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Integrating PROMs Visualisations into EHRs: Advancing Palliative Care Management

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Abstract. The integration of Patient Reported Outcome Measures (PROMs) visualisations into Electronic Health Records (EHRs) offers a transformative approach to palliative care by providing both clinicians and patients with a comprehensive, at-a-glance, longitudinal view of patient health. This poster presents the development and implementation of patient-level visualisations for Palliative Care PROMs to be embedded within NHS Wales's EHR, to enhance clinical decision-making and support care provision and shared decision making. Our project focuses on creating intuitive and informative visualisations that track PROMs over time, allowing for a detailed understanding of symptom progression, treatment efficacy, and overall quality of life. The specification for the data visualisations was developed in partnership with clinical stakeholders to serve as visual tools to enable clinicians to quickly identify trends and make informed decisions, while patients benefit from shared decision making and more personalised care.

Keywords. Patient Reported Outcomes, Electronic Health Records (EHR), Patient-centered care, Data Visualisation.

1. Introduction

The integration of Patient Reported Outcome Measures (PROMs) visualisations into Electronic Health Records (EHRs) offers a transformative approach to palliative care by providing both clinicians and patients with a comprehensive, at-a-glance, longitudinal view of patient health. Here, we explain the development and implementation of patient-level visualisations for Palliative Care PROMs in NHS Wales. Visuals are embedded within the EHR to enhance clinical decision-making and support patient engagement.

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2. Design

The focus of the work was to create intuitive and informative visualisations, tracking PROMs over time, allowing for a detailed understanding of symptom progression, treatment efficacy, and overall quality of life. The visual specifications were developed by CEDAR in collaboration with a clinical stakeholder group, published and in-use examples were examined and feedback gathered from the clinicians.

3. Implementation, Discussion, and Conclusions

This specification was then passed to DHCW analysts who are currently working to replicate those visualisations within dashboards embedded in the Welsh Clinical Portal (WCP). WCP is a product that gives NHS health professionals in Wales access to patients' digital health records and access to the patient PROM visualisations.

This is the fifth condition-specific patient-level PROM visualisations that are available within the WCP that DHCW have developed in collaboration with the Welsh Value in Health Centre. Others include, Lung Cancer, Hip & Knee Arthroplasty and Heart Failure. Examples of PROM visualisations currently being developed for Palliative Care patients are shown below in Fig.1.

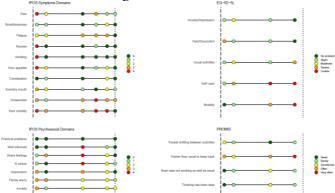


Figure 1. An example of some of the patient-level heart failure visuals currently being developed for Palliative Care patients within the Welsh Clinical Portal.

The benefits of PROMs in fostering better communication between patients and healthcare providers is well documented in the literature [1,2]. Key aspects of the development work was collaboration with clinicians to design effective visualisations and making them available where they could easily be accessed as part of the clinical workflow.

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