# The National Transformation of Nursing Documentation in Wales

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**Abstract.** In response to findings indicating poor standardisation and quality in nursing documentation, NHS Wales embarked on a transformative journey with the National Electronic Nursing Documentation Programme in 2014. Evolving into the Welsh Nursing Care Record (WNCR) by 2019, this initiative sought to streamline practices and enhance accuracy, compliance, and efficiency through a standardised digital platform. The case study explores the comprehensive project design, emphasising evidence-based practices, governance processes and the introduction of National Nursing Informatics roles. Accomplished from April 2021 to September 2023, the WNCR implementation achieved a 79% roll out across eligible wards, marked by strategic investments, robust training, and phased deployment. Evaluations to date show positive impacts on key performance indicators, exemplified by a 9-minute time saving per patient. Lessons learned noted the significance of user engagement, cultural transformation, and ongoing staff development, paving the way for future strategies including nationwide implementation, benefits realisation, and data visualisation initiatives.

**Keywords.** National, Nursing language, nursing informatics, standardisation

## 1. Introduction

In 2014, Healthcare Inspectorate Wales (HIW) found that nursing documentation lacked standardisation and was of poor quality [1,2]. The national electronic nursing documentation programme was established and aimed to standardise nursing documents to improve the accuracy of records and release time to care. In 2019, the e documentation programme was rebranded as the Welsh Nursing Care Record (WNCR).

Through the standardisation of nursing documents, the development of an integrated digital platform has been achieved to comply with the nursing code of practice to keep clear, accurate, concise, contemporaneous records about patients [3] to improve patient safety and reduce harm.

Key to the success of the programme was the introduction of health board/trust Nursing Informatics roles that supported both local and national engagement and enabled the rapid development of national standardised evidence-based core risk assessments with a standardised national nursing language. The introduction of the new roles supported the evidence identified in the Topol Report

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[4], to incorporate clinical roles in the development of technology and subsequent implementation.

In tandem with the new roles a governance process was established with key stakeholders from nursing, health, social care and patients to address information standards, patient safety and design to ensure alignment and approvals to support both the standardisation and digital technology design.

## 2.    Case Study Description and Relevance

Recognising the challenges posed by manual record keeping, NHS Wales, in alignment with Welsh government recommendations, initiated a comprehensive overhaul of the nursing documentation process. The aim was to streamline and modernise the approach to documentation and utilise data for secondary use to improve outcomes and increase the research evidence base.

Following a successful pilot phase in two Health Boards, the Welsh Nursing Care Record (WNCR) implementation was extended across all eight Health Board/Trusts in Wales. This implementation marked a significant shift from traditional documentation methods to a standardised digital platform.

The implementation of the WNCR is highly relevant in the context of advancing healthcare practices in Wales. It addresses the need for efficiency, accuracy, and consistency in nursing documentation, aligning with contemporary healthcare standards. By transitioning to a digital platform, the WNCR contributes to the broader goal of enhancing patient care, ensuring compliance with regulatory standards, and facilitating a standardised approach to nursing documentation across the entire healthcare system. The case study holds relevance not only in the context of modernising documentation practices but also in contributing to the broader digital transformation agenda within NHS Wales.

## 3.    Project Design

Up to date evidence-based practice in support of better patient outcomes was applied to develop national standard assessments that also support an increase in satisfaction for nurses and patients by reducing repetitive questioning.  Review of up-to-date evidence was supported by specialist multidisciplinary groups who were tasked with identifying and making recommendations regarding the best evidence to the NHS Wales Nurse Directors for approval. This resulted in standardised assessments and a single nursing language nationally.

To support the national adoption of the assessments and language a Welsh Government Health Circular was issued. Standardised forms are now being utilised in both the digital and paper format to support transitions of care and maintain the standard nursing language nationally whilst continuing rollout of the national digital platform.

This 31-month collaborative programme involved executive and nursing end users supported by multidisciplinary teams throughout Wales to achieve:

- •        Introduction of robust governance processes

- Introduction of National Nursing Informatics roles
- National standardised nursing language
- National standardised evidence-based risk assessments
- A fit for purpose digital solution that supports safe and effective patient care.
- Introduction of a national digital platform
- An increase in the adoption of technology by nursing based on user centred design.

The development of a national strategic approach towards digital technology and nursing information standards has informed the introduction of a standard nursing language in tandem with a digital platform. This has been achieved with extensive collaboration and a robust governance framework. The key success factor was the introduction of new lead nurse informaticist posts to support nursing decisions and adoption from all levels of nursing.

During the project design phase, the objectives, scope, and national-level implementation strategy were clearly outlined. Cross-functional teams, consisting of the project team, nurses, IT specialists and multidisciplinary team members who collaborated to design the digital nursing system collectively. The design process incorporated considerations for user friendly interfaces, and compliance with regulatory requirements. Clear objectives were established by the health boards, including the reduction of documentation errors, improved accessibility to patient information and improved communication with health care providers. This approach aligns with Forbes (2022) Data Analytics Marathon that describes the process of digital transformation as data collection, data preparation, data visualisation, data analysis, insight communication and take action. The study suggests that you must start at the beginning to achieve your end goal of a successful implementation.

## 4.    Execution

The implementation phase of WNCR spanned from April 2021 to September 2023, during which it was deployed across all Health Boards in Wales, encompassing 284 wards across 47 hospital sites. This represents the successful implementation of WNCR in 79% of eligible wards in Wales.
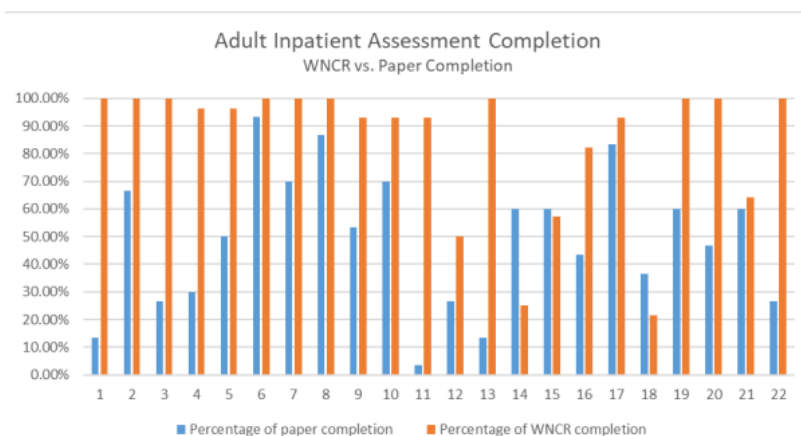
To accomplish this widespread deployment, each Health Board committed to investments in technology infrastructure, ensuring the smooth integration of the system into daily workflows. Staff training sessions were a critical component of the execution strategy, equipping healthcare professionals with the necessary skills to navigate the new system effectively. Feedback mechanisms were promptly established to address any concerns or challenges that arose during the training process.

A phased implementation approach, ward by ward, was adopted by the Health Boards. This deliberate strategy aimed to ensure that resources were optimally utilised throughout the implementation process. The phased approach allowed for a systematic and controlled rollout, mitigating potential challenges, and optimising the overall success of the WNCR deployment across the diverse healthcare landscape in Wales.

## 5.    Analysis

There have been various research evaluations to gauge the impact of the introduction of WNCR in Wales on key performance indicators, including improvement in communication, user experience, time to complete documents and quality of the nursing documentation.

A project evaluation conducted by Swansea Bay University Health Board (2021) [6] three months post implementation of WNCR demonstrated a 9-minute time saving per patient when completing the adult initial assessment document digitally as opposed to paper. The evaluation further highlighted an improvement in the quality of nursing documentation, as illustrated below:



(Swansea Bay University Health Board 2021)

- Key findings from a postgraduate research evaluation of WNCR post implementation, carried out at Bangor University [5].  Nurses found the system intuitive and easy to use and reported the quality and standards of documentation improved.
- Whilst there was a belief that less digitally enabled staff may find the implementation more difficult, once staff became familiar with WNCR as a new system, they appeared eager for more digitalisation.
- The importance of keeping staff informed and involved prior to and during implementation was generally agreed as pivotal.

## 6.    Impact and lessons learned.

Following an evaluation of the lessons learned, ensuring the active participation of system users at every stage was a significant factor in achieving success.  Sharing insights gained from one organisation with others allowed the opportunity to address and anticipate issues as the implementation moved forward.

It was crucial to gather feedback and experiences from key stakeholders, including nursing, IT and the project team to shape future implementations of digital systems.

However, the key lesson learned is the cultural transformation among clinical staff. They have embraced the new approach and express a growing demand for increased digital interoperability. The potential advantages of digital solutions have been effectively showcased and are now available to the NHS workforce. Their positive reception is due to its core focus on patient experience, quality, and safety. The programme is dedicated to continually improving the expertise of clinical staff, enabling them to actively shape and collaborate on future developments in digital informatics.

**Next steps**

- The future strategy for WNCR involves achieving full implementation throughout Wales.
- To focus is on understanding the benefits realisation of data captured and what benefits to patient safety and experience.
- Data visualisation – the development of both national and local dashboards to inform standards.
- The implementation of a national Paediatric WNCR system utilising the same governance and information model.
- Collaboration with technical colleagues to provide unique identifiers for student nurses to streamline access to the system.

## 7.    References

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