

Enhancing User Acceptance Testing in The Welsh Nursing Care Record

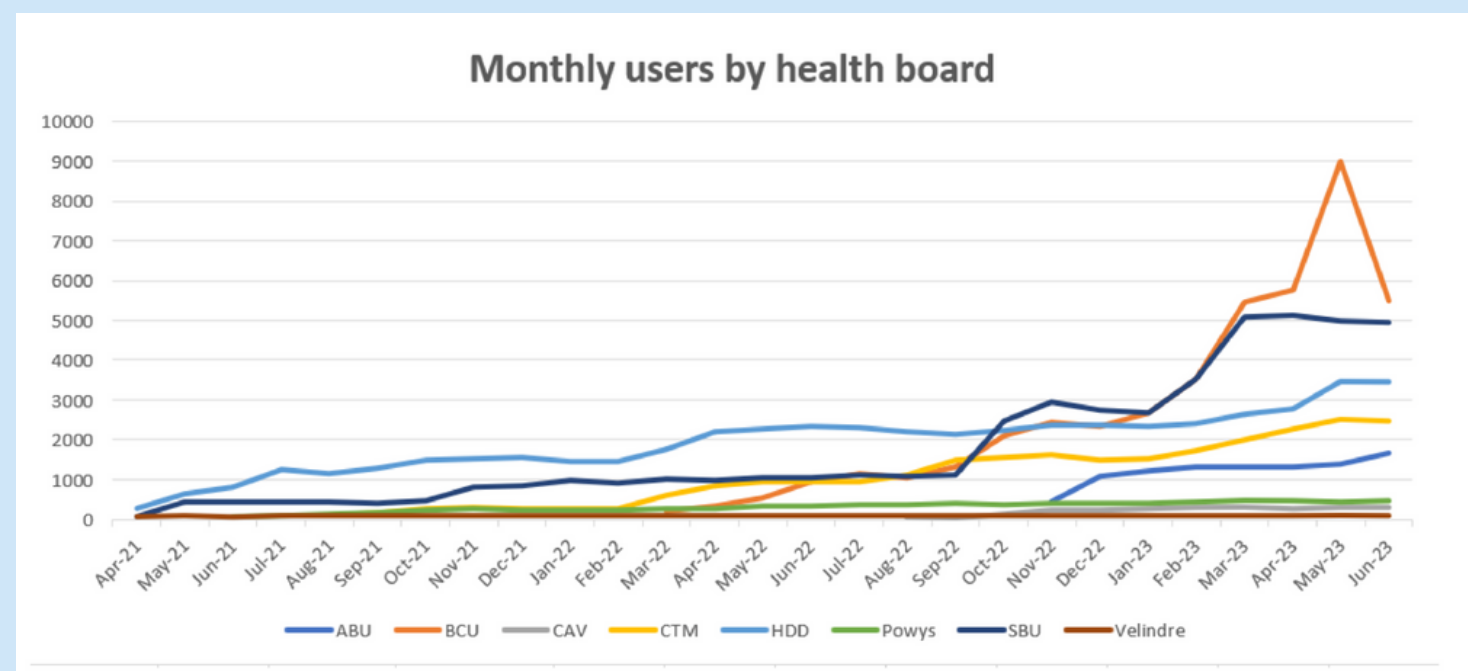
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1. INTRODUCTION



The Welsh Nursing Care Record (WNCR) [1] is a multi instance application managed and maintained by Digital Health and Care Wales (DHCW) [2]. WNCR aims to standardise nursing forms and offer a digital alternative.

Since WNCR go-live in April 2021 [1] there has been a total of 7,670,648 risk assessments completed across NHS Wales. With a total of 193,422 users accessing the application.



Due to it's rapidly evolving requirements and ever-growing functionality WNCR requires robust well-organised processes. This project aims to focus on improving the User Acceptance Testing [3] Process within WNCR.

Key deliverables:

- 1.To create a robust UAT process for the WNCR.
- 2.A user friendly informative WNCR UAT dashboard.

6.RESULTS/FINDINGS



Findings indicated that the changes made to the UAT process positively impacted the process with **100%** of users finding it useful.

98% of participants agreed that a hybrid 'Watergile' method to development and testing works well for WNCR.

The addition of a user-friendly informative dashboard enables the ability for **progress updates** and **reporting**.

The WNCR UAT dashboard resulted in **increased productivity** and has reduced time spent filtering and managing data.

2.AIM



Aim: To complete an analysis of current UAT practices and processes in the Welsh Nursing Care Record and propose improvements for future releases.

3.OBJECTIVES

1. To analyse the current process and identify where improvements should and could be made.
2. To work collaboratively with the National WNCR Support team, service leads and Chief Nursing informatics Officers (CNIOS) to collect feedback and identify process and product requirements.
3. To introduce a robust UAT process for the WNCR.
4. To create a user WNCR UAT dashboard (MVP July 2023).

5.DESIGN & IMPLEMENTATION



Thorough document analysis, paired with requirement gathering enabled appropriate changes to the current internal UAT process and the creation of a WNCR UAT dashboard.

Document Requirements:

- Clear Roles and Responsibilities
- Defined statuses and categories
- Power Automate Flow

Dashboard requirements:

- How many issues raised by Local Health Board
- Testing Browser/Devoce
- Priortiy
- Status
- Category
- Section of the application

WNCR UAT ISSUES PROCESS

Check the user has added an attachment to the issue if it is, use that for reference, if not use the call sheets to access 'mink' call and replace the issue ticket.

Following the initial investigation use the issue functionality to add notes highlighting what has been done and what has been found add your initials and the date ensuring that your newest note is visible at the top.

If it is identified that the issue needs to be escalated to the test team and all checks have been completed.

If it is already been raised?

• Can it be replicated again?

• Are we avoiding a new build in call with the test?

• The issue status should be changed to 'Resolved' and the user should be notified that the issue has been resolved.

Once an issue has been allocated to a test team category that issue is a bug.

Category

• Bug

• Feature Request

• Improvement

• Other

• Change to Requirements

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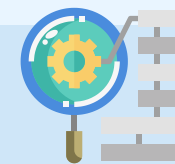
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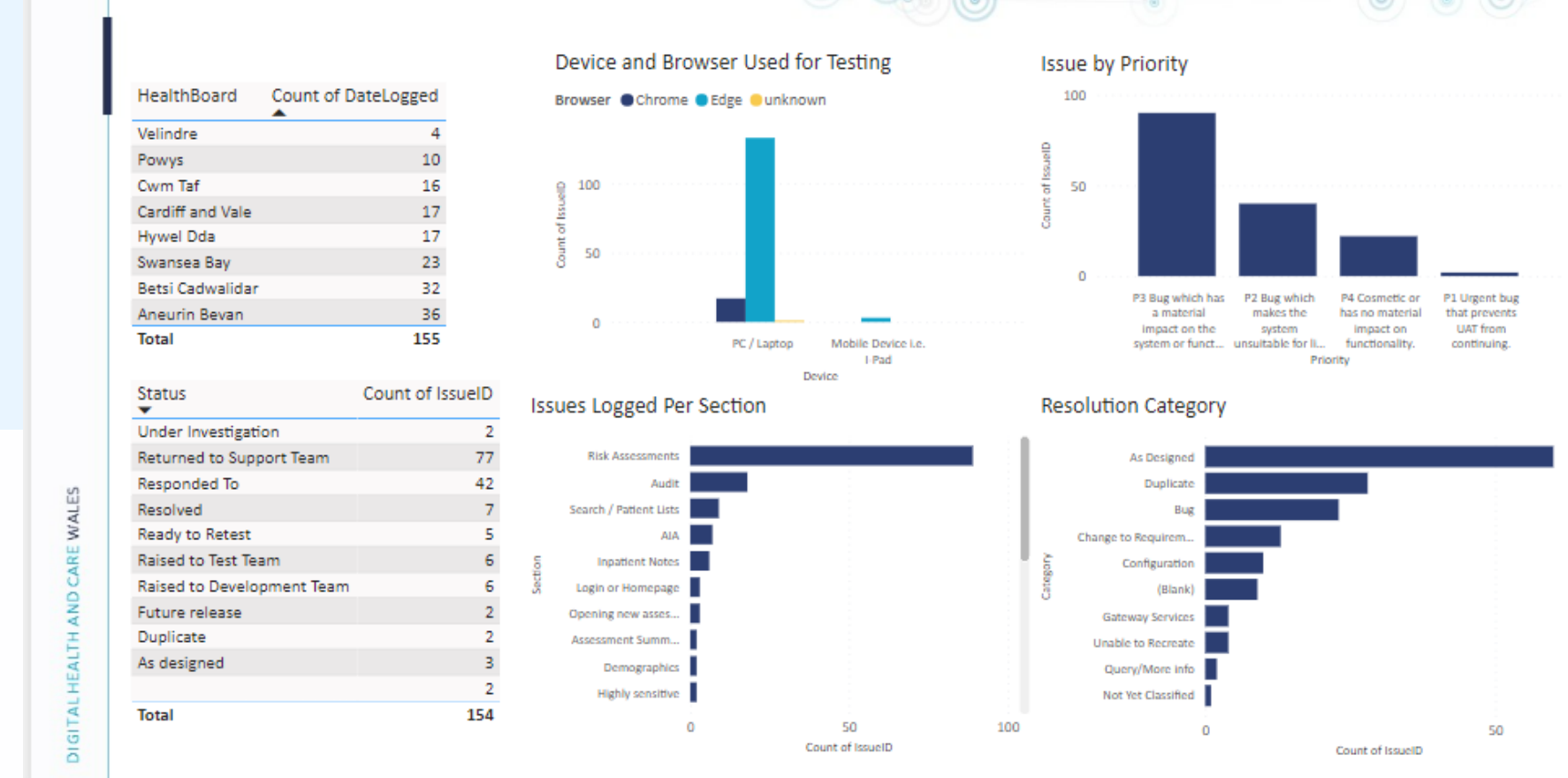
4.RESEARCH

A review of literature together with the collection of primary data identified that the current User Acceptance Testing process was vague and required improvement. Additionally, the introduction of a user friendly Power BI dashboard would be beneficial for reporting purposes.

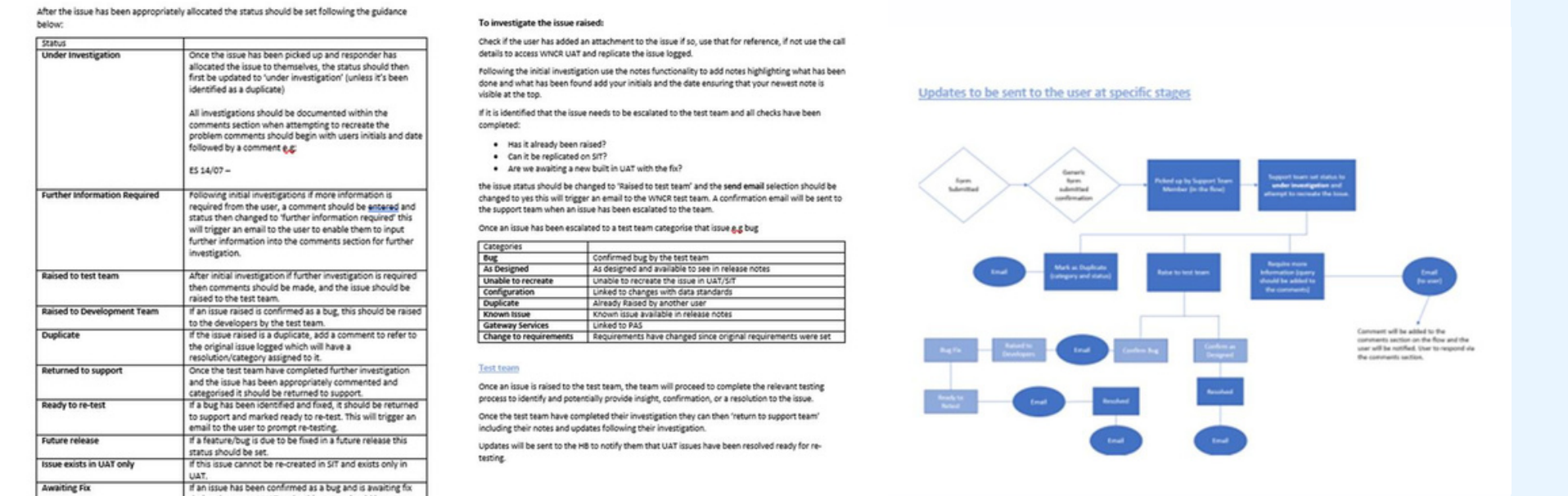
Research Methodology:

Positivist and Phenomenological
Inductive & Deductive
Primary and Secondary Sources

WNCR UAT v2.2 Data



WNCR All Wales UAT Dashboard



Updated WNCR UAT Process

7.CONCLUSION & RECOMMENDATIONS

Overall, the aims and objectives of the project were met. This project has contributed to the field by addressing service improvement needs linked to the UAT process within the context of a new application like WNCR. To conclude, this project has successfully improved the WNCR UAT process by creating an informative dashboard, increasing productivity, and improving communication.

Recommendations:

- 1.Continue adopting a hybrid 'Watergile' approach to development and testing.
- 2.Ensure that testing is completed against Mobile Devices
- 3.The addition of a 'sand box' environment



REFERENCES

- [1] Welsh Government, "Nursing Records go Digital - a case study," 25 10 2021. [Online]. Available: <https://digitalpublicservices.gov.wales/nursing-records-go-digital-a-case-study/>. [Accessed 20 05 2023].
- [2] Digital Health and Care Wales, "About Digital Health and Care Wales," Digital Health and Care Wales, [Online]. Available: <https://dhcw.nhs.wales/about-us/>. [Accessed 10 07 2023].
- [3] A. S. Gills, "User Acceptance Testing," Software Quality, 03 2022. [Online]. Available: <https://www.techtarget.com/searchsoftwarequality/definition/user-acceptance-testing-UAT>. [Accessed 05 04 2023].