

Electronic warfarin discharge plan has contributed to sustained quality use of medicines

Before – paper

After - electronic

Background:

The consequences of adverse drug events with warfarin can potentially be catastrophic. Medicine safety and quality governance units have long documented the risk of medications with narrow therapeutic indexes. The Australian Commission on Safety and Quality in Health Care developed the mnemonic APINCHS to assist organizations in developing multilayered strategies to mitigate these risks. One area our institution identified is that safe discharge of patients on warfarin from hospital to community requires clear communication to all relevant stakeholders. It was identified that an improvement initiative could be implemented by creating an electronic warfarin discharge plan (WDP) to replace the paper version embedded in practice for over a decade and to align with current medication safety strategies in our organisation.

Objective:

Develop an electronic WDP to assist safe and reliable communication of warfarin management plans for our patients.

Action:

A committee was formed to design a solution and included senior pharmacists, representatives from electronic medical electronic (EMR) team and pathology providers. The committee identified and assessed all possible innovative solutions through review of the current paper based WDP. During this review, areas for improvement were identified and actioned, including updating external pathology provider preferred contact details. The possible form designs were piloted in a non-production EMR platform and compared to the original form to ensure requirements met. The electronic WDP was then implemented into current practice alongside education and supported by comprehensive reference guides and guideline updates available to all clinicians.

Evaluation:

A snapshot audit by the EMR team showed all WDPs were successfully faxed from within the software. Further retrospective data analysis is currently underway to confirm these results. Evaluation of integration into workflows through feedback sessions with clinical pharmacists occurred. Improvement has been sustained at our institution as the electronic WDP is now considered standard practice.

Discussion:

By building on the existing 'business as usual' processes with an enhanced electronic solution, the electronic WDP has contributed to improved accuracy and integration into the EMR without the need for extensive workflow changes or clinician education. Potential future improvements could be transmission via secure messaging exchange with pathology services and WDP auto-populate to medical discharge summary?

Before	After
Paper	Electronic
Requires all fields to be manually completed	Pre-populated
Old fashion faxing	Faxed from within electronic system
Manually scanned into medical record	Integrated into medical record; improved visibility
Problems: <ul style="list-style-type: none"> legibility issues some data fields not completed reliant on user to fax to relevant stakeholders eg pathology providers & warfarin dosing services potential transcription errors eg with warfarin doses or international normalised ratios (INR) 	Problems: <ul style="list-style-type: none"> still requires user to commence workflow
Advantages: <ul style="list-style-type: none"> embedded into current workflows recognised & integral within the organization as a communication tool for safer warfarin management 	Advantages: <ul style="list-style-type: none"> auto population assists with systems generated data assists accuracy of data legible

Get rid of that paper! Creating an Electronic Warfarin Discharge Plan

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