Professional Record Standards Body

Better records for better care

NURSING STANDARD

Discovery Report

June 2021

Glossary of Terms

Term / Abbreviation	Description
ADL	Activities of Daily Living
AHP	Allied health Professional
AI	Artificial Intelligence
ANA	Association of American Nurses
CIS	Core Information Standard
CNIO	Chief Nursing Information Officer
CUH	Cambridge University Hospital
DAPB	Data Alliance Partnership Board
DCB	Data Coordination Board
EPR	Electronic Patient Record
FHIR	Fast Healthcare Interoperability Resources
FTE	Full Time Equivalent
GP	General Practice
HEE	Health Education England
ICNP	International Classification for Nursing Practice
ICS	Integrated Care System
ICP	Integrated Care Partnership
ICU	Intensive Care Unit
ISCES	Information Standards, Collections and Extractions
ISN	Information Standard Notice
IT	Information Technology
IV	Intravenous
MDT	Multidisciplinary Team
NANDA	North American Nursing Diagnosis Association
NDNQI	National Database of Nursing Quality Indicators
NIC	Nursing Intervention Classification
NNN	NANDA, NIC and NOC
NMAHP	Nursing, Midwifery and Allied Health Professional
NMC	Nursing and Midwifery Council
NOC	Nursing Outcome Classification
OT	Occupational Therapist
PCSP	Personal Care and Support Plan
PD	Practice Development
PRSB	Professional Records Standard Body
QNI	Queen's Nursing Institute
RCN	Royal College of Nursing

SNOMED CT	Systematised Nomenclature of Medicine Clinical Terms
ST	Standard Terminology
TIGER	Technology Informatics Guiding Education Reform
ToR	Terms of Reference
UCLH	University College London Hospital

Contents

1 Introduction

1.1 Background

There is a fundamental shift towards community centred integrated health and social care systems provided through integrated care systems (ICSs) and partnerships (ICPs). This is the biggest shake up since the NHS began and the push to locally determined, controlled and funded care has accelerated, in the four countries, over the last decade (NHS Long Term Plan, Northern Ireland Health and Wellbeing 2026, Scotland Health and Social Care Integration). Broadly speaking, health and social care integration relates to the creation of a more joined-up care experience for those with both health and social care needs. A fundamental enabler is integrated multiagency and multi-professional teams providing services and care to citizens, with organisational and technology infrastructures to support this way of working. While technology is not a cure-all, each country has digital and data as key enablers of safe and effective care, in their plans, for health and social care integration. A major barrier is differences in documentation, documentation practices and information sharing practices across health and social care which can mean that an individual's care is not co-ordinated across agencies.

The pandemic has sped up the use of digital devices and systems by frontline health and care staff as well as by the people/ patients using services. PRSB health and care information standards ensure that there is consistency in recording and communicating digital information which is a basic requirement for effective real- time patient information sharing. Standards must be co-produced with users including frontline health, care workers, patients/ citizens and all impacted stakeholders to ensure they are person-centred and usable as intended. They will support interoperability that promotes integrated care and multi- professional and multi-agency working. In so doing, standards should improve quality and safety of care, save time, and reduce duplication of effort, which can free up time to care. Standardised information is also required for the collection of data for the many other uses health and care information supports, such as service evaluation, population disease monitoring (e.g., Covid 19 surveillance), research, quality improvement and metrics to measure staff contribution and impact on care.

In consideration of the need to improve the structure of nursing information, NHSX commissioned PRSB to conduct a discovery project to investigate the feasibility, benefits, risks and challenges of developing a national nursing standard. The findings are to inform the business case for developing the standard and outline, at a high level, the phases and processes of development and subsequent implementation.

1.2 Rationale for the nursing standard

Nurses and nursing are at the heart of health and care developments as they represent the largest workforce in health and care with nursing being an integral part of care in virtually every health and care setting (RCN 2019). The challenge is that nursing documentation and communications are not standardised resulting in wide variation in practices both within and between organisations, care settings and nursing disciplines.

As stated earlier it is recognised that standardised documentation and communications are a basic requirement for interoperability and effective communications both within the profession and with other professional colleagues. However, getting patient documentation and information flows right is complex and implementation of documentation standards and patient electronic record systems (EPR) run the risk of not meeting the requirements of end users. Therefore, the time is ripe to investigate

standardising nursing documentation nationally to ensure it is fit for purpose in the 21st century.

The premise for the standard requirements is that it:

i) Supports a truly person-centred approach that consciously adopts the perspectives of individuals, families and communities, and sees them as participants as well as beneficiaries of trusted health systems that respond to their needs and preferences in humane and holistic ways (World Health Organisation, 2021).
ii) Supports shared care and caring in a digitally enabled environment with integrated health and care systems and multiagency and multi-professional ways of working.
iii) Facilitates improvement in quality and safety of patient care and patient/ citizen experience.
iv) Positively assists nurses in their work.
v) Provides the infrastructure for capture and utilisation of information and data for secondary uses, decision support, artificial intelligence etc.

1.3 The role of the nurse

Modern nursing practice attributes its foundations to the thinking and theories of Virginia Henderson (Chapman 2018; Vera, 2014). Her definition of nursing distinguished a nurse's role in health care; the nurse is expected to carry out a physician's therapeutic plan, but individualised care results from the nurse's creativity in planning for care. Nursing is focused on the person's function not the underlying illness/ condition/ disease. She was considered the 20th century Florence Nightingale and her definition of the role of the nurse is universally used and accepted:

"The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible" (Henderson, 1966).

She described the role as substitutive (doing for the person), supplementary (helping the person), complementary (working with the person), with the goal of helping the person become as independent as possible. This stresses the importance of the nurse patient/ person relationship and how caring for the person is about working together with the person, their carer and family for however long it takes to arrive at the goals and attainments mutually agreed. It is relatively easy to record the person's needs, desired goals/ outcomes and how these will be attained but its far more difficult to capture and document the nurse/ patient relationship, the holistic approach and keen observation and judgement needed for individualised care which is the art of nursing.

Henderson developed the Nursing Need Theory to define this unique focus of nursing practices. The theory categorises nursing activities into 14 components, based on human needs which encompasses a holistic nursing approach covering the physiological, psychological, spiritual, and social needs of the person. Her concept of nursing is widely accepted, and the 14 components are relatively simple, logical, and can be applied to individuals of all ages (Huitzi-Egilegor et al, 2014; Vera, 2014).

More recent nursing models are very influenced by Henderson's Needs theory including the Roper, Logan and Tierney model, developed in the 1980s, which is widely used in nursing practice in both the UK and Ireland. The patient is assessed on his or her ability to perform the 12 activities of daily living (ADLs) which are very similar to Henderson's 14 categories. It provides a framework for the nursing process model

and forms the basis for personalised care planning for assessing care needs, agreeing and planning care with the person, delivering care interventions and evaluation of patient outcomes from care given (Chapman 2018). For example, ADLs cover functional domains like the person's mobility, communication, spiritual and psychosocial needs, maintaining a safe environment, medication, pain management, nutrition and elimination. Nurses work in a very wide range of caring roles from staff nurse to advanced practitioners, section 4.1 provides an overview of the range and remit, but the caring model is universal; nurses adapt their skills and focus to whatever their role.

2 Aim & Objectives

2.1 Aim

The aim of the discovery project is to investigate the need, feasibility, benefit and challenges of developing a national standard.

2.2 Objectives

The objectives are:

- Gather the evidence base to inform the development of the standard.
- Consult with key stakeholders to appraise the feasibility, benefits and challenges.
- Draft outline benefits for care and nursing and expected improvements in patient safety and care that could be expected from implementing the standard for input to a business case.
- Produce a report that will inform the next phases of development including the methods, scope, workstreams, consultations, timeframe and costs.

2.3 Scope

2.3.1 Scope Inclusions

Scope includes the key considerations for a standard that encompasses nursing assessments, plans of care and the fundamentals of care that cross-cut nursing. The challenges and benefits of developing the standard for multiple care settings from community to secondary care and between different nursing disciplines including community, primary care, secondary care, mental health, care/nursing homes, learning disabilities and paediatrics.

Whilst the emphasis is nurse-led care, the focus is a standard that supports person centred care delivery. Nurses work closely with other health and social care colleagues in a shared care environment to deliver person centred care therefore, these key interdependencies will be explored.

This discovery will include a review of international literature.

2.3.2 Scope Exclusions

In the discovery, key stakeholders will be interviewed but more widespread consultation will be undertaken in subsequent phases.

Midwifery, maternity, and neonatal care are out of scope.

3 Methodology

The methodology to gather evidence included a targeted literature review and group semi structured interviews.

3.1 Targeted literature review

Conducted targeted review of the international literature focusing on the feasibility, benefit, challenges, and best practices for creating a standard. Findings are described in section 4.1.

3.2 Group interviews

Six group interviews and one individual interview were conducted using a semi-structured format over a four-week period commencing from the end of March 2021. Five streams of interviews were held.

- National leaders x 2
- Expert Practitioners
- Frontline practitioners
- Nurse Digital Leaders/ Experts
- Citizens/patients and carers

Themes of the interview

- Arriving at a shared understanding of a Nursing Standard
- Challenges & risks of a nursing standard
- Benefit of a nursing standard

The interviews were 60 minutes long and were tape recorded with the consent of the participants. The recordings were transcribed verbatim and analysed by thematic analysis to identify themes. The themes and supporting information including quotes are described in section 4.2.

For information about the PRSB team, who conducted the project, see Appendix C and the Project Board membership, in Appendix D.

4 Findings

The findings from the literature review and interviews are described in sections 4.1. and 4.2 respectively.

4.1 Literature review summary findings

The evidence suggests that ‘to get it right’ there is a requirement for mutually agreed, precise and well-articulated definitions, guidelines and processes pertaining to the goal of creating and implementing a national standard that is used as intended by everyone in the person’s circle of care and beyond. The fact that nurses are the largest health and care workforce in England, providing care in many diverse sectors needs to be considered. With this in mind, the following themes and questions need exploration and agreement to guide the premise and principles of development and intended usage.

4.1.1 Nursing workforce

Nurses are the largest healthcare workforce in the UK and most health and care is delivered by nurses and nursing/health care assistants. To put this in context NHS Digital workforce data, for September 2020, shows that of the total full time equivalent (FTE) hospital and community health service staff employed in England, 25.7% (299,184 FTE) are nurses (NHS Digital, 2020). They make up nearly half (48%) of the total professionally qualified clinical workforce. In terms of the whole of the UK there were 639,206 people employed in the occupational category of nurse in 2018, a further 338,084 nursing assistants/auxiliaries and 36,288 midwives (Source: Labour Force Survey, RCN (2019)). Table 1 show in which sectors these nurses are employed.

Table 1: All UK: Nurses and midwives in employment by sector of work (2018)

Employment Sector*	Percentage of total
Health Authority or NHS Trust	75.9%
Charity/ voluntary sector	3.1%
Private business or firm	16.6%
Other public sector	4.3%

Data Source: Labour Force Survey, April - June 2018 (RCN 2018)

* Office for National Statistics Categories

NHS nursing workforce in England

Table 2 describes the main work areas for the registered nursing workforce in England. As at March 2018, the headcount workforce was 346,293 and FTE was 307,535 (RCN, 2019)

Table 2: England NHS: registered nursing, midwifery and health visiting staff FTE by work area

Registered staff	Number	Percentage
All	307,535	100%
Adults	179,941	58.5%
Children's Nursing	22,406	7.3%
Community Health	35,377	11.5%
Mental Health	36,053	11.7%
Health Visitors	8,172	2.7%
Learning disabilities/ difficulties	3,305	1.1%
Other	491	0.2%
Midwives	21,790	7.1%

Data Source NHS Digital; RCN (2018)

Nurses employed outside the NHS

While the NHS is the biggest employer of nurses there are many thousands in other sectors managing services and delivering nursing care including in General Practice (GP), private hospitals, care homes and the voluntary sector.

General Practitioners, who are mostly all self-employed, contract their services back to the NHS and employ their own staff. There are approximately 7,270 GP practices in England which had a registered nurse workforce of 15,899 in 2018; the main nurse categories employed were: 72.8 % practice nurses, 19.7% advance nurse practitioners, 3% specialist nurses and 3.8% extended role practice nurses (RCN 2019).

Good national data sources do not exist for nurses working in the independent sector except where services are commissioned by the NHS. In 2018 there were over 12,000 nurses, health visitors and midwives and over 7,000 nursing support staff employed by independent sector health care providers providing NHS-commissioned services (RCN 2019). However, 40% of the RCN's 450,000 membership are employed outside the NHS which gives an indication of the volume of nurses and nursing assistants in other sectors.

4.1.2 Nursing care and nursing documentation practices

Nursing care refers to the work performed daily by nurses, and it is based on the nursing theory and on practical nursing experience with documentation produced continuously as part of this process (Hardiman et al, 2020; Nykänena, Kaipio and Kuusistoc, 2012).

Documentation usually follows a particular model, as described in section 1.3, which divides the nursing process into phases of care such as defining the person's needs and goals, planning and implementation of care and outcome assessment. Hence, there is a lot of it which can pose problems with organisation, accessibility, retrieval, and communications.

Nursing practices vary depending on care setting and disciplines therefore the emphasis on the nursing process phases is dependent on the care context e.g., the goal definition phase may be emphasised for chronic diseases, but for trauma and acute patients, implementation of care may be the most important phase. The documentation system must work for this wide range of nursing disciplines in a wide range of roles working in many different care settings and organisations. It has to be clear, logical and present the essential aspects of patient care within each care context. A workable characterisation is that the goal with nursing documentation is to make the documented information accessible, usable and useful for all participating health professionals without forgetting the patient (Nykänena, Kaipio, Kuusistoc, 2012).

4.1.3 Documentation practices that promote person centred care

Capturing the essence of nursing practice based on person-centred and compassionate care within the electronic record remains a significant challenge (Bøgeskov and Grimshaw-Asgaard, 2018). Nurses are generally dissatisfied with the quality of electronic documentation driven mainly by risk assessments and interventions and captures less about the relationship and care delivered (Bøgeskov and Grimshaw-Asgaard 2018). For a starter person-centred care requires more than articulation of person-centred values (McCormack and McCance, 2017). According to these authors the core of person-centred care originates from the development of person-centred relationships and is supported by shared decision-making which is difficult to articulate and describe in a patient record.

This situation has reignited interests in the philosophy and thinking of nursing theorists such as Henderson and successors, described in section 1.3., but with application to a modern digital working environment. As a starter the use of person- centred language can be an enabler to person centred processes and has been shown to be effective in developing a person-centred culture in the non- acute setting (Hardiman and Dewing 2019). In addition, Hardiman et al (2020) suggest focussing on a 'holistic needs' assessment as the gateway to a holistic record. Therefore, collecting data and information about the person, their health needs and what is important to them (values and beliefs) forms the bedrock for the care plan and fosters a holistic and meaningful relationship between the nurse and his/her patient. Care plans should be developed with the acknowledgement and recognition that patients are unique, representing a shift away from a one-size fits all philosophy of care (Hardiman et al, 2020).

4.1.4 Nursing structured documentation systems and standardised classification and terminologies

To date nursing standardised documentation systems usually consist of standardised templates and often have standardised classifications and standardised terminologies (STs) to enable more consistent recording. Standardised terminologies facilitate the consistent use and understanding of clinical concepts. They encompass terms with agreed definitions that represent the knowledge behind these terms and link them with a standardised coding and classification system (Grogan et al, 2021). Several categories of STs have been developed including both nursing specific (e.g., NANDA-I) and interdisciplinary STs (e.g., SNOMED-CT).

Nursing documentation systems use these classification systems to record nursing diagnoses, interventions, and outcomes. Studies evaluating the impact of the standard terminologies on patient care report that they are beneficial in supporting daily workflow, delivery of care and especially for data reuse (Grogan et al 2021; Vuokko et al. 2017; Saranto et al, 2014). Structured documentation systems can produce more complete and reliable patient records, better fulfilling the requirements of data quality for secondary use purposes (Vuokko et al., 2017) and they facilitate fluent and uniform data exchange (Saranto et al, 2017).

Currently evidence of benefits in better quality of patient care remains scarce (Vuokko et al., 2017). A consideration is that data used during provision of patient care as opposed to secondary use purposes may place different demands on the degree of granularity needed. The quest of finding a balance between the documentation flexibility demanded by primary users of EHRs and the disciplined representation of reality expected in research is ongoing with inevitable trade-offs (Vuokko et al., 2017).

Overall nurses and midwives perceive the ST to be beneficial as it facilitates the documentation of the nursing plan and clinical decision making, however, it could be cumbersome to use (Grogan et al 2021). Saranto et al, (2014) also reported mainly positive attitudes towards standardised classifications but nurses need more education and managerial support to be able to benefit from using them.

There is little information in the nursing literature about how nursing documentation could and will work in truly integrated systems that exchanges direct care patient information interoperability and where shared care records are the norm, which is understandable due to the current immaturity of such systems in healthcare. However, the evidence here supports the feasibility and potential benefits with enabling infrastructure to support interoperability.

4.1.5 Usability of care information

Usability issues with EPR systems' documentation are frequently highlighted with problems ranging from the constraints imposed by having documentation systems and terminologies that are too standardised (Grogan et al 2021; Vuokko et al 2017; Nykänena, Kaipio and Kuusistoc, 2012) to the other end of the spectrum where clinicians cannot utilise unfiltered and unstructured information (KLAS, 2017 & 2018). The KLAS NHS interoperability report (2018) stated that the three major shortcomings in receiving data from external sources are: exchanged data is unstructured; cumbersome formatting and key data is missing which inhibits interoperability.

4.1.6 Health and care information for secondary uses

A wealth of health and care information is currently collected or extracted from information systems, transferred off site and used for purposes other than direct care. The biggest information users are national organisations like NHS England/ Improvement, Public Health England which need the data for financial, activity and patient outcomes monitoring and evaluation of services, population surveillance and health needs assessments, national audits, research etc. A topical example is the timely and comprehensive information needed to map and monitor number and rates of COVID 19 infections, spread of the virus, related hospital admissions and deaths.

The ideal and less burdensome method is for the secondary uses information to be extracted and flow from direct care and services information, so it is not recorded and collected more than once by staff. However, this rarely happens as the information collected for secondary uses is not aligned with the information needed and recorded for direct care and service provision. Direct care information is often not structured enough and of variable quality in terms of consistency, completeness, and accuracy so it cannot be used for secondary uses without a further mapping, manipulation, checking and often re- entry into another system dedicated for specific purpose such as outcomes databases, disease registries, commissioning datasets.

Big Data in healthcare and AI opportunities

Current digital capabilities now provide unprecedented opportunities for utilising direct care and service information more effectively, opportunities that could not be realised if using paper-based records. The information in IT systems must be high quality and its uses overseen by skilled clinical, scientific and technical personnel for reliable and valid analyses and usage in health and care (Agrawal and Prabakaran, 2020). Artificial intelligence (AI), is one of the tools applied to digital data which is rapidly transforming businesses, including healthcare, and ways of working and has the potential to provide enormous benefit if applied with skill and intelligence to routinely available information sources (Agrawal and Prabakaran, 2020; PwC, 2018).

Big Data will be an integral part of the next generation of technological developments enabling new insights from the vast quantities of data being produced; there is significant potential for the application of Big Data to healthcare with the move to electronic patient records and the ability to link different sources of information to easily build comprehensive datasets (Agrawal and Prabakaran, 2020).

Effective use of Big Data in Healthcare requires the development and deployment of AI and machine learning (ML) approaches. ML and AI make it easier and possible to interrogate and conduct complex analyses on large and varied data sources from sequences of radiology images to narratives (in patient records) using Natural Language Processing and bringing all

these datasets together to easily generate prediction models, such as predicting the response of a patient to a treatment regimen (Agrawal and Prabakaran, 2020).

As stated, earlier nursing care information is an essential record for important patient care expectations, needs and goals, care delivery and care outcomes therefore it can be a vital source of data for additional purposes including objectively measuring the impact and value of nursing to patient safety, wellbeing and quality of life. For example, AI and ML algorithms can be applied to nursing risk assessments to predict the likelihood of patients developing pressure ulcers, falling, dehydration etc. This would require less fragmentation, better consistency, and more standardisation of nursing documentation to benefit from these tools. The US National Database of Nursing Quality Indicators® (NDNQI®) is an example of high quality and standardised nursing care information that is utilised for the sole purpose of assessing the impact of nursing on quality of care and patient outcomes. There is real potential to exploit this database using AI tools and link it with other data sources for even better usage.

The NDNQI® and Nursing Quality Indicators

This large voluntary nursing database was established by the American Nurses Association (ANA) in 1998. Care providers sign up to it and submit care data for analysis; the data is collected routinely as part of nurses' work. Its purpose is to evaluate nursing's impact on healthcare, along with what effect workload, workflow, and nurse-patient ratios have on patient outcomes (Montalvo, 2007; Lockhart, 2018).

Initially 10 nurse sensitive indicators were developed to measure patient care quality. Nursing-sensitive indicators identify structures of care and care processes, both of which in turn influence care outcomes. They are distinct and specific to nursing and differ from medical indicators of care quality. For example, one structural nursing indicator is nursing care hours provided per patient day. Many of the indicators are part of the National Quality Forum's nursing care measure set, which are evidence-based standards used to drive quality and excellence, and now affect reimbursement. The information can be used to compare organisations, units and services both within and across organisations or benchmark against all organisations nationally.

The quality indicators expanded and now includes falls; falls with injury; pressure injuries (community, hospital, and unit acquired); skill mix; nursing hours per patient day; registered nurse (RN) surveys, including job satisfaction; restraint use; pain management; paediatric pain management; paediatric intravenous (I.V.) infiltrations; nursing turnover and vacancy rates; psychiatric patient assault rates; RN certification rates and education levels; and healthcare-associated infections, including ventilator-associated pneumonia, central line-associated bloodstream infections, and catheter-associated urinary tract infections.

This is a well-established database, similar to many English national healthcare databases and registries; all now under the umbrella of NHS Digital. These are collectively known as ISCES (Information Standards, Collections and Extractions) and each one must be approved for development and ongoing use by the new Data Alliance Partnership Board (DAPB) which replaces the Data Coordination Board (DCB) (NHS Digital, 2021). However, a discreet comprehensive national collection or extraction for nursing does not exist in the UK.

Considerations for models to measure nursing care

More in-depth investigation is required if an ISCE and national nursing dataset is considered as part of the NHSX standard development programme. For example, many of the nurse sensitive indicators used by the NDNQI® are collected in England via other national NHS data collections and standards therefore it is important to identify what can be reused and repurposed as well as identifying the gaps in existing ISCEs. And with the flexibility afforded

by EPRs, Big Data and AI tools a more innovative and creative model should be considered to capture nurses' contribution to care. Another consideration is the interdependency of modern multi-professional working in a shared care environment which makes it more difficult to pull out individual contributions and indeed the whole team or service impact on patient outcomes and experience must also be evaluated.

Additionally, databases and registries are beneficial when they work well but achieving and maintaining high quality, timely and complete data is challenging, costly and resource intensive (Gilmore, 2009). Quality is negatively correlated with quantity – the smaller the dataset the greater the possibility of achieving complete, accurate and consistent data. Potential problems with benchmarking would need to be considered, which has been highlighted in the literature and by our interview participants, therefore any comparisons of services must be based on methodologically robust measures. Outcome data and quality indicators often start off with crude comparisons which are useful for an overview and to highlight problem areas (i.e., crude death rate per 100,000 population) but full risk adjustment (e.g., adjusted for co-morbidities is required for making comparisons (e.g., risk adjusted cardiac/ heart surgery mortality by surgeon or service) (Englum et al, 2015). Factors like environment, culture and other patient characteristics also influence outcomes. Therefore, accurate risk adjustment and avoiding erroneous data analysis is difficult and runs the risk of labelling services inaccurately is not done well (Pitches et al 2007; Glance et al 2008; Mohammed et al (2009).

4.1.7 Core competencies and capabilities in digital and informatics

Nurses, in all roles, are required to have the capabilities to work in a digitally enabled healthcare environment stemming from pre-registration students, frontline staff to all nurse leaders. The evidence suggests that dissatisfaction, inefficiencies and unrealised benefits of nursing documentation standardisation in EPR systems partially stems from nurses lacking the skills, knowledge and understanding of purpose for effective use. This is only one dimension of the problem, but it is a risk that can be mitigated (QNI 2018, RCN 2018).

The TIGER (Technology Informatics Guiding Education Reform) is an international example of a nursing initiative that developed an international recommendation framework for core competency areas in health informatics for nurses (Hübner et al., 2018). It aims at providing a grid to embrace knowledge about competencies, professional roles, priorities and practical experience. There are many existing and new initiatives, in England, that supports learning and skills development; DigitalHealth Network, Florence Nightingale Fellowships, Burdett Trust, Health Education England (HEE) programmes are a few of what is available. Mapping all the key initiatives and linking the key players to ensure there is a cohesive strategy and implementation support for deployment of a national standard is required. This needs to consider the multi-professional and multiagency nature of nurses' work and have a global perspective to remain relevant and up to date.

To have any chance of real success health and care organisations must move to a learning culture environment. Learning cultures are more sustainable than the other cultures in rapidly changing economies of care where there is a need to be responsive to change (Ellis, 2017). Teams in learning cultures place development at the centre of what they do. These types of organisations embrace the challenges that changes bring and are keen to reap the potential rewards of development. Learning cultures grow out of a commitment within an organisation to achieve lifelong learning within the staff group (Ellis, 2017).

4.1.8 Using learning from existing nursing documentation standard developments

There is some published literature about 'how to do it' but it is likely that much of the good work is unpublished (in the grey literature) and not in the public domain. Hardiman et al (2020) have published how they successfully developed a nursing standardisation documentation system using practice development (PD) methodology and the notion of 'healthy joey' as a benchmark patient scenario to assess the capability of their needs assessment templates. Others are published on organisation websites such as the Welsh Nursing Information Standards as part the health and care information strategy for Wales. The Royal Marsden Manual of Clinical Nursing Procedures (9th Edition) is widely used to inform developers (2015). Nursing documentation developments from various acute trusts, in England, are less publicised.

These are generally locally developed standards to fulfil local needs in a single/ standalone EHR system, with some exceptions including Wales who have recently implemented national nursing documentation standards for their new country wide EHR system. There is also national work underway in Northern Ireland and Scotland to standardise and digitise aspects of nursing documentation. In local system wide implementations, the nursing documentation and workflow needs are developed as part and parcel of the local system wide implementation. Two examples include UCLH and CUH who implemented an integrated electronic patient record system, providing a single record for all elements of patient care across the trust. In doing this, theory-based nursing practice was integrated into digital workflows and documentation with the aim of supporting the delivery of evidence-based patient care in a structured data format.

It will be important to identify and review, in a scoping phase, through stakeholder engagement, further pertinent examples of existing work and use these for intelligence gathering and reality checking and later as confirmation against the standard as it is developed. Key learning from what has been shown to work in this context is regarded as transferable learning (Hardiman et al, 2020).

4.2 Group interview findings

Feedback from group interviews have been organised into themes and is presented in the following table together with the key findings and quotes from interviewees.

4.2.1 Professional group interviews

Theme	Key Findings	Quotes
Positivity and Support for development of a nursing standard	There was a general consensus by the participants in support of a national standard and the positive impact it will have on patient care. However, the participants expressed a need to reconsider the name 'Nursing standard'. The concerns expressed where - • Participants expressed the title 'Nursing standard' would be first referenced as the monthly nursing journal. • The standard is targeted at the nurses and other members of MDT	

	who are likely to contribute to the patient care, however, the name appears to imply it would be used by nurses alone.	
Nursing minimum dataset	The standard should be more of a minimum dataset and have guidelines around the tools used in capturing patient data in the delivery of care. Standardising a minimum dataset should still allow for local control. Health and care organisations should have the ability to add more data elements to enable research and any other need they identify. Minimum datasets should be standardised, coded, and stored in a nursing data warehouse.	"So it maybe that we have 200 data items that we need to capture but I might, as an acute nurse, capture them on the admission assessment but a community perspective might capture them 3 or 4 days into the community in your visits and attendances so for me there's flexibility of where we capture and when we capture the data but as long as it's got the same meaning behind it is the main thing."
Quality of care	An overarching principle of this standard should be the patient's quality of care. In measuring the quality of care, it should not just be on nursing assessments but on what the nurse contributes to the quality of care that patients receive and how these contributions are seen in improving patient's health outcome.	
Congruence of standard for different care settings and different nurse disciplines	In community nursing, the clinical environment the care is being delivered is out of your control and part of the risk assessment to be carried out would include that of the environment as part of the holistic assessment. The service delivered in the community is nurse led and the nurse is responsible for the care of the individual, and in some cases, their families as well. Patient caseloads are held by the nurse, and these may not be dependent on a multidisciplinary team note. With the standard to include all nurses and services like health visitors and school nurses, it was highlighted that these nursing disciplines do have slight	"Would health visitors recognise it because it says nursing standard, or would they be looking for their own as a health visiting standard."

	differences in their assessments and the challenge would be how to make this standard inclusive all these care settings and nursing disciplines. In the community, one of the patient outcomes is that hospital admission was avoided. If the nurses are not present to, for example, give insulin or provide end of life care, the person may end up in a hospital.	
Identifying stakeholders for standard development	Current IT systems do not support the way nurses would want to collect or record data and they should be engaged in the entire process of developing the standard to ensure design meets nursing needs. In the community there are a number of community interest companies, and special enterprises that provide the NHS contract for community services, and these stakeholders should be engaged in the development of the standard. They are several charities who are service providers, for example, Marie Curie night sitting service, Well Child and Roald Dahl nurses that come into the person's home and may require access to patient records. These groups should be engaged in the development of the standard.	

System interoperability and terminology	There should be an identified terminology to support the standard and it was identified that the NHS has largely adopted the use of SNOMED CT in other healthcare specialities and for commissioning data sets. The current nursing classifications i.e., NNN, ICNP are also mapped to SNOMED CT. Clinical contents should be mapped to SNOMED CT either natively or via a clinical content curator which would result in uniformity and allow utilising the data for reporting, predictive analysis, and benchmarking. Every organisation should have the liberty to structure their data in a way that works for them and map them to SNOMED CT codes therefore conforming with ISN SCCI0034 Amd 35/2016. It should not matter what nursing model is being utilised in the delivery of care as long as there is the ability to share between care settings using SNOMED CT or a different terminology that maps to SNOMED CT.	
Transfer of care (Handover)	There should be a national decision on the choice of assessment models rather than the arbitrary decision made on NHS trust level. This will promote a shared understanding among nurses in different care settings of what an assessment score represents especially when it involves the transfer of care from one setting to another. Referral between care settings is only as good as the information received. If a bit of patient's vital information is sent incorrectly or missing, this could put patient safety at risk. Having a structured way data is captured would greatly mitigate against this.	"I know it's very prescriptive to say every Acute Trust in the UK has to use the same assessments but actually if we're talking about making it easier for nurses to do their job and do documentation and care for their patients and release more time to care for their patients, that would actually be very useful."
Nursing documentation	There must be a real balance around the standard to ensure it cuts across whole continuum of digital maturity in various health care organisations. The standard should have the ability to support both	"the data is only as good as the information that's put into it and what I think we need to get to is a point where nurses feel that

	digital and non-digital nursing documentations. Nursing documentation is more nuanced and granular and as such may be of more value to patients as it better captures the patient's health record. There is precedent for this in that nursing documentation was traditionally paperwork on a clipboard at the end of the bed and the patient (family/carers) were encouraged to read and interact with it. Nurses are good in filling out documentation as proof, for example to protect against litigations. However, if nurses adapt to this standard there must be education and awareness that the documentation is what the patient needs and not just a tick box exercise. As a principle, the standard should not just promote the capture of patient data but the reason why the data is being captured across the patient's care journey. Nurses would need to be educated and supported to understand the value of the patient that is being captured.	they're allowed to put the correct data in or just are aware of why and the importance of actually double-checking before they write that down or making sure it is correct before they document, rather than it being seen as a task that they have to have done before they go home, which is I think can be how it is seen at points when you're pulling lots of metrics from the electronic records."
Secondary use of data	Research makes a big difference to future outcomes for patients, so it is vital that nursing data is captured and can be shared in a way that supports and contributes to research. Secondary use of nursing data is used in the determination for funding of services, their commissioning and also determines workforce requirement. The standardised nursing documentation should allow for local control like addition of data elements for use in research, analytic etc.	

Nursing framework & models	There should be flexibility that allows the nurse to use a framework that would best work for certain patients based on their target health outcome. This standard should not lead to further creations of frameworks that could create duplication of things required from nurses, doctors, and other health professionals. The uniqueness of nursing is the ability to use different frameworks and models to treat patients but, if possible, we should have an overarching framework that will allow integration of all other nursing models.	
Patient outcome	The standardised nursing documentation should be patient centred, termed and worded in the patient context about what their goal is and how the healthcare practitioner would be supporting the patient. The standard should the ability to measure how the interventions are supporting the patient in meeting their goals. And the nurse's contribution should be measured over the period of nursing care. The standard should ensure there is an assessment of need, plan of care and there are evaluations taking place in relation to the interventions being provided. The measure of the effectiveness of the interventions should be based on the outcome of the patient's experience. Hospitals with superior quality outcome have a whole organisational framework for using data to inform the quality of care. Data are extracted from their systems and analysed which in turn is fed back to individual nurses to improve their delivery of care.	
Benchmarking	Benchmarking without understanding the implications of the raw data and the demography of the patient group could be misleading e.g., looking at two different hospital pressure ulcer data without taking	

	into consideration that one of the hospitals could have had patients who had pressure ulcers before coming into the hospital while the other hospital's patients could have developed theirs while in acute care. These are two different scenarios that should be captured differently and not compared. The standard should not encourage comparison of care settings as this should not be the aim of developing this standard. Instead, the care settings should be able to measure their own care-past and present to improve patient's outcome.	
Digital and technology	The standards should be developed to support consistency across care settings. There is a recognition that it is not possible to implement a single IT system; the use of standards means that staff will recognise and understand the information to be recorded irrespective of the system in use. Appointing Chief Nursing Information Officers across care settings who would aid with the implementation of nursing information technology and ensure system suppliers build applications that meet clinical needs of nurses. Only systems that are designed in collaboration with their users should be commissioned.	"Interoperability and compatibility of the systems will be really important if a standard was to be introduced, it would need to be absolutely compatible, interoperable with the other systems that are being used commonly right now with the GPs."
Risks	There is a significant risk that too prescribed documentation systems and templates replace the core role of nurses' clinical assessment and critical analysis of the patient/person leading to patient safety risks and issues. There is the risk of a lack of national agreement on the principles for the development of a national standard that would meet the requirements of the five nations and diverse nursing disciplines. There is the risk that the standard may not adequately consider all nursing disciplines and area of practice and may lead to the standard being unusable without expensive system supplier add-ons and extra unfunded work.	"I have gone into houses and seen patients' dead and all the paperwork has been followed. The nurses' critical role is to conduct an observation and assessment of the patient and make an evaluation using their skills and judgement which is more than following documentation."

	There is a risk that the standard is not seen as a national priority or railroaded by other national priorities and there is lack of commitment to develop and implement standard. There is the risk that the requirement for national reporting is prioritised over nursing practice thereby making the dataset to be used mainly for monitoring and evaluating national needs e.g., infection control, pressure ulcer targets, cost control. There is the risk that there could be a lack of adequate training for nurses to fully exploit the potential of the standard in improving patient experience and outcome. There is the risk that the use of bilateral use of digital and non-digital records in a care setting may increase documentation burden if systems do not support a completely digital implementation of the standard.	

4.2.2 Patient group interview

Theme	Key Findings	Quotes
Positivity and Support for development of a nursing standard	There was a general consensus by the participants in support of a national standard and the positive impact it will have on patient care.	"The holistic data capture that is central to personalising care for patients is mostly done by nurses. I would go so far as to say that personalised care would be impossible to deliver without the creation of a standard"
Participation in standard development	To support patient outcomes, patients, carers, and citizens should be consulted and involved in the development process of the standard.	"I think the only way we can support the patient outcomes within the documentation is to ensure that patients and citizens are involved throughout the whole process developing the standard. The patient involvement should be right from the very beginning."

Patient care journey	The standardised nursing documentation should define what information needs to be collected at each point of the patient care journey and eradicate the need for patients to repeat themselves.	
Ownership & control of data	Patients would like the ability to choose the information that is shared with other health practitioners to ensure the information that is important to them is not restricted by the standardised nursing documentation. Patients should have access in an easily readable format and be encouraged to challenge errors in their health record. Patients should have the ability to challenge errors in their data (and misunderstandings of the language and terminology that's been used). The standard should give patients the ability feed into their record information they that have collected themselves through, for example, wearables and apps.	"Why can't the nurse sit with me as I'm being discharged and let me choose some of the information that gets shared with the other care settings?" "I wasn't hugely confident that the GP had listened properly. so, when they gave me an envelope that was sealed, I opened it and realised they had actually made a really, really serious mistake. I went back and mentioned it and the receptionist's response was "how dare you open this up, this has nothing to do with you"".
Secondary uses	Nursing documentation can make a real difference in the lives of patients outside a clinical setting. These types of care records do support benefits claims and ensure patients are able to access other relevant services.	
Patient Outcomes	The standardised nursing documentation should be patient centred, termed and worded in the patient context about what their goal is and how the healthcare practitioner would be supporting the patient. Knowing exactly what the patient wants to achieve should be the starting point of all nursing documentation. The patient's 'about me' information should capture the expectations of the care being delivered. Nursing data can be more nuanced and granular and as such may be of more value to patients because it better captures the outcomes that they want to see.	"I think the first thing within the documentation should be what is it that the patient actually wants to achieve?" "I think it's relatively well recognised by the public that the one thing the NHS does really badly is National data collection. It is why when outcomes are bad, the recognition and response needed to turn that around can't happen".

Patient Safety	This work should ensure that health inequalities are captured adequately, particularly where it may lead to harm.	"Improved patient safety, improved patient outcomes, and better care, all depend on improving data capture and being able to share that information better and more quickly!"
Nursing Documentation	Nursing documentation content should be "jargon free" to enable patients and their carers not to be confused and avoid misunderstandings. There should be easy access of patient information that is required by relevant professional/caregiver. The standardised nursing documentation should enable role based access control restricting patient data when necessary.	

5 Discussion of key findings and proposals for a Nursing Standard

The literature review and interview analysis found that there is broad support for and a strong proven case for the benefits that would accrue from developing a standard. The impact on quality of records, sharing information for care and, later interoperability, generally would be greatly advanced by accelerating the contribution of nurses using a national standard. While the focus is on nurses it is recognised that they constantly interact with health and social care colleagues and agencies, so the benefit is universal.

The evidence points to the fact that patients consider nursing information to be the most important for describing and communicating their health and care needs and how they want to be cared for. And patients are increasingly able to access, review and update their records therefore it is a professional responsibility that documentation is high quality, accessible and usable (Nuffield 2018). This research found that patients/ carers want and expect to be equal partners in their care, be better able to negotiate their goals and treatment options, compete their nursing records with the nurse as equal partner and be able to challenge entries and get them updated as required. Of course, some patients/ citizens what more involvement in their care than others but that is what personalised care is about. This is what substantive partnership in care requires and the only way to archive optimal self-care. Therefore citizens, patients and carers will have to be adequately represented at all levels and in all areas of the development of the standard. It can be an opportunity to showcase effective professional/ citizen partnership which the PRSB has as its core principle and is already a leader in citizen co-creation of standards and guidance.

The holistic goal is for care to centre around achieving the person's quality of life aspirations and potential as well as enhancing patient safety (NHS Long term Plan, 2016 and 2019; Handy, 2019). In order, to achieve a seamless service with effective patient pathways the effort needed here is about getting existing health and care record standards understood and used by nurses as well as developing new standards and content. The whole nursing process should be reviewed to agree the standard framework for development. It is

envisaged that new content is required to be developed around assessments, plans of care, handover communications and how secondary use purposes of nursing information can be effectively accommodated in the design.

However, the standard needs to go further than standardising documentation in systems with templates and embedded classifications and coding systems. To work in an integrated system, it will have to support sending and receiving valid and reliable information interoperability and be able to fully integrate in shared care records where the provenance and contextualisation of patient/ citizen information is paramount for clinical safety. This involves developing the standard to meet current and future information sharing requirements. Good examples of what the requirements are can be found on the PRSB website including Core Information Standard (CIS), Personal Care and Support plan (PCSP) and the Social Care suite of standards.

It is difficult to make an informed view about the ideal level of structuring in records. A point to facilitate decisions, made by Nykänena, Kaipio and Kuusistoc (2012), is the idea should be to document with a nursing classification not into a nursing classification. Key considerations are that valid and reliable use of the ST is influenced by the knowledge and skills of end-users and decision rules for selecting the most appropriate term will help improve consistency of use. There are benefits to using more medically focused STs and STs that are more specific to nursing and midwifery practice which need to be considered.

Therefore, usability of information is key and usability considerations should be approached from both the perspective of the users and receivers of the information as well as documenters and senders. Interoperability is defined as consistent access to needed outside patient information in an easily located and viewable place within the care record/ EPR. Digital has made vast amounts of patient information instantly available but the experience for clinicians is that it is not accessible and usable unless filtered and relevant to their requirements (Kings Fund, 2018: KLAS 2017 & 2018). The same applies to patients/ citizens accessing and contributing to their own information. A further consideration is that social care information is typically narrative and unstructured which needs to be considered when sharing person information between health and care settings for care purposes.

The Watcher Review (2016) and multiple reports since have found that digital products and implementations will only work if you focus on the people that the innovation is meant to support. An in-depth analysis of digital transformation in NHS Trusts, by the Kings Fund (2018), recommends remembering that staff only engage when they see the change as clinical and not an IT project and early and sustained engagement is crucial. It has to be locally led with a clear but adaptive plan and with support from the Centre in terms of clear strategy, policy and incentives.

5.1 Benefit analysis

The evidence identifies various positive impacts of standardised nursing documentation. Outcomes can be classified as improvements in care/ patient safety, documentation practice and documentation of content (McCarthy et al, 2019). However, due to the studies methodologies it is difficult to disentangle the benefit of using standardised documentation systems from the overall effects of introducing and using an electronic health record (EHR) system and the educational, monitoring and change management processes that are implemented as part and parcel of the process. Alternatively, it would be better to view the development, use and benefits of nursing standardised documentation as a whole system

change package rather than trying to isolate specific benefits from the ‘standardised documentation’ itself. With this caveat in mind specific benefits reported include:

- Potential to streamline processes to enhance accuracy (reduce rates of documentation errors), efficiency of care processes and reduce human error risk.
- Potential to reduce documentation burden or repurpose time for data, information interpretation and analysis to inform care.
- Standardised documentation across the system will mean staff are more familiar and know the assessments and plans of care that are being used. This will improve staff knowledge and competence. This will also reduce training and learning needs. If nurses move around, they know they would be using the same documentation e.g., pain scale.
- Having standardised assessments, assessment score and plans of care aids acquisition and retention of knowledge as nurses are not constantly learning new and different methods of assessing and evaluating the same thing (e.g., pressure ulcer risk, pain scores).
- Standardised documentation will enable the comparison of processes and outcome of care both within and across organisations.
- Reported improvements in patient outcomes such as reduction in falls and infection rates from better quality of data and better use of data.
- Enables comparison of like with like.
- Reduces the need for transcription, data cleansing, re-keying information and duplication of effort.
- Standardised and good quality documentation will enable better use of patient information at the point of care. For example, patient level of risks could be predicted and would save time on assessment.
- Enables patient and carers to become more familiar and have a better understanding of nursing documentation if they are the same or similar across different care settings.
- Improved safety from accrued learning by patient/carer and nurses
- Standard documentation is essential to enable sharing information and data in electronic systems.
- A national standard will reduce the burden of creating local standards and documentation.
- It gives authority to digital nursing leads to ensure that nursing documentation standards are embedded in EHR systems.
- Exposes the importance of nurses' documentation in the care process.
- Standardised nursing documentation is a vital piece of the wider system standards and interoperability landscape.
- Fundamental to measuring nurses’ work and impact on patient care. Needs developing and ownership by nurses to ensure meaningful data is captured and measured.
- Reduces the likelihood of including irrelevant information.
- Well designed, evidence-based templates for clinical pathways can reduce time spent on documentation.
- Having quality relevant data in real-time and at the point of care aids decision making.
- Aids consistency in exchange of information between professionals for continuity of care.
- Empower nurses to do things differently because they have quality data to utilise for direct care, patient management, audit and research.
- Provides infrastructure and tool to improve all nurses digital and data literacy to at least the minimum standard needed for intelligent use of patient information for proactive and responsive care.

Benefits of Structuring Data

- Structuring data leads to more comprehensive and multidisciplinary communication regarding patients' needs and more specific decisions about interventions.
- Significantly better described interventions and defined nursing care outcomes, comprehensive nursing process documentation, fulfilment of legal demands and usage of technology.
- Support processes such as audit support, practice, continuity of care, care collaboration and information reuse.
- Effects on outcomes include improved patient safety, increased outcome assessment and secondary impacts, for example research initiatives, management support and education programmes.
- It is a basic requirement if the full potential of artificial intelligence tools, machine reading, predictive modelling and all the other components of AI are to be realised for nursing and health and care in general.

Benefits with Risk of Disbenefits

- Can support critical thinking and clinical reasoning but be mindful it does not replace it.
- Need level of flexibility to document clinical judgements and variations across patients. All patients are different, and nurses observe, in the first instance, investigate and apply their clinical judgement. Documentation and guidelines are tools to support care delivery, does not replace or mitigate professional responsibility.

5.2 Design Principles

The literature and consultation findings were broadly in agreement about the potential benefits, challenges and risks inherent in developing and implementing a national standard. Likewise, the complexity of getting it right and consequences of not were unravelled. To drive success the essential elements and considerations outlined in this discovery phase must be further scoped, defined and planned for, taking into account the accrued learning and lessons learnt of others including current good practice initiatives.

Findings have been narrowed down to focus on the salient features and design principles that should drive and underpin the next phases of this work, these include:

- Designed to fulfil the information utilisation and sharing requirements as well as documentation needs to satisfy nurses, shared care and information exchange.
- Consider the collaborative aspects of nursing work and be based on the analysis of the daily work of nurses and other health professionals.
- Consider the patient/ person care pathways and what information flows are needed to support care delivery at each phase.
- Consider the information sharing requirements between health and social care to support integrated care and seamless services for the person. Social and health care information is inherently different and both sector's requirements will need to be addressed.
- Be informed by and ensure the standard is part of the wider system standards agenda and interoperability landscape.
- Some evidence suggests that inclusion of person-centred language and processes (within the electronic record) enables a more holistic record to support care delivery.
- Review systems and processes that already embody these principles for guidance e.g., innovative social and community care focused vendor systems.
- Use a nursing model that is person centred and supports individualised care planning.

- Should reflect nursing practices as closely as possible.
- Implementation procedures should be simple and straightforward, leaving no room for misinterpretation.
- Finely balanced between being generic and specific.
- Both generic and tailored templates are required.
- Supports the art and science of nursing ie avoids stifling or impeding nurses' critical role in observation, assessment and evaluation of the person.
- Modifying the standard and nursing classifications so they are practical, easy to use, logical and compatible with the nursing practices.
- Nursing classification and documentation practice should be closely linked.
- Consider using national coding systems to promote consistency.
- Involving each discipline and specialist is essential for a record that nurses feel confident with and to enhance their practice (Hardiman et al 2020).
- A rigorous process is required to ensure only elements that add value to the record are included (Hardiman et al 2020).
- Map to PRSB existing standards to identify reusable elements, those that need modification and gaps.
- Mitigate for variations in adoption and use.
- Identify and describe justifiable local variation and customisation.
- Evaluate the level of standardisation and coding required in terms of risks to usability.
- Assess the benefits to using more medically focused STs rather than STs that are more specific to nursing and midwifery practice.
- Ensuring the knowledge and skills of end-users and decision rules for selecting the most appropriate term will help improve consistency of use.

5.3 Standard scoping and development artifacts

The draft proposed consultation approach is outlined in Appendix B and proposed guiding themes to underpin the framework are suggested below.

Figure1, below, illustrates the draft proposal for a framework for the national standard.

There are various nursing models, that can be used to underpin the nursing process model and which model(s) to utilise to underpin the standard will be decided in the scoping phase. The ultimate gaol is production of quality nursing documentation for all purposes therefore the criteria should be the based on that principle. Jefferies, Johnson and Griffiths (2010) defined the following themes as essential for quality documentation which are presented here to guide scoping the requirements for the standard.

Nursing quality documentation:

- should be patient centred.
- must contain the actual work of nurses including education and psychosocial support.
- is written to reflect the objective clinical judgement of the nurse.
- must be presented in a logical and sequential manner.
- should be written contemporaneously, or as events occur.
- should record variances in care within and beyond the health-care record.
- should fulfil legal requirements.

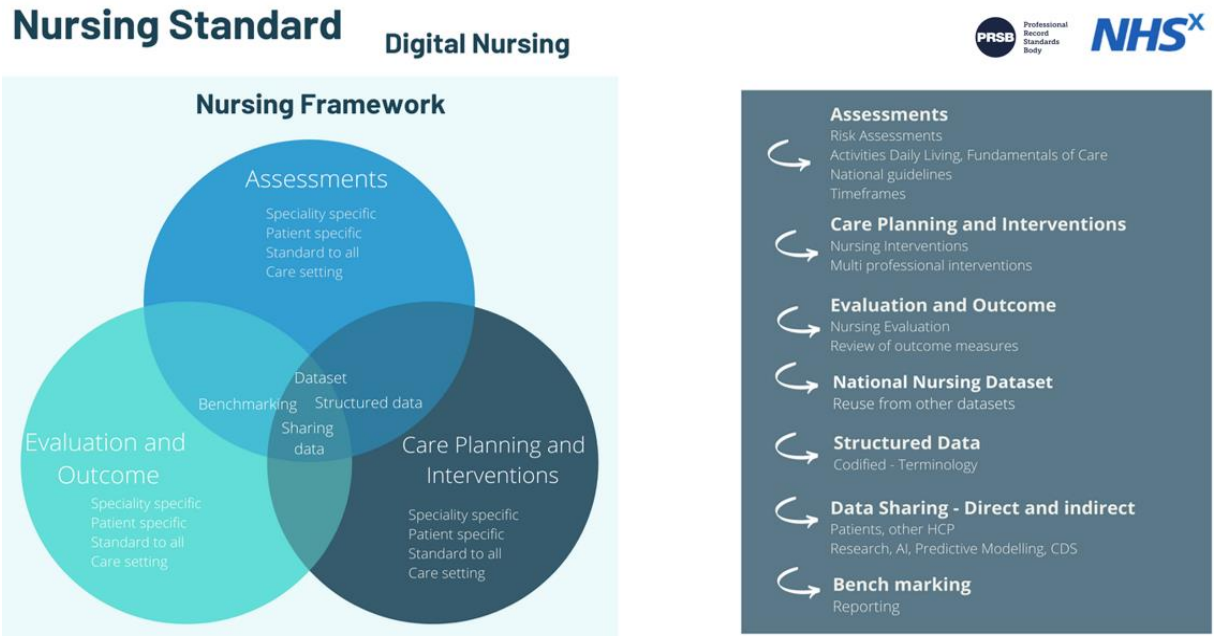

Figure 1: Nursing Standard Framework

6 Conclusion, recommendations/ key considerations and next steps

The registered nursing workforce and nursing/ care assistants are the main group responsible for patient care. To illustrate registered nurses, make up over a quarter of the total acute and community NHS workforce in England and 48% of the total clinical professionals. And there are many more employed outside the NHS sector. In addition, there are about half that number again of nursing assistants who assist nurses and other professionals in care delivery. This alone demonstrates how important nursing documentation and communications are within the person's circle of care and how imperative it is to get it right. In addition to realise integrated care for the person across health and social care the documentation and information practices and needs of both social care and healthcare will have to be considered in parallel. Therefore, a collaboratively developed national standard with justifiable local variations should improve interoperability, collaborative working and shared decision making. The benefits derived for patients, nurses, the system can be significant in the long term but likewise getting is wrong could be a costly setback.

The patient/ citizen input at all levels, stages and workstreams in the national programme to develop and deliver the standard is paramount to ensure citizens are equal partners in the care they receive, to promote self-care and to be able to action and evaluate outcomes that patients/ citizen want and value (as opposed to those health and care professionals and national public organisations think they what).

It can be complex to execute, in England, due to the sheer size of the health and care sector, variability in digital maturity and differences in care settings, disciplines, roles and local cultures. However, there is broad support for this initiative. The PRSB and other entities have proven ability to deliver a high-quality standard that meets the needs of all stakeholders.

Usability is key including perceptions of usability by end users, which includes those receiving, viewing and acting on the information as well as those charged with documenting and communicating it in the first place. Reconciling the requirements for direct care delivery

and the obvious needs for secondary uses and AI must be adequately considered and consensus reached both to minimise burden and improve the quality of data.

It will be important to consider, early on, evaluating the impact of implementation and use of the standard and really understand how to do it otherwise there will be a struggle with measuring and showing success and benefits (Kings Fund, 2018).

6.1 Recommendations/ key considerations

It is recommended that the following considerations are considered for the best chance of success.

- Conduct thorough testing of the usefulness for nurses of PRSB existing standards and for developing new content.
- Test how effective all the above are in different care settings.
- Use the design principles, in section 5.2, to guide the development.
- Develop comprehensive advice and guidance and collateral in conjunction with RCN and HEE.
- Emphasis on adoption through educating, training, raising awareness as well as on the development of the Standard.

6.2 Future plan and next steps

Next steps, to achieve this, should be a scoping study to deliver a requirements specifications document, explicit governance arrangements, stakeholder engagement and consultation strategy and finding out what will be new and what can be reused.

The suggested next steps for the whole NHSx programme are outlined below. PRSB will be involved in specific aspects of the programme where they are best placed to do so. For example, in the scoping phase: defining the scope of the standard; mapping and cross referencing existing nursing data sets to PRSB standards; mapping to SNOMED CT; assistance with UK wide multi-professional and patient group consultations.

Programme Governance

Define and set up the governance required for the scoping phase at both a national and regional level, this will include terms of reference (ToR) for the various committees and steering groups. The governance group will also explore and recommend implementation and business as usual governance structures to ensure quick and effective decision making. The governance group will also look to understand the need for local variation in nursing assessments and make recommendations on what this could look like and be managed.

Engagement and Communications

Generate an engagement and communication plan for the programme to ensure national, regional and local engagement in defining and agreeing the standard. This will support implementation later. The plan will cover all stakeholders. Review digital maturity surveys and IG toolkits to understand digital maturity of nursing across England. https://www.england.nhs.uk/digitaltechnology/connecteddigitalsystems/maturity-index/

Content Scope

The scoping phase will need to review the breadth and depth of nursing documentation to be included and agree where local variation may need to exist.

- Define and agree the nursing care settings and practice areas to be included.
- Define and agree the Core Risk Assessment set and Care Plans.
- Define and agree core nursing dataset.
- Agree SNOMED binding of assessment findings.

Interoperability

Map nursing data set to existing PRSB standards and datasets and align with FHIR standards for interoperability of systems.

Secondary uses of data

Understand scope and need for secondary use of data and to understand governance required to utilise data for research.

Implementation Support

Recommend implementation strategy and methodology.

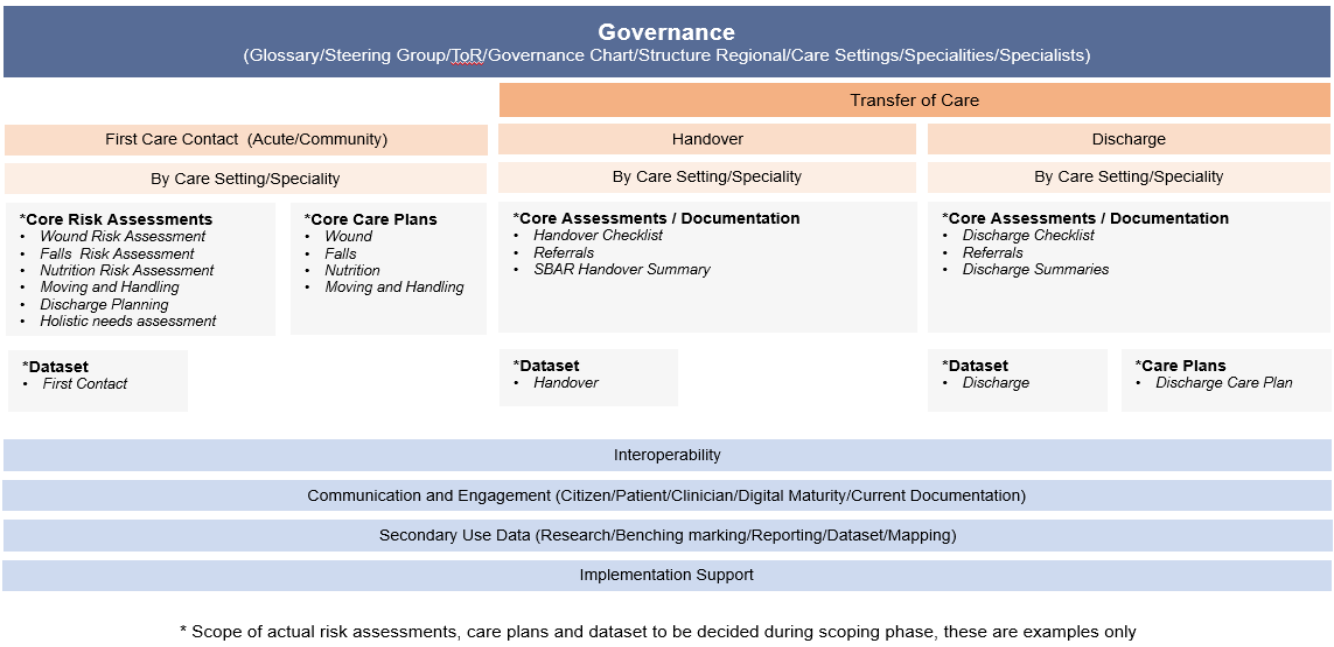

Figure 2: Proposed scoping phase diagram

7 Appendices

7.1 Appendix A – Group Interview Participants

Interviewee	Role
Sue Tranka	Deputy CNO, NHSE/I
Angela Reed	Senior Professional Officer, Northern Ireland Practice and Education Council; Five Nations Chair
Donna Kinnair	Chief Executive, Royal College of Nursing
Wendy Fowler	Nursing Education Adviser, Nursing & Midwifery Council (NMC)
Loretto Grogan	National Clinical Information Officer, Nursing & Midwifery, Health Service Executive, Southern Ireland
Helen Crowther	Clinical Nurse Advisor, NHSX; General Practice Nurse
Jean Davies	Chair of RCN Children's and Young Persons Professional Issues Forum
Debbie Brown	Queen Nursing Institute, District Nurse
Jonathan Beebee	RCN Advisor for learning nursing disabilities
Paul Johnson-Whittle	Mental Health Nurse & Academic
Bryan Baroy	Nurse, Imperial College Healthcare NHS Trust
Gillian Brown	Nurse, Cambridge University Hospital NHS Trust
Joel Stanton	Nurse, University College Teaching Hospitals NHS Foundation Trust
Louise Axford	Nurse, Oxleas NHS Foundation Trust
Prof Dawn Dowling	Professor, Clinical Decision-making, University of Manchester
Tim James	Clinical Lead, Cerner & ICU Pediatric Nurse
Mark Fleming	Scottish Government Digital Health and Care NMAHP Clinical Lead/ Nurse Consultant Mental Health/ Digital Services NHS Ayrshire and Arran
Emma Robertson	PRSB Patient Advisor
Sam Goncalves	PRSB Patient Advisor
Helen Hughes	CEO, Patient Safety Learning
Claire Buchner	Assistant Director Digital Health & Nursing Public Health Agency, Northern Ireland
Dr Crystal Oldman	Chief Executive, Queen Nursing Institute
Francis Beadle	National Digital Nurse Lead, Wales

7.2 Appendix B – Consultation Approach

Introduction

PRSB is working with NHSX on a project to develop standards for sharing information about nursing care, in England, that will support digital ways of working. This work is nurse-led but centred on a person's needs and goals. Its impact is intended to be cross-cutting and draws on multi-disciplinary insights and perspectives. It will reflect the standards requirements of nursing in England but take account of and collaborate with the five nations for best practice and alignment where possible.

Consultation aims and objectives

The draft objectives of the consultation will be aligned to the overall project objectives and will aim to:

- Raise awareness and build support for the standard to improve information sharing and ensures that people accessing nursing care receive high quality health and care services.
- Ensure that the new national standard PRSB co-produces with stakeholders aligns to existing standards.
- Consult widely and obtain buy-in and support for the new standard from professional bodies, vendors and their representative groups and organisations representing people who use services at a five-nation level.
- Capture any issues that could affect how care is provided from the viewpoint of professionals, people using services and vendors and ensure these are highlighted appropriately.
- Work with stakeholders, partners and participants in this project to communicate and promote the adoption of the new five-nation standard.
- Report back on findings from specialist disciplines on what additional information is needed to ensure all appropriate care information is captured, documented and shared as appropriate.
- Test the draft information model and assess how well it supports nursing care. (Pilot testing to be agreed?)

Evidence base for consultation approach

The evidence base will reflect the themes identified in the reports on the Discovery and Scoping phases of the project and inform the specific participant groups, topics and questions for consultation and methods for consulting on the standard.

Stakeholder participation:

Given that nursing is the single largest professional group in health and care it is important that we identify all the key stakeholder groups within the profession itself, reflecting the varied nature and settings that the workforce is engaged in. We also need to include those who work closely with or are impacted by nursing professionals. This section identifies at a high level the groups of stakeholders to co-produce the standard but should be reviewed by the project board, steering group and others as appropriate to ensure our group is inclusive:

- Acute care
- Community care
- Mental health care
- Private practice
- Specialist disciplines such as intensive care, cardiac care, dementia, diabetes, paediatrics etc.
- Allied health professionals – health care assistants, OTs etc
- Nursing professionals working in social care.
- Nursing professionals working in educational settings.
- Nursing professionals working in occupational health settings.
- Nursing professionals working in end-of-life care settings.
- Nurses working in research areas.
- Five nation nursing representation
- Clinicians working in other, related disciplines.
- People using services – spanning the breadth of nursing disciplines.
- Carers
- Vendors
- Other stakeholders

Topics for exploration

The discovery report and scoping work will inform the topics for exploration with nurses, and we will co-produce (a) set(s) of questions to share during consultation with project advisors, steering group members, those we have consulted in the early phases of the work and our wider members.

Consultation methods

Again because of the size and breadth of services the nursing profession covers we believe a range of approaches to consultation would be appropriate. The content used will be tailored to meet the requirements of the audiences so that we can maximise input from the widest range of participants and ensure each group are able to have their particular views and concerns heard and addresses.

The interviews conducted with citizens, frontline clinicians, nursing leaders and technical experts during the discovery phase of this project will inform the consultation approach and methods we use.

The following methods have proved most useful in PRSB standards development projects.

Online workshop

- Purpose - bring together five nation nursing professionals including a range of health and care professionals from acute, community, social care providers, mental health, paediatrics, end of life care, and other specialist disciplines (as agreed during the scoping phase) to discuss and build consensus around a proposed generic standard for nursing.
- Focus of the workshop - the content of the standard and gaps that should be addressed.
- Participants – nursing professions, people who use services, carers, other professions who work closely with nursing information e.g., OTs, healthcare assistants.

- Online platform – share draft standard on PRSB online platform/Discourse platform (CNIOs etc) to seek additional input/comment. Identify individuals/groups from members, stakeholders to encourage them to contribute additional comment via the online platform.

Focus groups – specialists within the nursing discipline

These are an effective way to ensure we hear from all perspectives with representative groups of stakeholders identified in the participant list above with particular focus on health and care staff and people who use services and carers. This approach could be tailored to reflect key settings, disciplines, national nursing perspectives which we can determine as part of the scoping stage. Smaller focus groups would ensure that in-depth discussions are held in which a broad range of views are heard on issues specific to professionals, people who use services and carers with lived experience or expertise.

- Why – purpose of specialist focus groups and who would participate – nurses/people who use services/other professionals, five nations etc.
- Discuss the range of information that should be captured and shared about an individual to personalise and improve the quality of nursing care they receive in light of the standard.
- It will include discussion about generic information for a standard for admission to an acute service/assessment for community-based care.
- The focus groups will be strongly represented by professionals with specialist expertise and knowledge plus people with lived experience who use services and carers and where possible the discussion will be co-led by a person who uses services or a carer.
- Materials in accessible language and formats will be available to participants in advance.

Survey

Testing the draft generic standard through survey across the five nations should be considered as part of the consultation methods mix. The survey content and questions should include a mix of quantitative and qualitative information and should be accessible via any digital device as the nursing and other professionals taking part as well as people using services and carers may only have access to the survey via a mobile phone or iPad.

The survey questions should be co-produced and tested with the steering group and/or an identified group of professionals and people who can help ensure that it is plain English, accessible and addresses the right content. We will need to consider translations and easy to read versions plus formats that are accessible to people who use screen readers or other visual aids.

Consultation document

- Develop consultation document which sets out what is being consulted on, why, methods of response, and the timescales. The document will also give links and/or references to more information, such as the personalised care and support, the ‘About Me’ standard.
- Website/online platform – share consultation document including draft standard on PRSB website/online platform, make links available to members and partners to share widely.

- Identify individuals/stakeholder groups from members, partners and others to encourage them to contribute additional comment via the consultation document available via the website or via the online platform.
- Share draft standard on Discourse platform to seek additional input/comment.

Supplementary engagement via social media - (tweet chat)

- To explore topics for people who use services as outlined above (see questions above)
- Invite groups to contribute views via social media platform.

7.3 Appendix C - Project Team

Role	Name
PRSB Project Lead & Analyst	Kingsley Ejeh
PRSB Clinical Lead & Analyst/ Researcher	Dr Annette Gilmore
Nurse Clinical Lead, NHSX	Paula Anderson
PRSB Citizen/Patient Lead	Emma Robertson
PRSB Stakeholder Manager	Alannah McGovern
PRSB Director of Strategy, Communications & Engagement	Helene Feger

7.4 Appendix D – Project Board

Role	Who
Chair & CEO, PRSB	Lorraine Foley
Senior Responsible Officer & CNIO, NHSX	Dr Natasha Philips
Programme Manager, NHSX	Walter Johnson
PRSB Chair & GP/ Clinical Safety Lead	Prof Maureen Baker
Chief Nurse Information Officer, UCLH	Paula Anderson
Community Associate CNIO, NHSX	Ronke Adejolu
Patient Advisor	Emma Robertson

7.5 Appendix E – Authors

Role	Name
PRSB Clinical Lead & Analyst/ Researcher	Dr Annette Gilmore
Clinical Lead (CNIO, UCLH and NHSX)	Paula Anderson
PRSB Project Lead & Analyst	Kingsley Ejeh
PRSB Director of Strategy, Communications & Engagement	Helene Feger

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