREENING AND IDENTIFICATION OF STUDIES

Covidence software (Cochrane 2016) was used to manage the retrieved studies. After duplicates were removed, each title was reviewed independently by at least two members of the national academic teams. Disputes were settled by discussion and negotiation. For all the remaining studies, the full abstracts were reviewed by two academics again with disputes resolved by the process outlined above.

As the initial review was to include all seven work-streams, studies were included if participants were registered nurses/midwives. Also included were education programmes using nursing and midwifery metrics systems in acute, children, intellectual disability, mental health, midwifery, older person, or public health nursing services or where participants were persons in receipt of nursing or midwifery care and services. Included studies had to make a clear reference to nursing or midwifery care processes and identified a specific quality process in use or proposed use.

SYSTEMATIC REVIEW RESULTS

The search conducted across the eight databases resulted in 15,304 citations. Following removal of duplicates, 7,524 unique references were identified and independently screened for selection. Following title and abstract screening, 218 citations were retained for full-text screening. Following full text screening, 112 articles were included upon the basis that they met the study's inclusion criteria. These articles were then tagged depending on their relevance to acute, children, intellectual disability, mental health, midwifery, older person, or public health nursing services. From this initial search, eight articles were identified which were directly relevant to OPS.

Additional searches included grey literature relevant to OPS and publications identified from hand searching. From this search, 37 documents from grey literature and six articles from hand searching were identified as relevant and included in the review. This resulted in 51 studies out of 7,575 included after full text screening (Figure 2, Appendix 4 and 5).

A data extraction form was designed and studies were critically appraised. After several rounds of paper review, appraisal and data extraction by the four members of the OPS academic team, 33 OPS metrics were identified (Table 1). Sixteen of the identified metrics were existing metrics with 17 new metrics identified. These new metrics were:

- Emotional support,
- Mobility, dexterity and rehabilitation,
- Oral and dental care,
- Sensory loss (e.g. hearing or vision) is identified and managed,
- Optimising nutrition and hydration,
- Meals and mealtimes,
- Tube feeding,

-
- Infection control,
 - Safeguarding vulnerable adults,
 - Privacy and dignity,
 - Pain assessment,
 - Pain management,
 - Continence assessment, promotion and management,
 - End of life and palliative care,
 - Delirium screening, prevention and management,
 - Depression screening, prevention and management,
 - Responsive (challenging) behaviours support.

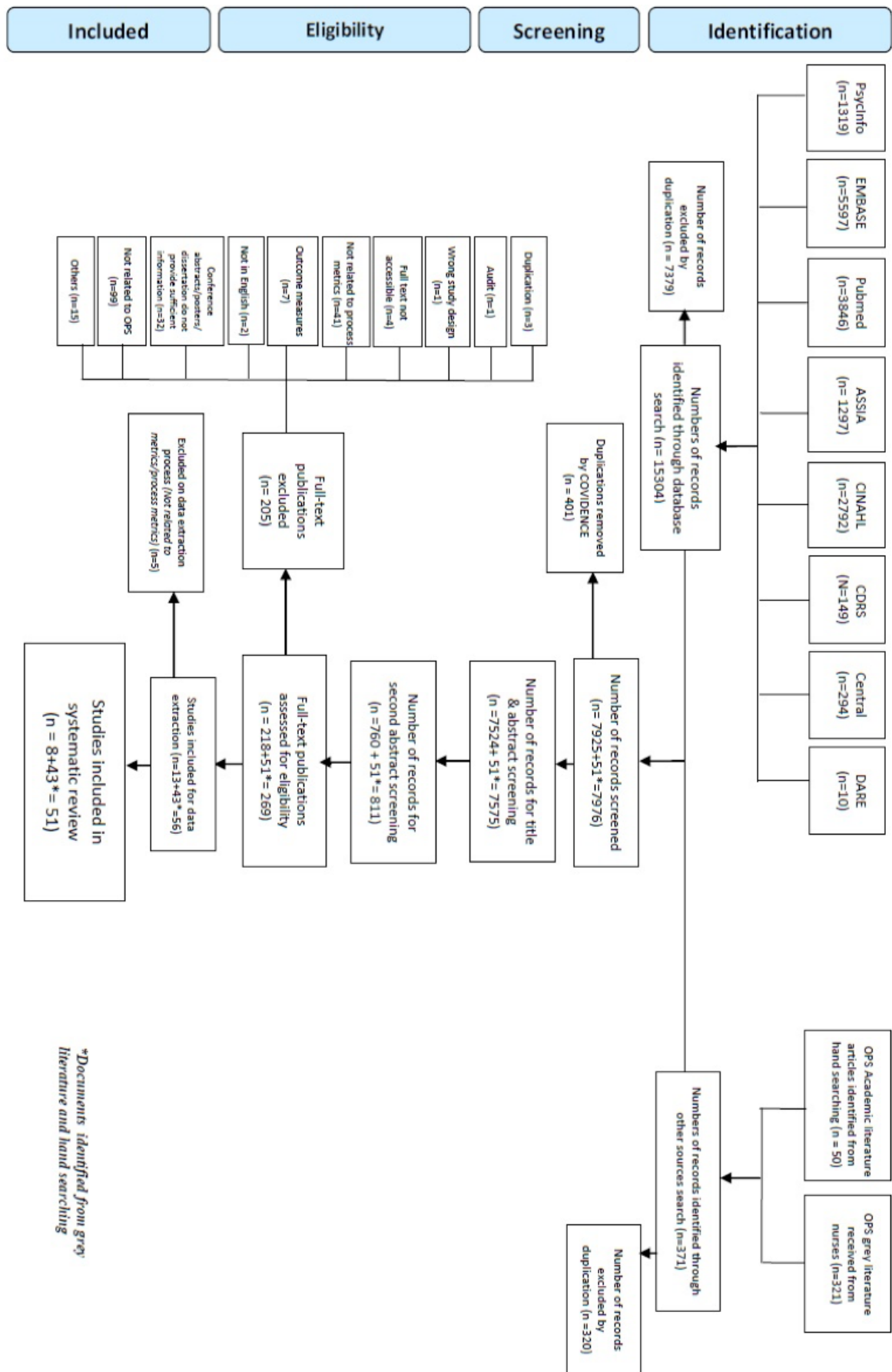


Figure 2: PRISMA Flow Diagram for the Systematic Literature Review

Following the systematic review process, an Older Person Services WSWG meeting was held on the 25th of May, 2017 (Membership Appendix 6). This was to discuss the potential metrics extracted from the systematic literature review as well as the metrics from the 2015 OPS Standard Operating Procedure for Nursing and Midwifery Quality Care Metrics and other existing metrics from the literature. Following this discussion, 33 potential OPS metrics were included in Round 1 of the Delphi survey (Table 1).

TABLE 1. EXISTING AND NEW OPS METRICS FOR ROUND 1 OF THE DELPHI SURVEY

EXISTING METRICS (HSE QUALITY CARE-METRICS)	NEW METRICS
1. Medication storage and custody	17. Emotional support
2. MDA drugs	18. Mobility, dexterity and rehabilitation
3. Medication administration	19. Oral and dental care
4. Medication prescription	20. Sensory loss (e.g. hearing or vision) is identified and managed
5. Standardised needs assessment as basis for care plan	21. Optimising nutrition and hydration
6. Assessment and management of pressure ulcers	22. Meals and mealtimes
7. Fall risk assessment	23. Tube feeding
8. Fall prevention	24. Infection control
9. Invasive medical devices (e.g. indwelling urinary catheters)	25. Safeguarding vulnerable adults
10. Physical restraints	26. Privacy and dignity
11. Discharge planning	27. Pain assessment
12. Environment (hygiene and safety)	28. Pain management
13. Patient experience	29. Continence assessment, promotion and management
EXISTING METRICS (FROM LITERATURE)	30. End of life and palliative care
14. Cognitive assessment	31. Delirium screening, prevention and management
15. Wound care	32. Depression screening, prevention and management
16. Chemical restraints	33. Responsive (challenging) behaviours support

STAGE 2: DELPHI CONSENSUS PROCESS

This stage consisted of a four-round online Delphi survey to develop consensus on prioritised metrics and indicators. At the end of the first two rounds, the metrics were identified and at the end of Round 3 and 4, the indicators for those metrics were identified.

SAMPLING FRAME FOR THE DELPHI SURVEYS

The target population were nurses working in OPS across Ireland who could complete the survey electronically. There was an absence of guidance on optimal sample size requirements for consensus development studies such as this. Completed survey sample sizes were estimated based on that which would be required for the sample to be representative of a given total population using 95% confidence level and a confidence interval of 5. Thus the required sample size was calculated as 300 (using the above parameters) for the OPS work-stream. 404 OPS nurses expressed an interest in participating in the surveys.

RECRUITMENT TO THE DELPHI SURVEYS

With the support of the Office of the Nursing and Midwifery Services Director (ONMSD), Senior Clinical Managers were requested to distribute an information pack to potential participants in their area. This information pack provided information on the study and invited them to participate. Any potential participants had an opportunity to contact the academic team directly to clarify any issues prior to making a decision to participate.

An invitation e-mail was then circulated to participants who gave their email address as above. On receipt of this, the academic team forwarded further information, instructions and the survey instrument.

DATA COLLECTION

The Delphi surveys consisted of four rounds of data collection and analysis to synthesise the opinions of participants into a group consensus on which metrics (Rounds 1 and 2) and their indicators (Round 3 and 4) should be used. An online survey software system was used to distribute the surveys. All survey rounds collected participants' demographic information (grade, work place, years of experience) and the list of metrics/indicators. Participants were asked to rate each metric/indicator between 1 and 9 on a Likert scale where 1 to 3 was not important, 4 to 6 was important but not crucial, and 7 to 9 was very important.

Responses to each round were collated, analysed, and redistributed to participants for further comment in successive rounds. Each round had a closing date 21 days after the date of invitation with weekly e-mail reminders sent.

DATA ANALYSIS

Data analysis for all four rounds was conducted using this rule:

All outcomes from the rounds, including newly identified metrics/indicators, will be forwarded to the next round and re-rated by the participants, with knowledge of the group's results from the previous round. Consensus on inclusion of a metric/indicator will be determined where 70% or more of participants score the metrics as 7 to 9 (very important) and less than 15% of participants score the metric as 1 to 3 (not important).

The data obtained from the Delphi surveys was analysed using simple descriptive statistics to summarise data.

ETHICAL CONSIDERATIONS

Ethical approval to conduct this study was obtained from the University of Limerick Research Ethics Committee. Participation in the survey was by an 'opt-in' informed consent approach. Participants gave consent to participate by clicking on an 'I consent to participate in this study' link prior to being able to access the Round 1 instrument. The online survey software system used to facilitate the online surveys maintained data behind a firewall. Only the academic team had access to the data through use of a password and user identifier.

DELPHI SURVEY ROUND 1

Round 1 of the Delphi survey was distributed on the 6th of June 2017 and ended on 26th of June. The 404 OPS nurses recruited were sent the invitation for Round one through their individual emails including the survey's web link. 217 responded an overall response rate of 53.71% (n= 217), dropping to 49.75% as 201 nurses completed all metrics related questions on the survey.

DEMOGRAPHICS

Most of the nurses were based in services in the HSE West area (Figure 3), were staff nurse level (23.44%) and their average years of experience was 23.31 (Table 2).

Figure 3: Older Persons Services Participants by Location at Close of Round 1 (Total responses: 186, Skipped: 31)

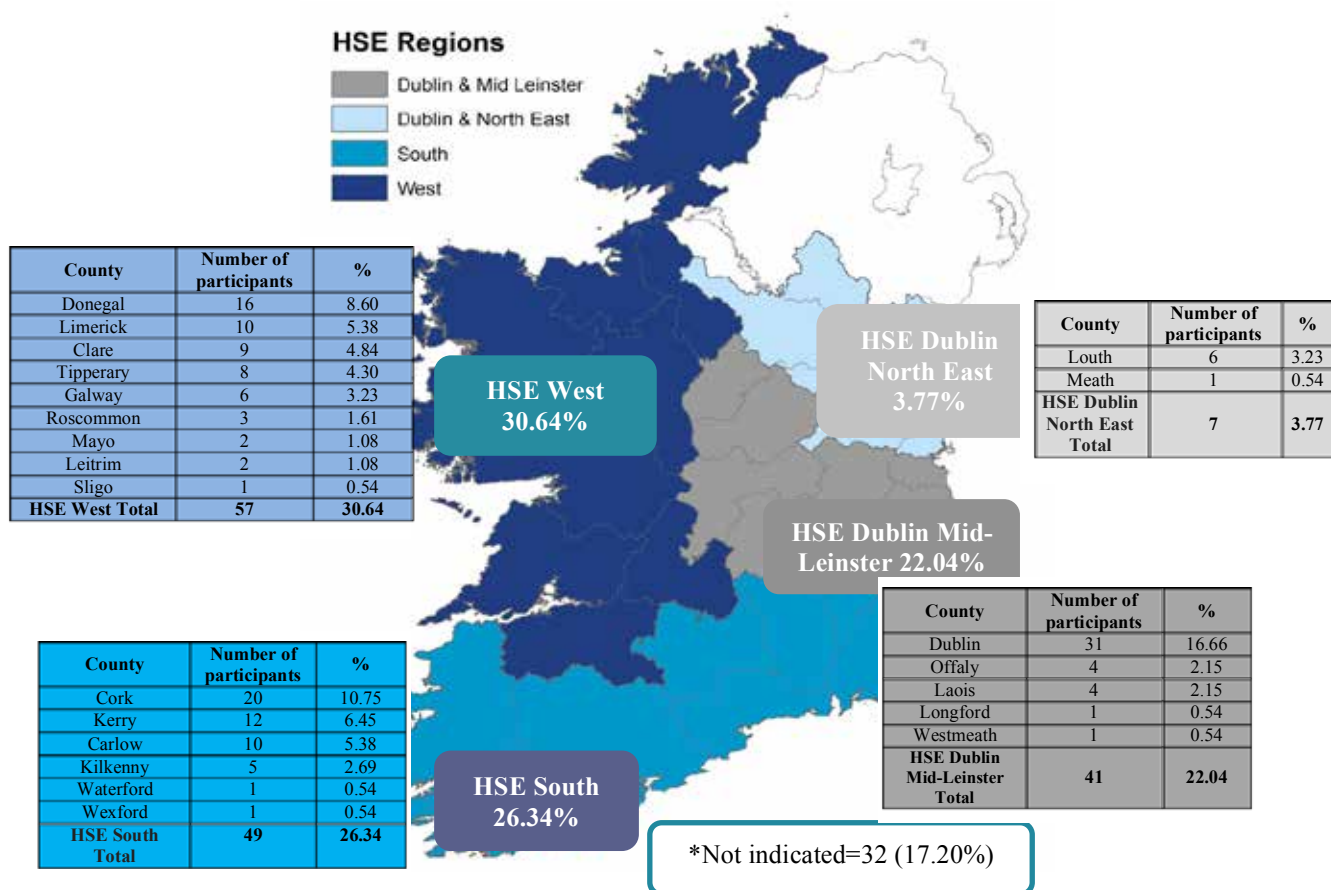


TABLE 2. OLDER PERSONS SERVICES PARTICIPANTS BY GRADE AT CLOSE OF ROUND 1(TOTAL RESPONSES: 209, SKIPPED: 8)

GRADE	Number of participants	%
Staff nurse	49	23.44%
CNM2	47	22.49%
Assistant Director of Nursing	32	15.31%
Director of Nursing	28	13.40%
CNM1	14	6.70%
CNSp	11	5.26%
CNM3	3	1.44%
Educator	3	1.44%
Other (please specify)	22	10.53%

METRIC RATINGS

The findings of the metric rating are presented in Table 2, with 21 of the 33 metrics initially making it through to Round 2 of the Delphi survey. In accordance with the analysis rule, none of these metrics were rated between 1 and 3 by more than 15% of the participants and so were included.

Participants were also given the opportunity to add suggestions for new areas of practice to be included as potential new metrics in the next round of the survey. These 200 qualitative comments were analysed, categorised under 17 common themes and mapped under either existing or new metrics.

12 of the 33 metrics were not rated between 7 and 9 by 70% or more of the nurses thus they were initially excluded. However, four of these metrics were specifically mentioned in the qualitative comments. This enabled those four metrics (1-Patient experience, 2-Environment -hygiene and safety, 3-Cognitive assessment, 4-Mobility, dexterity and rehabilitation) to reach 70%. Following this, the number of metrics increased by four and reached 25.

In addition, the analysis of qualitative comments identified four further areas of practice, these being: 1-Activities (physical, social, recreational and sensory); 2-Social/ engagement (family centred/included, social engagement and support); 3-Person centred care (individual plan/assessment, self-care, self-management, decision making) and 4-Health Screening (Sensory, Depression and Delirium). Thus on completion of Round 1 of the Delphi survey, the total number of metrics for Round 2 was 29 (Table 3).

TABLE 3. OLDER PERSONS SERVICES METRICS RATED IN ROUND 1

OPS metrics rated 70% and above	% of participants
1 Medication administration	95.55
2 Safeguarding vulnerable adults	94.06
3 Pain management	93.57
4 End of life and palliative care	93.07
5 Assessment and management of pressure ulcers 93.07	1.43%
6 MDA Drugs	92.08
7 Fall risk assessment	91.59
8 Pain assessment	90.10
9 Fall prevention	88.62
10 Medication prescriptions	88.62
11 Infection control	88.61
12 Wound care	88.12
13 Medication storage and custody	87.63
14 Privacy and dignity	84.66
15 Optimising nutrition and hydration	84.16
16 Chemical restraints	81.68
17 Responsive (challenging) behaviours support	80.09
18 Physical restraints	79.70
19 Standardised needs assessment as basis for care plan	75.74
20 Continence assessment, promotion and management	74.25
21 Invasive medical devices (e.g. indwelling urinary catheters)	70.80
Metrics that made it through after analysis of qualitative comments	% of participants
22 Patient experience	70.00
23 Environment (hygiene and safety)	70.00
24 Cognitive assessment	70.00
25 Mobility, dexterity and rehabilitation	70.00
Additional Metrics identified from qualitative comments	% of participants
26 Activities (physical, social, recreational and sensory)	NA
27 Social/ engagement (family centred/included, social engagement and support)	NA
28 Person centred care (individual plan/assessment, self-care, self-management, decision making)	NA
29 Health Screening (Sensory, Depression and Delirium)	NA
OPS metrics rated below 70%- excluded	% of participants
Meals and mealtimes	65.84
Delirium screening, prevention and management	65.67
Tube feeding	62.37
Depression screening, prevention and management	61.20
Sensory loss (e.g hearing or vision) is identified and managed	60.21
Oral and dental care	59.70
Emotional support	58.42
Discharge planning	56.93

DELPHI SURVEY ROUND 2

The second round survey was distributed on the 11th of July 2017, weekly reminders were sent and the data collection period ended on 31st of July 2017.

The 217 OPS nurses responding to the first round and were sent an invitation for Round 2 by email. 186 participated in the survey with an overall response rate of 85.71% (n= 186) dropping to 78.34% with 170 nurses completing all metrics related questions on the survey.

DEMOGRAPHICS

Most of the nurses were based in services in the HSE Dublin Mid-Leinster area (Figure 4), most were Clinical Nurse Manager 2 (CNM2) level (29.83%) and their average years of experience was 24.09 (Table 4).

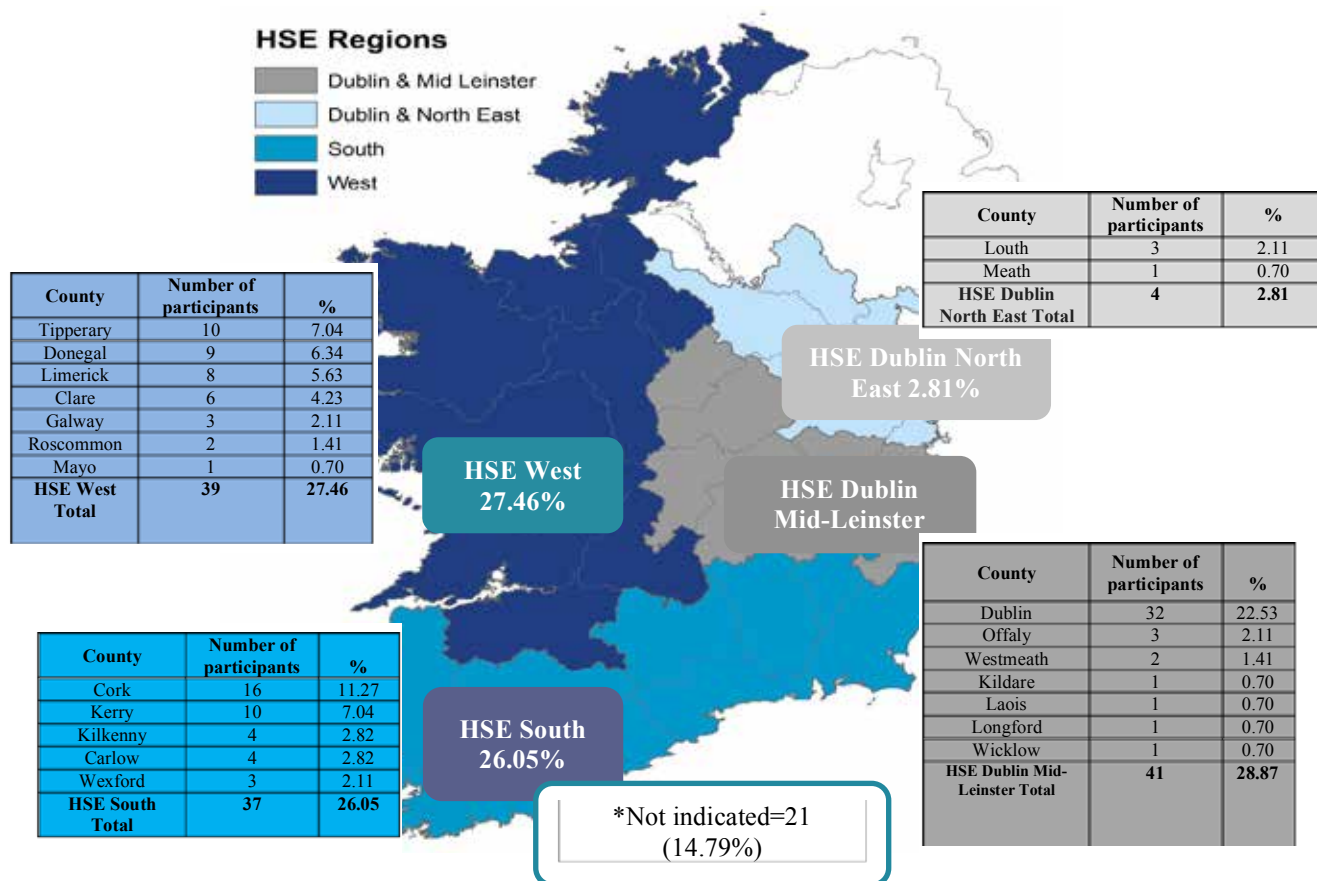


Figure 4: Older Persons Services Participants by Location at Close of Round 2 (Total responses: 142, Skipped: 44)

TABLE 4. OLDER PERSONS SERVICES PARTICIPANTS BY GRADE AT CLOSE OF ROUND 2(TOTAL RESPONSES: 181, SKIPPED: 5)

GRADE	Number of participants	%
CNM2	54	29.83%
Assistant Director of Nursing	36	19.89%
Staff nurse	27	14.92%
Director of Nursing	23	12.71%
CNSp	12	6.63%
CNM1	11	6.08%
CNM3	4	2.21%
Educator	2	1.10%
Other (please specify)	12	6.63%

METRIC RATINGS

Twenty-six of the 29 metrics were rated 70% and over and none were rated between 1 and 3 by more than 15% of the nurses, they were therefore included (Table 5).

Three of the 29 metrics were rated between 7 and 9 by less than 70% of the nurses and thus were excluded. Those were; Health Screening (Sensory, Depression and Delirium) (69.99%), Activities (physical, social, recreational and sensory) (58.24%), Social/ engagement (family centred/included, social engagement and support) (57.65%).

TABLE 5. OLDER PERSONS SERVICES METRICS RATED IN ROUND 1

OPS metrics rated 70% and above	% of participants
1. Medication administration	98.84
2. Assessment and management of pressure ulcers	98.25
3. End of life and palliative care	97.67
4. Pain management	97.66
5. Pain assessment	96.49
6. Fall risk assessment	95.35
7. Fall prevention	95.35
8. MDA Drugs	94.77
9. Safeguarding vulnerable adults	94.74
10. Optimising nutrition and hydration	93.02
11. Medication storage and custody	92.45
12. Infection control	91.86
13. Wound care	91.86
14. Medication prescriptions	89.53
15. Privacy and dignity	89.48
16. Responsive (challenging) behaviours support	86.55
17. Chemical restraints	84.30
18. Continence assessment, promotion and management	84.21
19. Person centred care (individual plan/assessment, self-care, self-management, decision making)	83.53
20. Standardised needs assessment as basis for care plan	82.56
21. Physical restraints	80.81
22. Invasive medical devices (e.g. indwelling urinary catheters)	77.33
23. Patient experience	76.75
24. Mobility, dexterity and rehabilitation	76.02
25. Cognitive assessment	72.68
26. Environment (hygiene and safety)	72.09
OPS Metrics rated by less than 70%	% of participants
27. Health Screening (Sensory, Depression and Delirium)	69.99
28. Activities (physical, social, recreational and sensory)	58.24
29. Social/ engagement (family-centred/included, social engagement and support)	57.65

After the end of Round 2, 26 metrics were identified. After discussions in a work-stream meeting, these 26 metrics were re-formulated into 20 metrics. However, 13 of these metrics required indicator development as there was little or no supporting literature. The members of the WSWG were tasked to draw on clinical expertise nationally in order to derive indicators required for these metrics. These were collated by the academic team ready for the third round of the Delphi survey.

DELPHI SURVEY ROUND 3

This round of the Delphi differed from Round 1 and 2 in that now the set of metrics with their respective indicators were distributed to the participants. Twenty metrics and 95 indicators were sent.

Using a Likert scale as before, participants were asked to rate the indicators using the 1 to 9 scale. This third round was distributed on the 22nd of August 2017, weekly reminders were sent and the data collection period ended on the 11th of September 2017.

404 nurses were originally recruited for the QCM study; however 17 of them dropped out through Round 1 and 2, thus invitations were sent to 387 OPS nurses. The overall response rate for Round 3 was 56.58% (n=219), dropping to 46.51% as 180 nurses completed all indicators related on the survey.

DEMOGRAPHICS

Most of the nurses were based in the HSE West area (Figure 5), were CNM2 level (24.14%) and their average years of experience was 23.23 (Table 6).

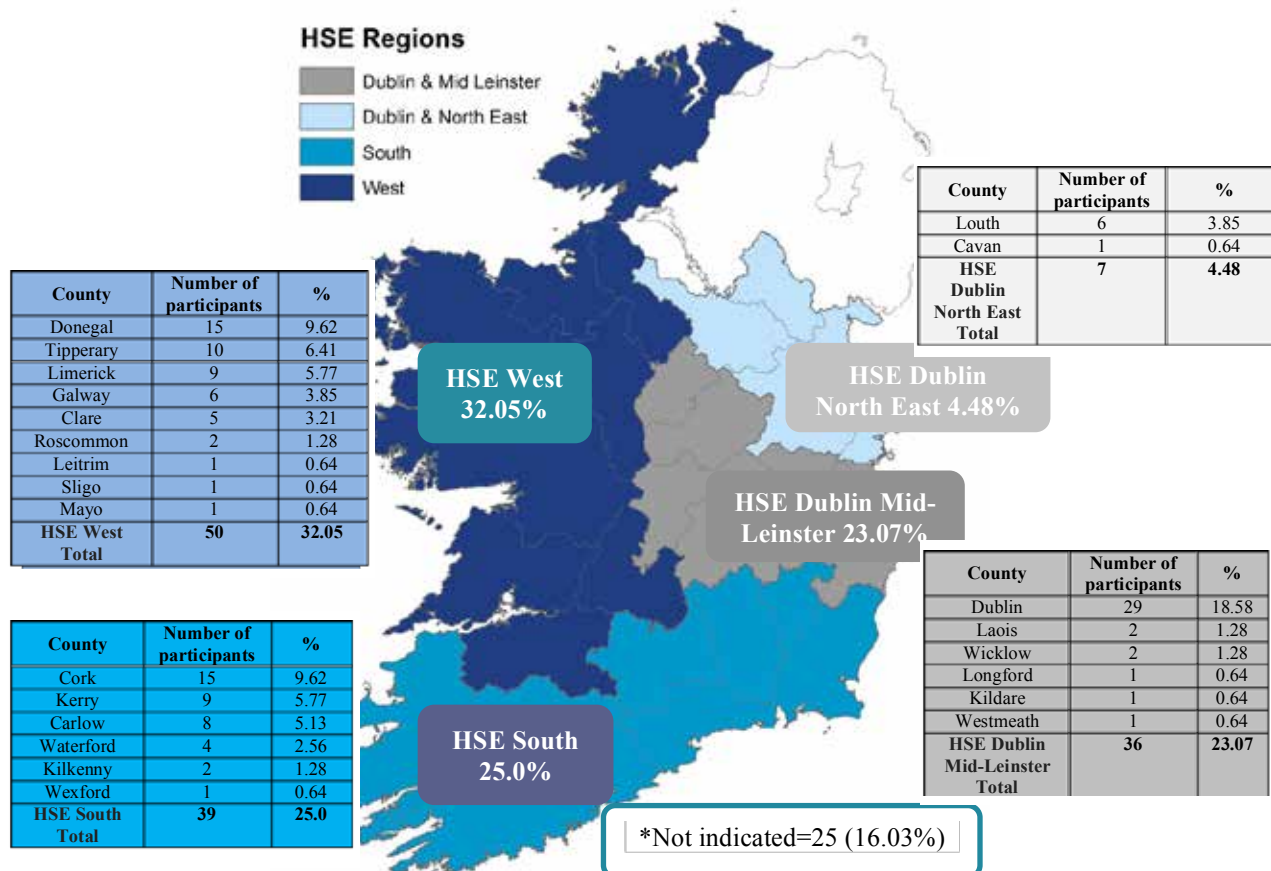


Figure 5: Older Persons Services Participants by Location at Close of Round 3 (Total responses: 156, Skipped: 63)

TABLE 6. OLDER PERSONS SERVICES PARTICIPANTS BY GRADE AT CLOSE OF ROUND 3(TOTAL RESPONSES: 203, SKIPPED: 16)

GRADE	Number of participants	%
CNM2	49	24.14%
Staff nurse	42	20.69%
Assistant Director of Nursing	34	16.75%
Director of Nursing	26	12.81%
CNM1	15	7.39%
CNSp	15	7.39%
Educator	6	2.96%
CNM3	3	1.48%
Other (please specify)	14	6.90%

INDICATOR RATINGS

As in Rounds 1 and 2, the same analysis rule was used. 92 of the 95 indicators relevant to the 20 metrics achieved the 70% threshold with none of these indicators being rated between 1 and 3 by more than 15% of the participants. These were therefore included (Table 7). Only three indicators out of 95 were rated between 7 and 9 by less than 70% and thus were excluded. These related to the continence assessment, promotion and management metric (Table 7).

As in Round 1, nurses could add their suggestions for other indicators. There were 71 qualitative comments received and after analysis of these the indicators were further reviewed, refined, collapsed or separated where necessary. Following this process, the final number of indicators to be included in Round 4 was 90.

TABLE 7. OLDER PERSONS SERVICES INDICATORS RATED IN ROUND 3

METRICS	INDICATORS	% rated between 7 and 9
01 Comprehensive geriatric needs assessment	1. There is evidence of a full physical assessment of the individual on admission and regular review	92.14
	2. There is evidence of a full functional assessment of the individual on admission and regular review	93.96
	3. There is evidence of a full psychological (cognition and mood) assessment of the individual on admission and regular review	79.05
	4. There is evidence of a full social assessment of the individual on admission and regular review	74.87
	5. Evidence of appropriate specialist referral as required	76.45

02 Person centred care planning	6. After a comprehensive geriatric assessment, appropriate interventions have been identified, implemented, and evaluated	95.29
	7. Individual involvement in decisions made about his/her care is ensured	91.10
	8. Individual is supported to care for himself/herself, where appropriate	87.96
	9. There is evidence that each individual has been consulted regarding the provision of intimate personal care and support	83.77
	10. Each individual's preferences and choices with regard to how they would like to be addressed are respected	86.90
	11. Each individual has an opportunity to be alone when receiving visitors, having personal consultations or examinations	76.44
	12. Each individual's preferences and choices regarding time of rising and retiring are respected	74.35
03 Fall risk assessment	13. A falls risk assessment is completed on all individuals with any degree of mobility (immobile individuals are exempt) within 24 hours of admission	95.22
	14. Individuals are reassessed at least every 3 months or sooner if indicated (e.g. following a change in status or a fall)	94.15
04 Fall prevention	15. A care plan has been initiated for all individuals identified as medium or high risk of fall	97.34
	16. A falls prevention programme is in place in the organisation and all staff have received education about it	94.15
	17. The total environment is free from obstacles and hazards. Observed that call bell is in sight & reach, safe footwear are on feet, room is free of clutter; medication administration record is observed if given night sedation, individual is asked about history of falls.	92.03
	18. There is evidence of a risk assessment and reassessment of the individual is documented before a decision made for physical restraint use.	94.15
	19. Where the individual has fallen, the individual has been reviewed using the ISBAR analysis	89.90
05 Optimising nutrition and hydration	20. A nutritional screening is undertaken on admission and at set intervals dated and signed by the assessor. If in residential care reviewed at 4 monthly periods.	95.17
	21. The individual's weight and BMI on admission is recorded and at set intervals for residential care.	95.67
	22. If the Individual is identified at risk (moderate to high risk), following a full nutritional assessment, a person centred nutritional care plan demonstrating nutritional support interventions is evident.	98.39
	23. All Individuals receive a varied, appealing, wholesome and nutritious diet, which is suited to individual assessed and recorded requirements.	90.81
06 Assessment and management of pressure ulcers	24. Oral cavity is assessed and date of last dental check is recorded.	78.38
	25. A Pressure Ulcer risk assessment was conducted on admission/transfer to the unit/ward and was dated, timed and signed by the assessing staff member	98.92
	26. A re-assessment of pressure ulcer risk was undertaken within the last 4 month period	97.84
	27. If the individual is identified as at risk, a Care Plan with pressure ulcer prevention measures is evident	97.29

07 Continence assessment, promotion and management	28. A Continence assessment been carried out on admission	81.53
	29. A Care Plan is in place to address Continence Promotion	83.69
	30. There is evidence that all treatment options have been explored	71.73
	31. A bladder diary has been completed for at least 3 days.	59.79
	32. There is evidence of 4 monthly evaluation of continence	69.02
	33. The type and rationale for selecting the particular continence products are clearly documented	69.56
08 Pain assessment and management	34. An appropriate pain assessment tool is used where indicated	96.74
	35. Individual's pain, sedation/agitation scores and level of comfort are evaluated and recorded every 2-4 hours (until pain free -Score 0)	91.31
	36. A care plan demonstrating pain management and interventions is evident (medication and otherwise)	94.56
	37. Analgesia administration and its efficiency are recorded	95.65
09 Mobility, dexterity and rehabilitation	38. A referral to a Pain Clinic/specialist has been made if pain persists and efficiency of interventions is not meeting the individual's needs	82.06
	39. Pre-admission/pre –morbid and current functional status is recorded	84.71
	40. The care plan demonstrated an enabling approach where client mobility and independence is promoted within functional capacity	87.43
	41. Person centred goal setting addresses self-care and activities of daily living	89.62
	42. There is evidence of medical and therapy reassessment / engagement where there is a change in functional status	87.98
10 Activities <i>(physical, social, recreational and sensory)</i> Social/engagement <i>(family-centred/ included, social engagement and support)</i>	43 Enabling supports, strategies, aids and assistive devices are appropriately used where functional limitations exist	85.25
	44. An assessment of residents' interests and capacities on admission and a review of these on a regular basis	76.50
11 Wound care	45. Schedule of activities should be driven by residents and they should be included in drawing up a schedule	73.77
	46. If a pressure ulcer is present, the grade is documented on the relevant documentation	98.90
	47. Regular inspections and skin care are performed in a MDT approach in collaboration with individual and family	93.99
	48. Modifiable risk factors associated with poor wound healing e.g. malnutrition, continence, mobility are identified.	98.17
	49. Optimal mobility and manual handling are facilitated.	94.54
12 Medication administration	50. Pressure relieving devices and alternative pressure therapies are used.	97.27
	51. The Individual's prescription documentation provides details of individual's legible name, unique identifier	100
	52. The Allergy Status is clearly identifiable on the front page of the prescription chart	99.45
	53. All prescribed medication are administered or have an omission code entered	99.45
	54. The individual's surrounding environment is free of unsecured prescribed medicinal products	97.27

13 Medication prescribing	55. There is evidence of medication reconciliation on admission transfer	91.26
	56. There is evidence of 3 monthly review	91.26
	57. The complete prescription is legible with correct use of abbreviations	97.82
	58. The Frequency of Administration is recorded & correct timings indicated	97.82
	59. The minimum dose interval and/or 24 hour maximum dose is specified for all "as required" or PRN drugs	95.08
	60. Discontinued medicines are crossed off, dated and signed by prescriber	96.17
	61. The Generic name is used for each drug prescribed	84.70
14 MDA Medicines	62. MDA Medicines are checked & signed at each changeover of shifts by nursing staff (By member of Day staff & Night Staff)	97.82
	63. Two signatures are entered in the MDA Medicines Register for each administration of an MDA Medicine	98.36
	64. The MDA Medicines cupboard is locked	97.81
	65. A designated nurse holds MDA keys separate from other medication keys	95.07
15 Medication storage and custody	66. A registered nurse is in possession of the keys for Medicinal Product Storage	96.72
	67. All Medicinal products are stored in a locked cupboard/room and trolleys are locked and secured as per local policy.	97.81
	68. A Drug Formulary is available on all Medicine Trolleys.	90.71
16 Responsive (challenging) behaviour support	69. There is an assessment carried out on communication on admission.	92.35
	70. There is a care plan in place to manage communication needs and memory deficits which evidence information obtained from the Resident and / or significant other / designated advocate.	90.16
	71. There is a care plan in place for management of Responsive Behaviours.	91.81
	72. PRN psychotropic medication is evidenced to be given as a last resort only.(Evidence that a full assessment has taken place and employment of non-pharmaceutical interventions are included)	91.80
	73. There is an assessment carried out on Responsive Behaviours on admission	84.16
	74. The Residents conversational preferences are documented using the appropriate tool e.g.; 'A Key to Me'.	81.42
	75. Each incident of Responsive Behaviour is assessed using Antecedent, Behaviour and Consequence monitoring to determine trending triggers.	85.25
	76. The Responsive Behaviour Care plan is evaluated and updated to include appropriate psychosocial interventions specific to the Resident.	89.07
	77. A multidisciplinary holistic assessment is carried out before medication is prescribed to manage challenging behaviour.	89.07
	78. A record of all PRN Psychotropic Medication administered is maintained by Nursing Administration and available to each ward / Unit.	82.51

17 Safeguarding vulnerable adults	79. Risk assessments relating to vulnerable adults in the Nursing Care plan have been carried out in consultation with the vulnerable person, their family, advocates and the multidisciplinary team.	88.53
	80. There is information available and easily accessible to the older person of their rights to be free from abuse and supported to exercise these rights, including access to advocacy.	89.61
	81. Complaints handling procedures are well publicised, easy to access and at an appropriate level to promote understanding.	89.62
18 End of life and palliative care	82. Individual's preferences for end-of-life care are clearly documented in the nursing care plan	93.45
	83. A comprehensive nursing care plan, which includes symptom management is evident.	93.99
	84. The chart clearly indicates the individuals resuscitation status	94.53
	85. Individual's end-of-life care preferences are reassessed at least every 3 months or as per local policy	84.69
	86. Holistic assessment including spiritual needs and their relation to quality of life is carried out	84.61
19 Infection control	87. All invasive medical devices are managed in accordance with the policy / Care bundle e.g. Peg, Catheter, Cannula, TPN, Tracheostomy.	93.45
	88. An infection alert /status is recorded in the nursing / medical record.	94.53
	89. Environmental hygiene audits are complete at a minimum of 6 monthly intervals.	85.25
	90. Hand hygiene audits are completed at a minimum of 6 monthly periods.	85.25
	91. The unit/ward area and individual bed space is clean and clutter free.	86.89
20 Patient experience	92. Consistent delivery of care against identified needs is provided	80.88
	93. Individual's preference and choice are respected	87.98
	94. What is important to the individual is known and documented in care plan	89.62
	95. Patient experiences are anonymously surveyed at a regular interval.	73.78

DELPHI SURVEY ROUND 4

The fourth round of the Delphi Survey was distributed on the 3rd of October 2017, weekly reminders were sent and the data collection period ended on the 23rd of October 2017.

DEMOGRAPHICS

219 OPS nurses were sent the web-link with 181 participating in the survey an overall response rate of 82.64% (n= 181), dropping to 67.12% with 147 nurses completing all indicators related on the survey. Most of the nurses were in the HSE West area (Figure 6), were CNM2 level (23.84%) and their average years of experience was 23.74 (Table 8).

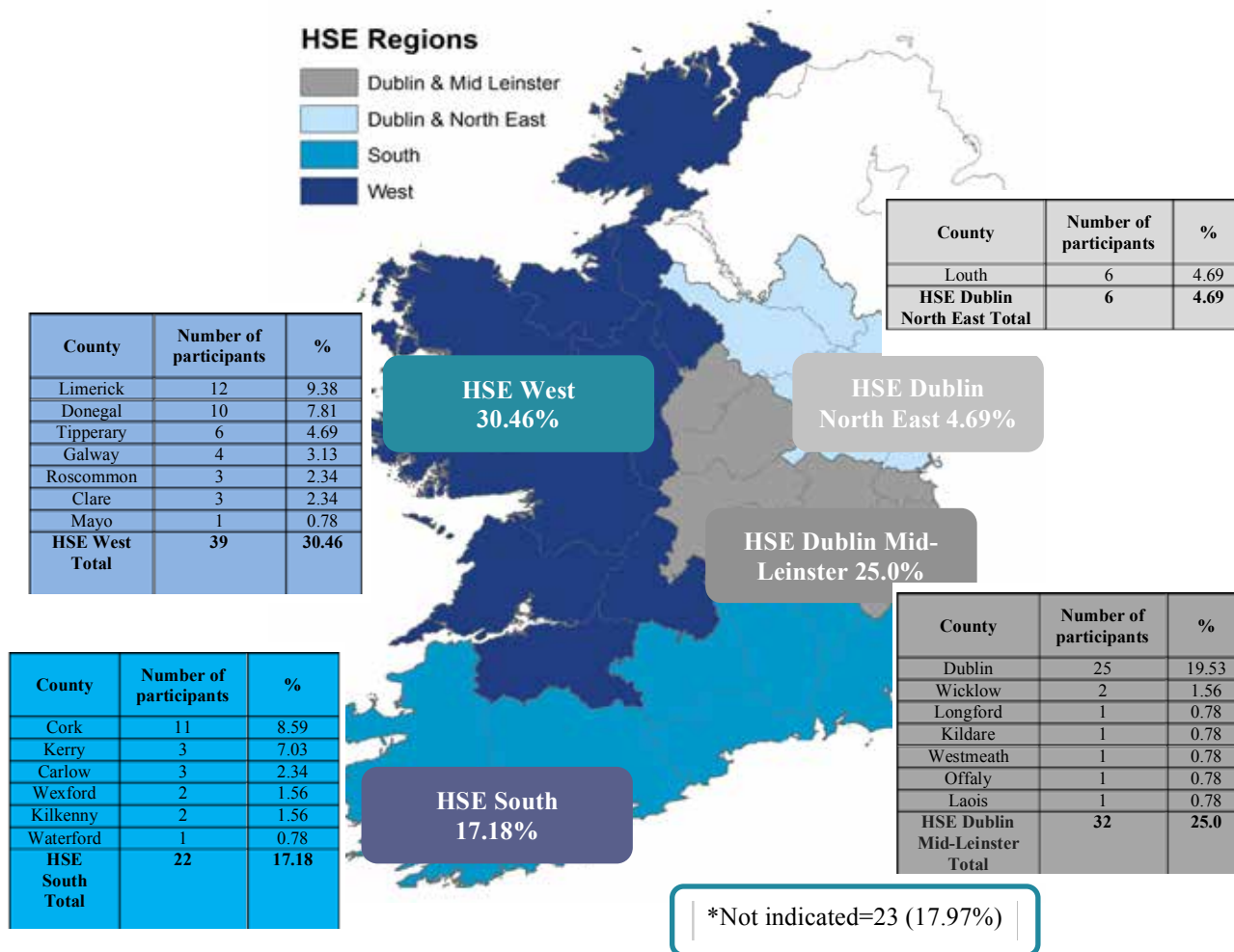


Figure 6: Older Persons Services Participants by Location at Close of Round 4 (Total responses: 128, Skipped: 53)

TABLE 8. OLDER PERSONS SERVICES PARTICIPANTS BY GRADE AT CLOSE OF ROUND 4(TOTAL RESPONSES: 172, SKIPPED: 9)

GRADE	Number of participants	%
CNM2	41	23.84%
Assistant Director of Nursing	34	19.77%
Staff nurse	27	15.70%
Director of Nursing	23	13.37%
CNSp	17	9.88%
CNM1	10	5.81%
CNM3	4	2.33%
Educator	4	2.33%
Other (please specify)	12	6.98%

INDICATOR RATINGS

Using the analysis rule as before; all 90 indicators were rated between 7 and 9 by more than 70% of participants. None of the indicators were rated between 1 and 3 by more than 15% of the nurses.

The final result of the Delphi survey process after the four rounds of the Delphi survey was the identification of 20 metrics and 90 indicators (Table 9).

TABLE 9. OLDER PERSONS SERVICES INDICATORS RE-RATED IN ROUND 4

METRICS	INDICATORS	% rated between 7 and 9
01 Comprehensive geriatric needs assessment	1. On admission, there is evidence of a full physical assessment of the individual with regular review	96.32
	2. On admission, there is evidence of a full functional assessment of the individual with regular review	93.87
	3. On admission, there is evidence of a full psychological (cognition, mood, delirium) assessment of the individual with regular review	90.80
	4. On admission, there is evidence of a full social assessment of the individual with regular review	81.60
	5. Evidence of frailty assessment as required with regular review	80.98
02 Person centred care planning	6. After a comprehensive assessment, appropriate interventions including specialist referral have been identified, implemented and evaluated	96.32
	7. Involvement in decisions made about his/her care by the individual is evident	96.32
	8. Individual is supported to care for him/her self, where appropriate	92.64
	9. There is evidence that each individual has been consulted regarding the provision of intimate personal care and support	93.25
03 Falls risk	10. The individual's preferences and choices are documented and respected	95.71
	11. A falls risk assessment is completed on all individuals with any degree of mobility (immobile individuals are exempt) within 24 hours of admission	96.88
04 Fall prevention	12. Individuals are reassessed at least every 4 months or sooner if indicated (e.g. following a change in status or a fall)	93.75
	13. A care plan has been initiated for all individuals identified as medium or high risk of falls	97.50
	14. A falls prevention programme is in place in the organisation and all staff have received education about it	95.63
	15. The total environment is free from obstacles and hazards. It is observed that call bells are in sight & reach, safe footwear are on feet and room is free of clutter. Night sedation is charted.	95.63
	16. There is evidence of a documented risk assessment and reassessment before physical restraint use.	98.13
05 Optimising nutrition and hydration	17. Where the individual has fallen, the individual has been reviewed using the ISBAR analysis format	86.25
	18. Nutritional screening undertaken on admission and at set intervals dated and signed by the assessor. Reviewed 4 monthly in residential care	96.84
	19. On admission, the individual's weight and BMI is recorded with 4 monthly review in residential care	97.47
	20. For the individual identified at moderate to high risk, a person centred nutritional care plan demonstrating nutritional support interventions is evident	96.84
	21. All Individuals have access to fresh water & receive a varied, appealing, wholesome and nutritious diet suited to individual assessed and recorded requirements.	95.57
	22. Oral cavity is assessed and date of last dental check recorded.	82.91

06 Assessment and management of pressure ulcers	23. A Pressure Ulcer risk assessment is conducted on admission/transfer and dated, timed and signed by the assessing staff member	99.37
	24. If a pressure ulcer is present, the grade is documented	100.0
	25. Pressure ulcer risk is re-assessed every 4 months	99.37
	26. For at risk individuals, commencement on S. S.K.I.N bundles for pressure ulcer prevention & management are evident	85.44
	27. Pressure relieving devices and alternative pressure therapies are used if appropriate	98.10
07 Continence assessment, promotion and management	28. A urinary and bowel continence assessment is conducted on admission/transfer and dated and signed by the assessing staff member	91.03
	29. A continence promotion care plan is in place if applicable	92.31
	30. There is evidence that all management options have been explored	87.18
08 Pain assessment and management	31. An appropriate pain assessment tool is used where indicated	97.44
	32. Individual's pain, sedation/agitation scores and level of comfort are evaluated as frequently as appropriate and recorded at least every 2-4 hours (until pain free -Score 0)	92.95
	33. A pain management care plan including pharmacological and non-pharmacological interventions is evident	96.79
	34. Analgesia administration and its efficiency are recorded	98.08
	35. A referral to a Pain Clinic/specialist has been made if pain persists and efficiency of interventions is not meeting the individual's needs	86.54
09 Mobility, dexterity and rehabilitation	36. Pre-admission/pre –morbid and current functional status is assessed and recorded	86.75
	37. Care plans demonstrate an enabling approach where client mobility and independence is promoted within functional capacity	92.05
	38. Person centred goal setting addresses self-care and activities of daily living	92.72
	39. There is evidence of medical and therapy reassessment / engagement where there is a change in functional status	90.07
	40. Enabling supports, strategies, aids and assistive devices are appropriately used where functional limitations exist	90.73
10 Activities <i>(physical, social, recreational and sensory)</i> Social/ engagement <i>(family-centred/ included, social engagement and support)</i>	41. Residents' interests and capacities on admission are assessed and reviewed on a regular basis	84.11
	42. Evidence of an appropriate activity schedule in care plan	79.47
	43. Evidence of individual and family member involvement in drawing up the activity schedule	76.16
11 Wound care	44. Regular inspections and skin care are performed in a MDT approach in collaboration with individual and family	92.05
	45. Modifiable risk factors associated with poor wound healing e.g. malnutrition, continence, mobility are identified and managed	96.03
12 Medication administration	46. The Individual's prescription documentation provides details of individual's legible name, unique identifier	100.0
	47. The Allergy Status is clearly identifiable on the front page of the prescription chart	100.0
	48. All prescribed medication are administered or have an omission code entered	100.0
	49. The individual's surrounding environment is free of unsecured prescribed medicinal products	96.69

13 Medication prescribing	50. There is evidence of medication reconciliation on admission transfer	95.36
	51. There is evidence of 4 monthly review	94.04
	52. The complete prescription is legible with correct use of abbreviations	98.68
	53. The Frequency of Administration is recorded & correct timings indicated	99.34
	54. The minimum dose interval and/or 24 hour maximum dose is specified for all "as required" or PRN drugs	96.03
	55. Discontinued medicines are crossed off, dated and signed by medical personnel	94.70
14 MDA Medicines	56. The Generic name is used for each drug unless prescriber states 'do not substitute'	87.42
	57. MDA Medicines are checked & signed at each changeover of shifts by nursing staff (By member of Day staff & Night Staff)	98.68
	58. Two signatures are entered in the MDA Medicines Register for each administration of an MDA Medicine	98.68
	59. The MDA Medicines cupboard is locked	99.34
15 Medication storage and custody	60. A designated nurse holds MDA keys separate from other medication keys	92.72
	61. A registered nurse when on duty is in possession of the keys for Medicinal Product Storage	98.01
	62. All Medicinal products are stored in a locked cupboard/room and trolleys are locked and secured as per local policy	98.68
16 Responsive (challenging) behaviour support	63. A Drug Formulary is available on all Medicine Trolleys	92.72
	64. On admission, there is a communication assessment with conversational preferences documented using the appropriate tool e.g.; 'A Key to Me'.	82.78
	65. There is a care plan in place to manage communication needs and memory deficits with evidence information obtained from the individual and / or significant other / designated advocate.	90.73
	66. An assessment is carried out on Responsive Behaviours on admission with an appropriate care plan in place for management	88.08
	67. The Responsive Behaviour Care plan is evaluated and updated to include appropriate psychosocial interventions specific to the individual	90.73
	68. Each incident of Responsive Behaviour is assessed using Antecedent, Behaviour and Consequence monitoring to determine trending triggers	88.74
	69. A multidisciplinary holistic assessment is carried out before medication is prescribed to manage responsive behaviours	85.43
17 Safeguarding vulnerable adults	70. PRN psychotropic medication is evidenced to be given as a last resort only.(Evidence that a full assessment has taken place and employment of non-pharmaceutical interventions are included)	91.39
	71. A record of all PRN Psychotropic Medication administered is maintained by Nursing Administration and available to each ward / Unit.	80.79
	72. Risk assessments relating to vulnerable adults have been carried out in consultation with the vulnerable person, their family, advocates and the multidisciplinary team and documented in care plan.	91.39
	73. Easily accessible information is available to the older person of their rights to be free from abuse and supported to exercise these rights, including access to advocacy.	96.69
	74. Complaints handling procedures are well publicised, easy to access and at an appropriate level to promote understanding.	94.04

18 End of life and palliative care	75. Holistic assessment including spiritual needs and their relation to quality of life is carried out	94.70
	76. A comprehensive nursing care plan for end of life including symptom management is evident.	96.69
	77. The individuals resuscitation status is clearly documented	96.03
	78. Individual's end-of-life care preferences are reassessed at least every 4 months or as per local policy	89.40
	79. Individual's preferences for end-of-life care where required are clearly documented in the nursing care plan	96.69
19 Infection control	80. All invasive medical devices are managed in accordance with the policy / Care bundle e.g. Peg, Catheter, Cannula, TPN, Tracheostomy.	95.92
	81. Infection and sepsis alert /status are recorded in the nursing / medical record	96.60
	82. Environmental hygiene audits are complete at a minimum of 6 monthly intervals	86.39
	83. Hand hygiene audits are completed at a minimum of 6 monthly periods	81.63
20 Patient experience	84. The unit/ward area and individual bed space is clean and clutter free	89.12
	85. Consistent delivery of care against identified needs is evident	88.44
	86. Individual's preferences and choice are respected	93.88
	87. What is important to the individual is known and documented in care plan	94.56
	88. Observed that each individual has an opportunity to be alone when receiving visitors (residential settings)	80.27
	89. Observed that call bells are answered in a timely manner	85.03
	90. Patient experiences are anonymously surveyed at regular intervals	78.91

CONSENSUS MEETING PHASE

Following the Delphi survey rounds, the next phase of the Delphi process consisted of a face-to-face meeting with key stakeholders to review the findings from the Delphi surveys and build consensus on the final suite of metrics and respective indicators. Prior to this was a Pre-consensus meeting of the work-stream in which there was a rigorous appraisal of each indicator with particular reference to relevance and wording. Further to this, the number of indicators was slightly increased from 90 to 94 (Table 10).

TABLE 10. OLDER PERSONS SERVICES METRICS AND INDICATORS REVIEWED AT PRE-CONSENSUS MEETING

Comprehensive geriatric assessment
<ol style="list-style-type: none">1. On admission, there is evidence of a full physical assessment of the individual2. Four monthly regular review3. On admission, there is evidence of a full functional assessment of the individual4. Four monthly regular review5. On admission, there is evidence of a full psychological (cognition, mood, delirium) assessment of the individual6. Four monthly regular review7. On admission, there is evidence of a full social assessment of the individual8. Four monthly regular review9. Evidence of frailty assessment as required10. Four monthly regular review
Person centred care planning
<ol style="list-style-type: none">11. After a comprehensive assessment, appropriate interventions including record of specialist referral12. Involvement in decisions made about his/her care by the individual is evident13. Individual is supported to care for him/her self, where appropriate14. There is evidence of provision of intimate personal care is carried out in accordance with individual wishes15. The individual's preferences and choices are documented
Falls risk
<ol style="list-style-type: none">16. A falls risk assessment is completed on all individuals within 24 hours of admission17. Individuals are reassessed at least every 4 months or sooner if indicated (e.g. following a change in status or a fall)

Fall prevention

18. A care plan has been initiated for all individuals identified as medium or high risk of falls
19. A falls prevention programme is in place in the organisation
20. All staff have received education
21. The total environment is free from obstacles and hazards.
22. It is observed that call bells are in sight & reach.
23. Safe footwear are on feet.
24. Night sedation is charted.
25. There is evidence of a documented risk assessment and reassessment before any form of restraint is used.
26. Where the individual has fallen, the individual has been reviewed using the ISBAR analysis format.

Optimising nutrition and hydration

27. Nutritional screening undertaken on admission.
28. Four monthly regular review.
29. There is a completed nutritional care plan for individuals identified at moderate to high risk.
30. The individual has access to fresh water and a varied dietary option.
31. The diet provided is suited the assessed needs of the individual.
32. An oral cavity assessment is completed on admission.
33. Four monthly regular review.

Assessment and management of pressure ulcers

34. A Pressure Ulcer risk assessment is conducted on admission and transfer.
35. If a pressure ulcer is present, the grade is documented.
36. Pressure ulcer risk is re-assessed as required.
37. For at risk individuals, commencement on S. S.K.I.N bundles for pressure ulcer prevention & management are evident
38. Pressure relieving devices and alternative pressure therapies are used if indicated.

Continence assessment, promotion and management

39. A urinary and bowel continence assessment is conducted on admission or transfer.
40. Four monthly regular review.
41. A continence promotion care plan is in place if indicated.
42. There is evidence that all management options have been explored.

Pain assessment and management

43. An appropriate pain assessment tool is used where indicated.
44. Individual's pain, sedation/agitation scores and level of comfort are evaluated on admission and as frequently as appropriate and recorded at least every 2-4 hours (until pain free -Score 0)
45. A pain management care plan including pharmacological and non-pharmacological interventions is evident
46. Analgesia administration and its efficiency are recorded (part of care plan but include in the SOP)
47. A referral to a Pain Clinic/specialist has been made if pain persists and efficiency of interventions is not meeting the individual's needs

Mobility, dexterity and rehabilitation

48. Pre-admission/pre –morbidity and current functional status is assessed and recorded
49. Care plans demonstrate Enabling supports, strategies, aids and assistive devices are appropriately to promote independence within functional capacity

Activities (physical, social, recreational and sensory) Social/engagement (family-centred/included, social engagement and support)

50. The individual's interests and hobbies are documented on admission
51. Four monthly regular review
52. The care plan demonstrates evidence of the individual's involvement in the development of their social activity plan.
53. There is evidence of individual's participation in the social activity plan.

Wound care

54. Regular inspections and skin care are performed in a MDT approach in collaboration with individual and family
55. Modifiable risk factors associated with poor wound healing e.g. malnutrition, continence, mobility are identified and managed

Medicines administration

56. The Individual's prescription documentation provides details of individual's legible name, unique identifier.
57. The Allergy Status is clearly identifiable on the front page of the prescription chart and/or medication administration.
58. All prescribed medication are administered or have an omission code entered and appropriate action taken.
59. The individual's surrounding environment is free of unsecured prescribed medicinal products.
60. The Frequency of Administration is as prescribed.

Medicines prescribing

61. There is evidence of medication reconciliation on admission or transfer.
62. There is evidence of 4 monthly review of medicines.
63. The complete prescription is legible with correct use of abbreviations.
64. The minimum dose interval and/or 24 hour maximum dose is specified for all "as required" or PRN drugs.
65. Discontinued medicines are crossed off, dated and signed by prescriber.
66. The Generic name is used for each drug unless the prescriber indicates a branded drug and states 'do not substitute'.

MDA Medicines

67. MDA Medicines are checked & signed at each changeover of shifts by nursing staff (By member of Day staff & Night Staff).
68. Two signatures are entered in the MDA Medicines Register for each administration of an MDA Medicine.
69. The MDA Medicines cupboard is locked.
70. A designated nurse holds MDA keys separate from other medication keys.

Medicine storage and custody

71. A registered nurse when on duty is in possession of the keys for Medicinal Product Storage.
72. All Medicinal products are stored in a locked cupboard/room and trolleys are locked and secured as per local policy.
73. Up-to-date suitable medication formulary is available on all Medicine Trolleys.

Responsive behaviour support

74. An assessment is carried out on Responsive Behaviours on admission.
75. Four monthly regular review.
76. The responsive care plan incorporates a communication strategy and other psychosocial interventions specific to the individual.
77. There is evidence of PRN psychotropic medication is evidenced to be given as a last resort only after a review has taken place and employment of non-pharmaceutical interventions are included.
78. A record of all PRN Psychotropic Medication administered is maintained.

Safeguarding vulnerable adults

79. Safeguarding vulnerable adults procedures are well publicised, easy to access and at an appropriate level to promote understanding.
80. Easily accessible information is available to the older person of their rights to be free from abuse and supported to exercise these rights, including access to advocacy.
81. Risk assessments relating to vulnerable adults have been carried out in consultation with the vulnerable person, their family, advocates and the multidisciplinary team and documented in care plan.

End of life and palliative care

82. Individual's end-of-life care preferences are identified and documented with ongoing engagement every 4 months or as per local policy
83. A comprehensive care plan for end of life including spiritual needs and symptom management is evident.
84. The individuals resuscitation status is clearly documented

Infection control

85. All invasive medical devices are managed in accordance with local policy / Care bundle e.g. Peg, Catheter, Cannula, TPN, Tracheostomy.
86. Infection and sepsis alert /status are recorded in the nursing / medical record.
87. Environmental hygiene audits are complete at a minimum of 6 monthly intervals.
88. Hand hygiene audits are completed at a minimum of 6 monthly intervals.
89. The unit/ward area and individual bed space is clean and clutter free.

Person experience

90. Consistent delivery of care against identified needs is evident.
91. What is important to the individual is known and documented in care plan.
92. Observed that each individual has an opportunity to be alone when receiving visitors when requested (residential settings).
93. Individual reports a timely response to their call bell.
94. A process in place to anonymously survey patients experiences as per local policy.

The final OPS WSWG consensus meeting was held on the 29th of November 2017 in Dublin. Participants at this meeting were representatives of the WSWG key stakeholders with consideration to grade and geographical representation. There were 11 work-stream group members, one academic, and one invited expert; a total of 13 participants. The numbers of participants varied slightly during the day being reduced to 10 at one point. The purpose of the meeting was that through face to face discussion, each metric and indicator would be voted on resulting in a final suite of metrics and indicators for OPS.

Attention was paid to identifying the optimum way to run this consensus meeting. A systematic review of the literature was conducted prior to the meeting to identify good guidelines. Following this, guidance was provided to the participants including ground rules (Gagnier et al 2013, McMillan et al 2016, Nair et al 2011, Van Ganzewinkel et al 2011) (Figure 7). An electronic voting system was used to ensure anonymity of the voting process.

STEPS FOR MANAGING THE FACE TO FACE CONSENSUS MEETING

- 01** Welcome & introduction by the Chairperson. Setting and agreement of ground rules.

- 02** Explain the identified percentage needed for agreement through the voting process.
 - 70% and over was required for agreement

- 03** Introduce the system to be used for voting.
 - PDF version of the metrics and indicators were shared prior to the consensus meeting.
 - QCM metrics and indicators evaluation tool were introduced.
 - The voting system of the tool “Yes/No” was explained.

- 04** Anonymous electronic voting was performed for each metric and their relevant indicators, and instantly displayed electronically.

- 05** The percentage of “Yes” and “No” votes was calculated with each single metric and indicator requiring to achieve 70% of the vote.

Figure 7: Guidance document for the Consensus meeting

In addition a framework to aid in the selection and voting of the metrics and indicators was developed. Again, this was devised following a systematic review of the literature and expert review. Four core attributes of a metric and indicator were identified these being “**Process Focused**”, “**Important**”, “**Operational**”, and “**Feasible**” (Figure 8). The tool was designed to aid the participants in making their voting choices.

FRAMEWORK FOR SELECTING NURSING AND MIDWIFERY QUALITY CARE PROCESS METRICS AND INDICATORS

- 01** **PROCESS FOCUSED**
The metric/ indicator contributes clearly to the measurement of nursing care processes.

- 02** **IMPORTANT**
The data generated by the metric/indicator will likely make an important contribution to improving nursing 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.

Modified from: eRegistries indicator evaluation tool (Flenady et al. 2016 and Campbell et al. 2011)

Figure 8: Framework for selecting Nursing and Midwifery Quality Care Process Metrics and Indicators

Each of the OPS metrics and indicators were discussed by the consensus group members with some edits to wording performed and some indicators being merged together prior to voting. One metric “Mobility, Dexterity and Rehabilitation” was excluded since it failed to reach the 70% threshold. In total, 19 of the 20 metrics and 80 of the 94 associated indicators reached 70% and thus were included in the new suite of OPS Quality Care Process Metrics and Indicators (Table 11).

TABLE 11. OLDER PERSONS SERVICES METRICS AND INDICATORS RESULTS FROM CONSENSUS MEETING

METRIC	INDICATORS	Voted "Yes" at Consensus meeting	%
01 Comprehensive geriatric assessment 10/13*	1. On admission, there is evidence of a full physical assessment of the individual	12/13	92.3
	2. Four monthly regular review	12/13	92.3
	3. On admission, there is evidence of a full assessment of activities of daily living	12/13	92.3
	4. Four monthly regular review	12/13	92.3
	5. On admission, there is evidence of a full psychological (cognition, mood, delirium) assessment of the individual	12/13	92.3
	6. Four monthly regular review	12/13	92.3
	7. On admission, there is evidence of a full social assessment of the individual	12/13	92.3
	8. Four monthly regular review	12/13	92.3
	9. Evidence of frailty assessment	12/13	92.3
	10. Four monthly regular review	12/13	92.3
02 Person centred care planning 13/13*	11. After a comprehensive assessment, appropriate interventions including record of specialist referral	12/13	92.3
	12. Involvement in decisions made about his/her care by the individual is evident	13/13	100
	13. Individual is supported to care for him/her self	11/13	84.61
	14. Provision of intimate personal care is planned in accordance with individual wishes	12/13	92.3
	15. The individual's preferences and choices are documented	13/13	100
03 Falls risk 13/13*	16. A falls risk assessment is completed on all individuals within 24 hours of admission	12/13	92.3
	17. Individuals are reassessed at least every 4 months or sooner if indicated (e.g. following a change in status or a fall)	12/13	92.3
	18. There is evidence of a documented falls risk assessment and reassessment before any form of restraint is considered	12/13	92.3
04 Fall prevention 13/13*	19. A care plan has been initiated for all individuals identified as medium or high risk of falls.	12/13	92.3
	20. A falls prevention programme is in place in the organisation	12/13	92.3
	21. All staff have received education on falls prevention.	10/13	76.9
	22. Where the individual has fallen, they have been reviewed using the ISBAR analysis format.	12/13	92.3
05 Optimising nutrition and hydration 13/13*	23. Nutritional screening undertaken on admission.	13/13	100
	24. Four monthly regular review.	13/13	100
	25. There is a completed nutritional care plan for individuals identified at moderate to high risk.	13/13	100
	26. The individual has access to fluid and varied dietary options.	13/13	100
	27. The diet provided is suited to the assessed needs of the individual.	11/13	84.61
	28. An oral cavity assessment is completed on admission.	13/13	100
	29. Four monthly review of oral cavity.	12/13	92.3

06 Assessment and management of pressure ulcers 13/13*	30. A Pressure Ulcer risk assessment is conducted on admission and transfer.	13/13	100
	31. If a pressure ulcer is present, the grade is documented.	13/13	100
	32. Pressure ulcer risk is re-assessed as required.	13/13	100
	33. For at risk individuals, commencement on S.S.K.I.N bundles for pressure ulcer prevention & management are evident	13/13	100
07 Continence assessment, promotion and management 13/13*	34. Pressure relieving devices and alternative pressure therapies are used if indicated in risk assessment.	13/13	100
	35. A continence assessment is conducted on admission, transfer and discharge.	13/13	100
	36. Four monthly regular review or more frequently.	13/13	100
08 Pain assessment and management 13/13*	37. A continence promotion care plan is in place by continence assessment.	13/13	100
	38. On admission an appropriate pain assessment tool is completed	13/13	100
	39. Individual's pain is reassessed	9/13	70
09 Mobility, dexterity and rehabilitation 4/11*	40. A pain management care plan including pharmacological and non-pharmacological interventions is evident	11/13	84.6
	41. Pre-admission/pre –morbidity and current functional status is assessed and recorded	NA	NA
10 Activities <i>(physical, social, recreational and sensory)</i> Social/engagement <i>(family-centred/ included, social engagement and support)</i> 11/11*	42. Care plans demonstrate Enabling supports, strategies, aids and assistive devices are appropriately to promote independence within functional capacity	NA	NA
	43. The individual's interests and hobbies are documented in a social activity plan	10/11	90.9
	44. Four monthly review of the social activity plan.	10/11	90.9
	45. The care plan demonstrates evidence of the individual's involvement in the development of their social activity plan.	9/11	81.8
11 Skin Integrity 12/12*	46. There is evidence of individual's participation in the social activity plan.	9/11	81.8
	47. Skin care assessment on admission, transfer and discharge is completed.	10/12	83.3
12 Medicines administration 12/12*	48. Modifiable risk factors associated with impaired skin integrity e.g. malnutrition, continence, mobility are identified and managed	9/12	75
	49. The medicines administration record provides details of individual's legible name, unique identifier.	12/12	100
	50. The Allergy Status is clearly identifiable on the front page of the prescription chart and/or medication administration record.	12/12	100
	51. All prescribed medication are administered or have an omission code entered and appropriate action taken.	12/12	100
	52. There are no unsecured prescribed medicinal products in the individual's environment.	12/12	100
	53. The Frequency of Medicines Administration is as prescribed.	12/12	100

13 Medicines prescribing 11/12*	54. There is evidence of medication reconciliation on admission, transfer or discharge.	12/12	100
	55. There is evidence of 4 monthly review of medicines.	12/12	100
	56. The complete prescription is legible with correct use of abbreviations.	12/12	100
	57. The minimum dose interval and/or 24 hour maximum dose is specified for all PRN medicines.	12/12	100
	58. Discontinued medicines are crossed off, dated and signed by person with prescriptive authority	12/12	100
14 MDA Medicines 11/12*	59. The Generic name is used for each medicine unless the prescriber indicates a branded medicine and states 'do not substitute'.	9/12	75
	60. MDA Medicines are checked & signed at each changeover of shifts by nursing staff (By member of Day staff & Night Staff).	9/12	75
	61. Two signatures are entered in the MDA Medicines Register for each administration of an MDA Medicine.	12/12	100
	62. The MDA Medicines cupboard is locked.	12/12	100
15 Medicine storage and custody 12/12*	63. A designated nurse holds MDA keys separate from other medication keys.	12/12	100
	64. A registered nurse when on duty is in possession of the keys for Medicinal Product Storage.	12/12	100
	65. All Medicinal products are stored in a locked cupboard/ room and trolleys are locked and secured as per local policy.	12/12	100
16 Responsive behaviour support 12/12*	66. An Up-to-date medicines formulary resource is available and accessible.	12/12	100
	67. An assessment of responsive behaviours is carried out upon admission. If evidence of responsive behaviours is identified an assessment has been completed.	12/12	100
	68. Four monthly review.	9/12	75
	69. A responsive care plan is in place.	12/12	100
	70. PRN psychotropic medication is evidenced to be given as a last resort only after review has taken place and employment of non-pharmaceutical interventions prior to administration of PRN medicines.	12/12	100
17 Safeguarding vulnerable adults 9/11*	71. A record of all PRN Psychotropic Medication administered is maintained.	11/12	91.6
	72. Safeguarding vulnerable adults procedures are well publicised, easy to access and at an appropriate level to promote understanding.	9/11	81.8
18 End of life and palliative care 11/11*	73. Easily accessible information is available to the older person on their rights advocacy.	9/11	81.8
	74. Individual's end-of-life care preferences are identified and documented.	11/11	100
	75. A holistic palliative care plan including spiritual needs and symptom management is evident and updated accordingly.	11/11	100
19 Infection control 10/11*	76. The individuals resuscitation status is clearly documented.	11/11	100
	77. All invasive medical devices are managed in accordance with local policy / Care bundle.	10/11	90.9
	78. Infection and sepsis alert /status are recorded in the nursing record	9/11	81.8

20 Person experience 9/10*	79. Consistent delivery of care against identified needs is evident.	6/10	60
	80. What is important to the individual is known and documented in care plan.	7/10	70
	81. Person states there is opportunity for privacy.	8/10	80
	82. Individual reports a timely response to their call bell.	7/10	70
	83. A process in place to capture people's experiences of the services.	9/10	90

***Number of "Yes" votes/Number of members participated in voting**

A final suite of 19 metrics and 80 indicators for Older Persons Services were identified through a national consensus process (Figure 9 and Appendix 6). This final suite of OPS metrics and indicators has been mapped where possible to the relevant literature and standards (Appendix 4 and 5).

Figure 9: Older Persons Services Nursing Metrics and Associated Indicators at the end of Consensus Meeting

Comprehensive geriatric assessment
<ul style="list-style-type: none">• On admission, there is evidence of a full physical assessment of the individual• Four monthly regular review• On admission, there is evidence of a full assessment of activities of daily living• Four monthly regular review• On admission, there is evidence of a full psychological (cognition,mood, delirium) assessment of the individual• Four monthly regular review• On admission, there is evidence of a full social assessment of the individual• Four monthly regular review• Evidence of frailty assessment• Four monthly regular review
Person centred care planning
<ul style="list-style-type: none">• After a comprehensive assessment, appropriate interventions including record of specialist referral• Involvement in decisions made about his/her care by the individual is evident• Individual is supported to care for him/her self• Provision of intimate personal care is planned in accordance with individual wishes• The individual's preferences and choices are documented
Falls risk
<ul style="list-style-type: none">• A falls risk assessment is completed on all individuals within 24 hours of admission• Individuals are reassessed at least every 4 months or sooner if indicated (e.g. following a change in status or a fall)• There is evidence of a documented falls risk assessment and reassessment before any form of restraint is considered
Fall prevention
<ul style="list-style-type: none">• A care plan has been initiated for all individuals identified as medium or high risk of falls.• A falls prevention programme is in place in the organisation• All staff have received education on falls prevention.• Where the individual has fallen, they have been reviewed using the ISBAR analysis format.
Optimising nutrition and hydration
<ul style="list-style-type: none">• Nutritional screening undertaken on admission.• Four monthly regular review.• There is a completed nutritional care plan for individuals identified at moderate to high risk.• The individual has access to fluid and varied dietary options.• The diet provided is suited to the assessed needs of the individual.• An oral cavity assessment is completed on admission.• Four monthly review of oral cavity.

Assessment and management of pressure ulcers
<ul style="list-style-type: none"> • A Pressure Ulcer risk assessment is conducted on admission and transfer. • If a pressure ulcer is present, the grade is documented. • Pressure ulcer risk is re-assessed as required. • For at risk individuals, commencement on S.S.K.I.N bundles for pressure ulcer prevention & management are evident • Pressure relieving devices and alternative pressure therapies are used if indicated in risk assessment.
Contenance assessment, promotion and management
<ul style="list-style-type: none"> • A continence assessment is conducted on admission, transfer and discharge. • Four monthly regular review or more frequently. • A continence promotion care plan is in place by continence assessment.
Pain assessment and management
<ul style="list-style-type: none"> • On admission an appropriate pain assessment tool is completed • Individual's pain is reassessed • A pain management care plan including pharmacological and non-pharmacological interventions is evident
Activities (physical, social, recreational and sensory) Social/engagement (family-centred/included, social engagement and support)
<ul style="list-style-type: none"> • The individuals interests and hobbies are documented in a social activity plan • Four monthly review of the social activity plan. • The care plan demonstrates evidence of the individual's involvement in the development of their social activity plan. • There is evidence of individual's participation in the social activity plan.
Skin Integrity
<ul style="list-style-type: none"> • Skin care assessment on admission, transfer and discharge is completed. • Modifiable risk factors associated with impaired skin integrity e.g. malnutrition, continence, mobility are identified and managed
Medicines administration
<ul style="list-style-type: none"> • The medicines administration record provides details of individual's legible name, unique identifier. • The Allergy Status is clearly identifiable on the front page of the prescription chart and/or medication administration record. • All prescribed medication are administered or have an omission code entered and appropriate action taken. • There are no unsecured prescribed medicinal products in the individual's environment. • The Frequency of Medicines Administration is as prescribed.

Figure 9: Older Persons Services Nursing Metrics and Associated Indicators at the end of Consensus Meeting (continued)

Medicines prescribing

- There is evidence of medication reconciliation on admission, transfer or discharge.
- There is evidence of 4 monthly review of medicines.
- The complete prescription is legible with correct use of abbreviations.
- The minimum dose interval and/or 24 hour maximum dose is specified for all PRN medicines.
- Discontinued medicines are crossed off, dated and signed by person with prescriptive authority
- The Generic name is used for each medicine unless the prescriber indicates a branded medicine and states 'do not substitute'.

MDA Medicines

- MDA Medicines are checked & signed at each changeover of shifts by nursing staff (By member of Day staff & Night Staff).
- Two signatures are entered in the MDA Medicines Register for each administration of an MDA Medicine.
- The MDA Medicines cupboard is locked.
- A designated nurse holds MDA keys separate from other medication keys.

Medicine storage and custody

- A registered nurse when on duty is in possession of the keys for Medicinal Product Storage.
- All medicinal products are stored in a locked cupboard/room and trolleys are locked and secured as per local policy.
- An up-to-date medicines formulary resource is available and accessible.

Responsive behaviour support

- An assessment of responsive behaviours is carried out upon admission. If evidence of responsive behaviours is identified an assessment has been completed.
- Four monthly review.
- A responsive care plan is in place.
- PRN psychotropic medication is evidenced to be given as a last resort only after review has taken place and employment of non-pharmaceutical interventions prior to administration of PRN medicines.
- A record of all PRN Psychotropic Medication administered is maintained.

Safeguarding vulnerable adults

- Safeguarding vulnerable adults procedures are well publicised, easy to access and at an appropriate level to promote understanding.
- Easily accessible information is available to the older person on their rights advocacy.

End of life and palliative care

- Individual's end-of-life care preferences are identified and documented.
- A holistic palliative care plan including spiritual needs and symptom management is evident and updated accordingly.
- The individual's resuscitation status is clearly documented.

Infection control

- All invasive medical devices are managed in accordance with local policy / Care bundle.
- Infection and sepsis alert /status are recorded in the nursing record.

Figure 9: Older Persons Services Nursing Metrics and Associated Indicators at the end of Consensus Meeting (continued)



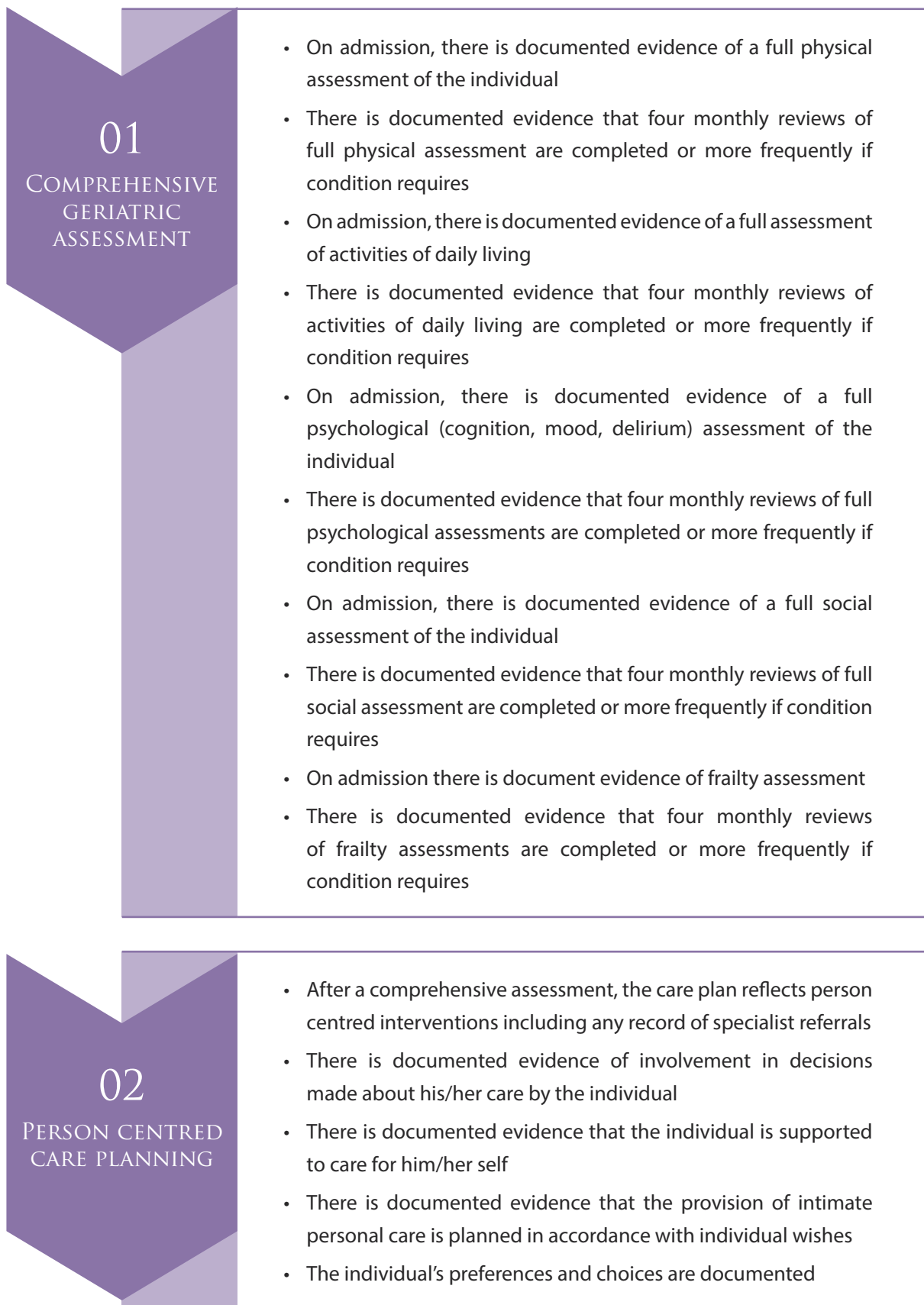

Person experience

- Consistent delivery of care against identified needs is evident.
 - What is important to the individual is known and documented in care plan.
 - Person states there is opportunity for privacy.
 - Individual reports a timely response to their call bell.
 - A process in place to capture people's experiences of the services.
-

Figure 9: Older Persons Services Nursing Metrics and Associated Indicators at the end of Consensus Meeting *(continued)*

After the consensus meeting, the metrics and their respective indicators were further reviewed by experts and the WSWG group members aiming to align wherever possible the language used across all seven work-streams. This was to ensure best fit with the 'Test Your Care' System. Following this, the suite of 19 metrics and 80 indicators for Older Persons Services was then finalised (Figure 10).

Figure 10: Final Suite of Older Person Services Nursing Metrics and Associated Indicators



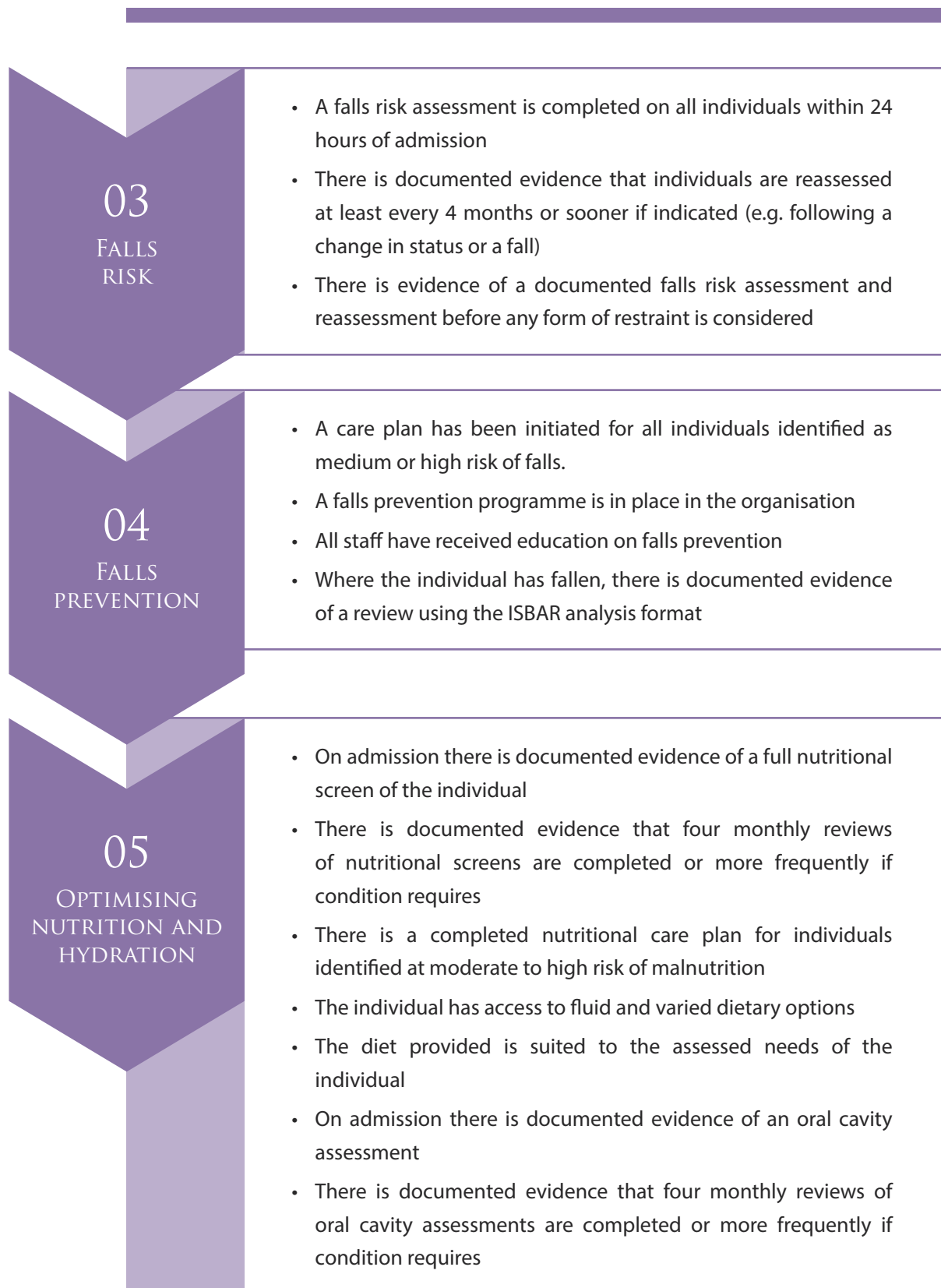


Figure 10: Final Suite of Older Person Services Nursing Metrics and Associated Indicators (continued)

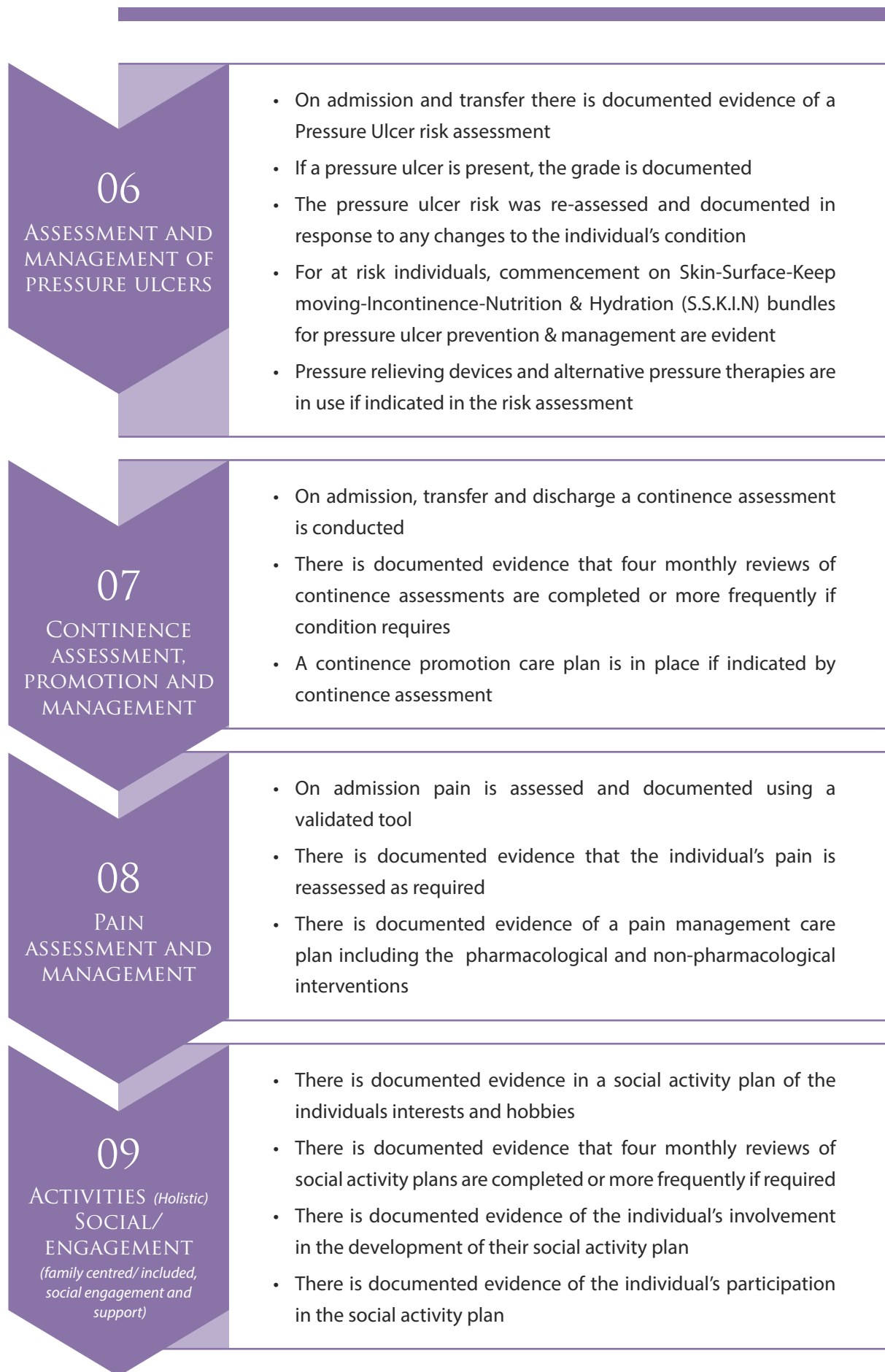


Figure 10: Final Suite of Older Person Services Nursing Metrics and Associated Indicators (continued)

<p>10 SKIN INTEGRITY</p>	<ul style="list-style-type: none"> • On admission, transfer and prior to discharge a skin care inspection has been completed • There is documented evidence that risk factors associated with impaired skin integrity e.g. malnutrition, continence, mobility are identified and managed
<p>11 MEDICINES ADMINISTRATION</p>	<ul style="list-style-type: none"> • The medicines administration record provides details of the individual's legible name and health care record number • The Allergy Status is clearly identifiable on the front page of the prescription chart and/or medication administration record • Prescribed medicines not administered have an omission code entered and appropriate action taken • There are no unsecured prescribed medicinal products in the individual's environment • The frequency of medicines administration is as prescribed
<p>12 MEDICINES PRESCRIBING</p>	<ul style="list-style-type: none"> • On admission, transfer or prior to discharge there is documented evidence of medication reconciliation • There is documented evidence of a 4 monthly review of medicines • The prescription is legible with correct use of abbreviations • The minimum dose interval and/or 24 hour maximum dose is specified for all PRN medicines • Discontinued medicines are crossed off, dated and signed by person with prescriptive authority • The Generic name is used for each medicine unless the prescriber indicates a branded medicine and states 'do not substitute'

Figure 10: Final Suite of Older Person Services Nursing Metrics and Associated Indicators (continued)

<p>13 MDA MEDICINES</p>	<ul style="list-style-type: none"> • Misuse of Drugs Act (MDA) medicines are checked & signed at each changeover of shift by nursing staff (member of day staff & night staff) • Two signatures are entered in the MDA Medicines Register for each administration of an MDA medicine • The MDA medicines cupboard is locked • A designated nurse holds MDA keys separate from other medication keys
<p>14 MEDICINE STORAGE AND CUSTODY</p>	<ul style="list-style-type: none"> • A registered nurse is in possession of the keys for medicinal product storage • All medicinal products are stored in a locked cupboard/room and trolleys are locked and secured as per local policy • An up-to-date medicines formulary resource is available and accessible
<p>15 RESPONSIVE BEHAVIOUR SUPPORT</p>	<ul style="list-style-type: none"> • On admission if evidence of responsive behaviours is identified an assessment of responsive behaviours is completed • There is documented evidence that a four monthly review of responsive behaviours assessment is completed or more frequently if required • There is documented evidence that a responsive care plan is in place • There is documented evidence that PRN psychotropic medicines are administered as a last resort only, following review and employment of non-pharmaceutical interventions • A record of all PRN Psychotropic Medication administered is maintained

Figure 10: Final Suite of Older Person Services Nursing Metrics and Associated Indicators (continued)



Figure 10: Final Suite of Older Person Services Nursing Metrics and Associated Indicators (continued)

DISCUSSION

From the literature review, it was apparent that there was a lack of what might be considered fully formulated metrics in which all the attributes of a metric - care process, standard and measurement - were immediately apparent. The nearest to fully formulated metrics was the literature coming out of North America such as American Nursing Association (ANA), US Nursing Home Compare, US Nursing Home Standards and Collaborative Alliance for Nursing Outcomes (CALNOC). Because of the type of healthcare system funding arrangements in North America, there has been much work around identifying and quantifying nurse sensitive indicators to facilitate funding mechanisms. In the non-grey literature this work was much in evidence. The remaining non-grey literature included papers that would have one or sometimes two but not all of the defining attributes of a metric.

Related to this was the type of evidence underpinning the identified metrics and indicators. It is recognised that there are different forms of evidence including research evidence, practice evidence and patient evidence. The grey literature was very useful in identifying important practice areas of concern to practitioners and regulators in the Irish context but within it there was considerable variation ranging from full procedure guidelines with underpinning evidence through to checklists. The grey and non-grey literature successfully identified practice evidence to find areas of practice considered relevant, but there was little higher level research evidence supporting the metrics and indicators identified in this document. Similarly, there was little patient and public evidence to further support which areas of practice might be considered relevant.

An important part of the final selection process was an awareness of the quality of the metrics and indicators. The evaluation tool used identified four key attributes of metrics and indicators these being process focused, important, operational and feasible. The robust design employed in the project means that the metrics and indicators can be considered as process focused and important to practice and practitioners. The points identified above indicate for the third domain- operational –that there are some considerations. Not all of the metrics and indicators had reference standards and a research evidence base underpinning them although they have a strong practice evidence base. This then impacts on the fourth evaluation attribute of feasibility. The lack of fully formulated indicators in the literature which could be used meant these had to be formulated and devised by the WSWG. The literature strongly recommends that metrics and indicators are piloted before full usage to avoid unintended and adverse consequences (Campbell et al. 2011), thus pilot testing of these indicators in particular is recommended.

CONCLUSION

The aim of the Nursing Quality Care-Metrics project was to identify a final suite of nursing quality care process metrics and associated indicators for OPS to facilitate providing evidence of the nursing contribution to high quality, safe, patient care.

Through a robust approach of a systematic literature review and a Delphi consensus process, a total of 19 nursing care process metrics and 80 indicators for OPS were identified.

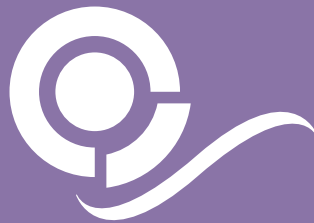
RECOMMENDATIONS

The implementation of the 19 quality care process metrics and 80 associated indicators is due to begin in Older Persons Services in 2018. To examine the effectiveness of the developed suite, we recommend a robust evaluation of the metrics and associated indicators on nursing and midwifery care processes. Adherence is a key challenge for any new guideline or measurement and in order to ensure the suite is fully utilised it would be important to explore any issues that might arise during the testing of the metrics and indicators. Consequently, there is a need to evaluate not only summative endpoint outcomes following implementation but also a requirement to perform formative and process evaluations of implementation (Stetler et al. 2006). Thus an implementation science approach is advised to complete the robust evaluation of the developed suite. Implementation science is defined as the study of methods to promote the systematic uptake of evidence based practice into routine care, to improve the quality and effectiveness of health systems (Eccles and Mittman 2006). Thus, using this approach would aid in examining the impact of the newly developed metrics and indicators on nursing and midwifery care processes.

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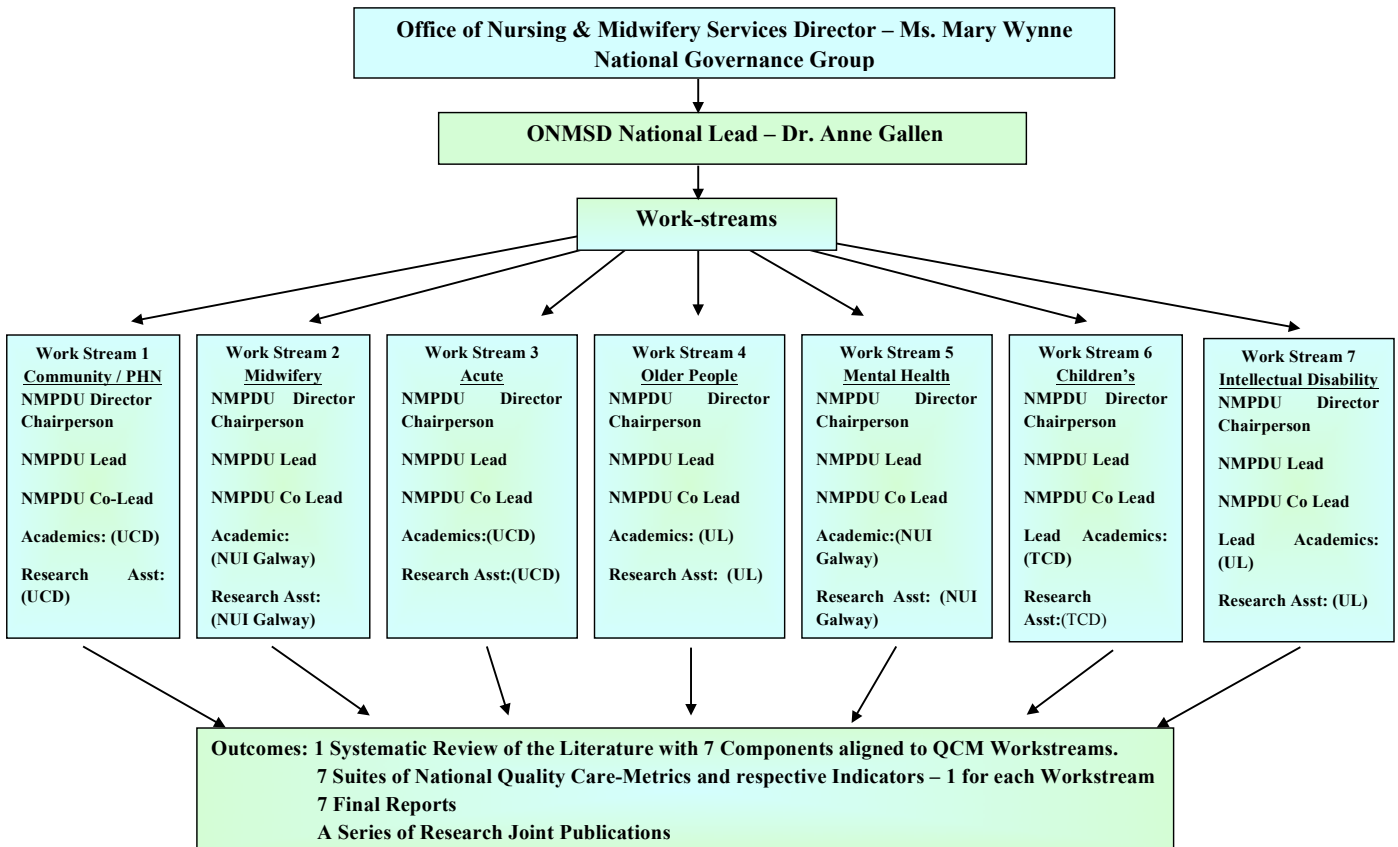
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APPENDICES



NURSING & MIDWIFERY
QUALITY
CARE-METRICS

APPENDIX 1: NURSING AND MIDWIFERY QUALITY CARE- METRICS GOVERNANCE FLOW CHART



APPENDIX 2: NURSING & MIDWIFERY QUALITY CARE-METRICS – ACADEMIC & NMPD STEERING GROUP MEMBERSHIP

OFFICE OF NURSING & MIDWIFERY SERVICE DIRECTOR	Ms. Mary Wynne , HSE, Interim Nursing and Midwifery Services Director & Assistant National Director, Office of the Nursing & Midwifery Services Director
NATIONAL LEAD	Dr. Anne Gallen , Director, NMPDU, HSE North West
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NMPD CO-LEAD – PREVIOUS:	Ms. Margaret Nadin , QCM Project Officer, NMPDU, HSE Dublin North East
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ADMINISTRATION	Ms. Anita Gallagher , NMPDU, HSE, North West

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QCM Academic Group Representative	Prof. Laserina O'Connor , University College Dublin
QCM NMPD Project Officers Representative	Ms. Gillian Conway , QCM Project Officer, NMPD, HSE West/Mid-West
Hospital Group Chief Nurse Representatives / IADNAM DON/M Representatives: <ul style="list-style-type: none"> • 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	Ms. Catherine Adams , Office of the Area Director of Nursing, Mid-West Mental Health Services
Director of Public Health Nursing	Ms. Mary B Finn-Gilbride , Director Public Health Nursing, HSE South, Upper George's Street, Wexford
Director of Nursing Intellectual Disability	Ms. Theresa O'Loughlin , Oakridge Children's Services Manager, Daughters of Charity Disability Support Services
HSE Quality Improvement Division Representative	Dr. Jennifer Martin , 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	Ms. Martina Harkin-Kelly , President, Irish Nurses & Midwives Organisation
PNA Representative	Ms. Aisling Culhane , Research and Development Advisor, Psychiatric Nurses Association
SIPTU Representative	Ms. Aideen Carberry , Assistant Organiser, SIPTU Health Division
Patient Representative	Ms. Anne Harris , Development & Case Support - Southern Area, SAGE (Support & Advocacy Service)
Secretary to the Group	Ms. Anita Gallagher , HSE, NMPD North West

APPENDIX 4: SUPPORTING LITERATURE MAPPED TO FINAL SUITE OF OPS METRICS

COMPREHENSIVE GERIATRIC ASSESSMENT	
RELEVANT LITERATURE	<p>(Arora et al 2007) (Brühl et al 2007) (Maher et al 2012) (Care Record Audit Tool ND) (Chen et al 2011) (Feil et al. 2007) (Geriatric Depression Scale ND) (Guidance Document for Oral Hygiene Care 2016) (Guideline on delivery of dementia care ND) (Imhof et al 2012) (Multidisciplinary Risk Analysis for Challenging Behaviour ND) (Nakrem et al 2009) (Oral Care Policy ND) (Procedure for Metrics Data Collection 2015) (Record Keeping & Documentation Policy 2016) (Terrell et al 2009)</p>
STANDARD	<p>HIQA National Quality Standards for Residential Care 2016) (Harrington et al 2016) (US Nursing Home Quality Measures) (US Nursing Home Compare) (NMBI Working with Older People Professional guidance 2014)</p>
PERSON CENTRED CARE PLANNING	
RELEVANT LITERATURE	<p>(Arora et al 2007) (Assessment and Care Planning for Nutritional Needs 2016) (Ensuring the Privacy and Dignity of our residents in St Joseph's Care Centre Service ND) (Guidance Document for Oral Hygiene Care 2016) (Meal Time Audit ND) (Nakrem et al 2009) (Oral Care Policy ND) (Protected Mealtime, provision of nutritionally balanced Meals and Guidance for Assisted Feeding in St Joseph's Care Centre ND) (Policy on the use of physical restraints in designated residential care units for older people 2011)</p>
STANDARD	<p>HIQA National Quality Standards for Residential Care 2016) (US Nursing Home Quality Measures) (NMBI Working with Older People Professional guidance 2014)</p>
FALLS RISK	
RELEVANT LITERATURE	<p>(Gama at al 2011) (Imhof et al 2012)</p>
STANDARD	<p>(US Nursing Home Quality Measures) (ANA Nursing quality 2017) (CALNOC Collaborative Alliance for Nursing Outcomes 2015)</p>

FALL PREVENTION	
RELEVANT LITERATURE	(Falls Prevention & Management 2016) (Procedure for Metrics Data Collection 2015) (Risk Management Policy 2016)
STANDARD	(US Nursing Home Quality Measures) (ANA Nursing quality 2017) (CALNOC Collaborative Alliance for Nursing Outcomes)
OPTIMISING NUTRITION AND HYDRATION	
RELEVANT LITERATURE	(Arora et al 2007) (Assessment and Care Planning for Nutritional Needs 2016) (Nakrem et al 2009)
STANDARD	(HIQA National Quality Standards for Residential Care 2016) (Health Act 2007 (Care and Welfare of residents in designated centres for older people) regulations 2013)
ASSESSMENT AND MANAGEMENT OF PRESSURE ULCERS	
RELEVANT LITERATURE	(Arora et al 2007) (Barthel Index Assessment ND) (Coleman et al 2014) (Nakrem et al 2009) (Procedure for Metrics Data Collection 2015) (Pressure Ulcer Prevention and Management Policy 2016) (Pressure ulcer prevention and management ND)
STANDARD	(International Guidelines for Pressure Ulcer Prevention 2016) (ANA Nursing quality 2017) (CALNOC Collaborative Alliance for Nursing Outcomes) (US Nursing Home Compare) (Pfeifer 2017)
CONTINENCE ASSESSMENT, PROMOTION AND MANAGEMENT	
RELEVANT LITERATURE	(Imhof et al 2012) (Nakrem et al 2009)
STANDARD	(US Nursing Home Quality Measures)

PAIN ASSESSMENT AND MANAGEMENT	
RELEVANT LITERATURE	(Arora et al 2007) (Burfield et al 2012) (Maher et al 2012) (Imhof et al 2012) (Nakrem et al 2009) (Terrell et 2009) (The Management of Pain in Residents in St Joseph's Care Centre ND)
STANDARD	(US Nursing Home Quality Measures) (HIQA National Standards for Residential Care Settings for Older People in Ireland 2009) (NMBI Working with Older People Professional guidance 2014)

ACTIVITIES (PHYSICAL, SOCIAL, RECREATIONAL AND SENSORY) SOCIAL/ENGAGEMENT (FAMILY-CENTRED/INCLUDED, SOCIAL ENGAGEMENT AND SUPPORT)	
RELEVANT LITERATURE	(Nakrem et al 2009)
STANDARD	(NMBI Working with Older People Professional guidance 2014)

SKIN INTEGRITY	
RELEVANT LITERATURE	(Local Policy on Wound Management 2016)
STANDARD	(National Best Practice and Evidence Based Guidelines for Wound Management 2009)

MEDICINES ADMINISTRATION	
RELEVANT LITERATURE	(Guidance to Nurses and Midwives on Medication Management 2007) (Imhof et al 2012) (Medication Event Report Form ND) (Medication Management Audit Tool ND) (Medication Error Report Form ND) (Procedure for Metrics Data Collection 2015) (Self-Administration of Medication ND)
STANDARD	(HIQA National Quality Standards for Residential Care 2016) (CALNOC Collaborative Alliance for Nursing Outcomes) (NMBI Standards for Medicines Management for Nurses and Midwives 2015)

MEDICINES PRESCRIBING	
RELEVANT LITERATURE	(Medication prescription metric ND)
STANDARD	(NMBI Practice Standards and Guidelines for Nurses and Midwives with Prescriptive Authority 2010)

MDA MEDICINES	
RELEVANT LITERATURE	(Guidance to Nurses and Midwives on Medication Management 2007) (Imhof et al 2012) (Medication Event Report Form ND) (Medication management audit tool ND) (Medication Error Report Form ND) (Procedure for Metrics Data Collection 2015) (Self-Administration of Medication ND)
STANDARD	(HIQA National Quality Standards for Residential Care 2016) (US Nursing Home Quality Measures) (ANA Nursing Quality 2017) (US Nursing Home Compare) (Pfeifer 2017) (CALNOC Collaborative Alliance for Nursing Outcomes) (NMBI Standards for Medicines Management for Nurses and Midwives 2015)

MEDICINE STORAGE AND CUSTODY	
RELEVANT LITERATURE	(Medication Management Policy For Services for Older Persons 2015) (Procedure for Metrics Data Collection 2015)
STANDARD	(HIQA 2016 National Quality Standards for Residential Care 2016) (NMBI Standards for Medicines Management for Nurses and Midwives 2015)

RESPONSIVE BEHAVIOUR SUPPORT	
RELEVANT LITERATURE	(Brühl et al 2007) (Maher et al 2012) (Chen et al 2011) (Feil et al. 2007) (Guideline on delivery of dementia care ND) (Imhof et al 2012) (Nakrem et al 2009) (Terrell et al 2009)
STANDARD	(NMBI Code of Professional Conduct and Ethics 2014) (NMBI Working with Older People Professional guidance 2014)



SAFEGUARDING VULNERABLE ADULTS	
RELEVANT LITERATURE	(Risk Management Policy 2016) (Safeguarding Vulnerable Persons at Risk of Abuse 2014) (Vulnerable Persons at Risk of Abuse National Policy & Procedures 2014)
STANDARD	(HIQA National Quality Standards for Residential Care 2016) (NMBI Code of Professional Conduct and Ethics 2014)

END OF LIFE AND PALLIATIVE CARE	
RELEVANT LITERATURE	(Buck et al 2008) (Daily Flow Record For Care Of The Dying Resident ND) (End of Life Care Policy 2016) (End of Life care ND) (Forum on End of Life in Ireland 2015) (Guidelines for Pastoral Care 2016)
STANDARD	(HIQA National Quality Standards for Residential Care 2016) (NMBI Working with Older People Professional guidance 2014)

INFECTION CONTROL	
RELEVANT LITERATURE	(Nakrem et al 2009)
STANDARD	(HIQA National Quality Standards for Residential Care 2016) (Guidelines for hand hygiene in Irish healthcare settings 2015)

PERSON EXPERIENCE	
RELEVANT LITERATURE	(Communication 2016) (Kajonis PJ and Kazemi A 2016) (McCance et al 2012) (Procedure for Metrics Data Collection 2015)
STANDARD	(National Health Service (NHS) Outcomes Framework 2014) (NMBI Code of Professional Conduct and Ethics 2014)



APPENDIX 5: EVIDENCE SOURCES FOR METRICS AND INDICATORS

LITERATURE REVIEW

- **Databases**

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- **Hand searching**

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APPENDIX 6: NURSING AND MIDWIFERY QUALITY CARE- METRICS - OLDER PERSON WORKSTREAM WORKING GROUP MEMBERSHIP

OFFICE OF NURSING & MIDWIFERY SERVICE DIRECTOR	Ms. Mary Wynne , HSE, Interim Nursing and Midwifery Services Director & Assistant National Director, Office of the Nursing & Midwifery Services Director
NATIONAL LEAD	Dr. Anne Gallen , Director, NMPDU, HSE North West
OLDER PERSONS WORKSTREAM:	
NMPD DIRECTOR – CHAIRPERSON –CURRENT:	Ms. Joan Donegan , Director, NMPDU, HSE North East
NMPD DIRECTOR – CHAIRPERSON – PREVIOUS:	Ms. Deirdre Mulligan , Interim Area Director, NMPDU, HSE North East
NMPD LEAD –CURRENT :	Ms. Mary Nolan , QCM Project Officer, NMPDU, HSE Midlands
NMPD CO-LEAD – CURRENT :	Ms. Angela Killeen , QCM Project Officer, NMPDU, HSE North West
NMPD CO-LEAD – PREVIOUS:	Ms. Paula Kavanagh , QCM Project Officer, NMPDU, HSE North West
LEAD ACADEMIC (S)	Prof. Fiona Murphy , University of Limerick Dr. Owen Doody , University of Limerick Ms. Rosemary Lyons , University of Limerick
RESEARCH ASSISTANT	Dr. Duygu Sezgin , Postdoctoral Researcher, University of Limerick
SERVICE USER REPRESENTATIVE	Ms Anne Harris , Project Manager Patient Engagement Office of Patient Engagement Quality Improvement Division, HSE Naas
SERVICE USER REPRESENTATIVE	Ms Anne Donnellan , Age Action Ireland.
NATIONAL CLINICAL PROGRAMME OP	Ms Deirdre Lang , Director of Nursing National Clinical Programme for Older People, HSE
IADNAM REPRESENTATIVE	Ms. Georgina Basset . Director of Nursing, St Columba's Thomastown, Co. Kilkenny
CHO 1	Ms Kathleen Doherty , Director of Nursing, St Joseph's Hospital Stranorlar, Co. Donegal Previous – Ms Sue Islam , Director of Nursing, Dungloe Community Hospital, Co. Donegal
CHO 1	Ms Maura Gillen , Practice Development, Older Persons Service, Buncrana Community Hospital, Co. Donegal
CHO 2	Rosalind Allen , Clinical Nurse Manager 2, St Anne's CNU., Clifden
CHO 2	Sandhya Joy , Clinical Nurse Manager 3, St Anne's CNU., Clifden

CHO 3	Ms Mary Marks , Director of Nursing, St. Camillus Hospital, Shelbourne Road, Limerick Previous - Ms Dhivya Plakkal , Assistant Director of Nursing St. Camillus Hospital, Shelbourne Road, Limerick
CHO 3	Ms Mary Lucas , Clinical Nurse Specialist, Ennistymon Community Hospital, Co Clare
CHO 4	Ms Mary J Foley , Advanced Nurse Practitioner, St Finbarr's Hospital, Cork.
CHO 4	Ms Caroline Dillon , Staff Nurse, Caherciveen Community Hospital, Co. Kerry.
CHO 4	Ms Cathy Sheehan , Assistant Director of Nursing, Castletownbere Community Hospital, Co. Cork
CHO 5	Ms Eilis Geraghty , Director of Nursing, Sacred Heart Hospital, Carlow Ms Elaine Flanagan Assistant Director of Nursing, Sacred Heart Hospital, Carlow
CHO 6	Ms Florence Hogan , Clinical Nurse Manager 2 (Quality& Patient Safety), Leopardstown Park Hospital, Foxrock, Dublin 18.
CHO 7	Ms Joan Guinan-Menton , Director of Nursing, Peamount Healthcare, Newcastle, Co. Dublin
CHO 8	Ms Paula Phelan , Director of Nursing, St Vincent's CNU, Mountmellick Co Laois.
CHO 8	Ms Marie Butler , Assistant Director of Nursing, Older Persons Services, St Oliver's Hospital, Dundalk, Co Louth Previously: Ms Aoife Bailey , Director of Nursing, Cottage Hospital, Dundalk, Co Louth.
CHO 8	Ms Patricia Greville , Interim Director of Nursing, St Joseph's CNU, Trim, Co Meath
CHO 9	Ms Fiona Dunne , Assistant Director of Nursing, St Mary's Campus, Phoenix Park, Dublin 20
CHO 9	Ms Bridget Gray , Assistant Director of Nursing, OPS Cappagh Orthopaedic Hospital, Finglas, Dublin 11
EXPERTS JOINING AT CONSENSUS	Professor Alice Coffey , University of Limerick
EXPERTS JOINING AT CONSENSUS	Ms Bibiana Savin , SAGE Advocate.

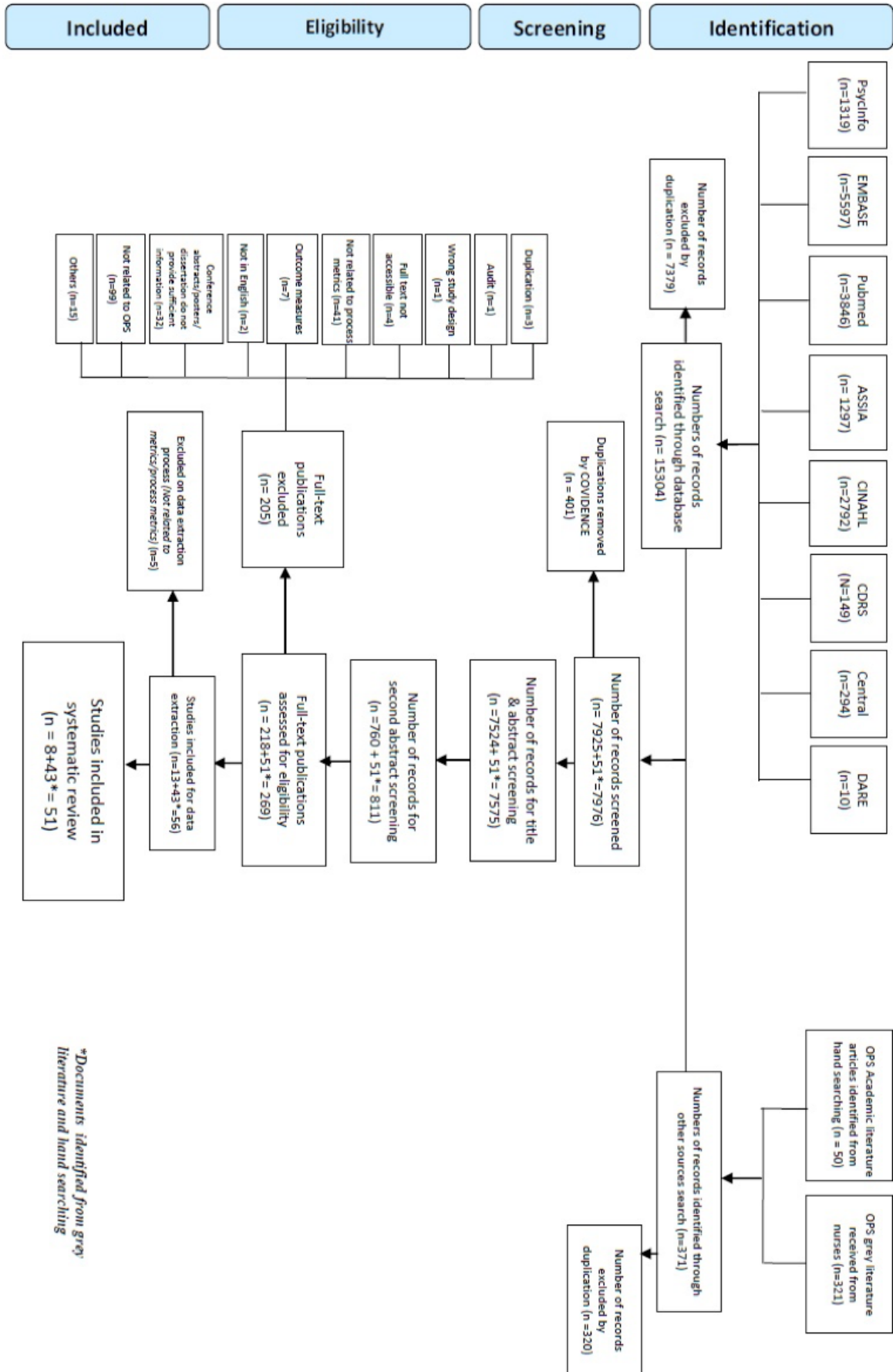
APPENDIX 7: DESCRIPTION OF NURSING & MIDWIFERY GRADES

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.

<p>Clinical Nurse/ Midwife Specialist (CNSp/CMSp)</p>	<p>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.</p>
<p>Community Mental Health Nurse (CMHN)</p>	<p>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.</p>
<p>Clinical Skills Facilitator</p>	<p>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.</p>
<p>Practice Development Co-ordinator (PDC)</p>	<p>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</p>
<p>Advanced Nurse/Midwife Practitioner (AN/MP)</p>	<p>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.</p>
<p>Assistant Director of Nursing/ Midwifery/ Public Health Nursing (ADON/M/PHN)</p>	<p>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</p>
<p>Director of Nursing/ Midwifery/ Public Health Nursing (DON/M/PHN)</p>	<p>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.</p>

Nurse / Midwife Lecturer /Educator / 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.

APPENDIX 8: NURSING METRICS CONSENSUS MANAGEMENT SYSTEMATIC REVIEW PRISMA FLOW DIAGRAM



APPENDIX 9:
 NURSING AND MIDWIFERY QUALITY CARE-
 METRICS/INDICATORS EVALUATION TOOL

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

Modified from: eRegistries indicator evaluation tool (Flenady et al. 2016)

NOTES



NURSING & MIDWIFERY
QUALITY
CARE-METRICS

JUNE 2018

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Clinical Strategy and Programmes Directorate

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Dr. Steevens' Hospital
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www.hse.ie/go/onmsd