

FINAL REPORT Digital Health Case Study / Workflow / Integration 2022

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Report Date	19/5/2022	
Report Title	Utility of the My Health Record in Clinical Practice – Illustrations from a Gastroenterology Perspective	
Lay Summary: Please provide a brief, plain English summary of your Case Study / Workflow or Integration example.		Case 1: A 69-year-old male was referred for after-hours hepatology review following transfer from a regional centre to the intensive care unit. The patient had presented to a regional centre critically unwell with decompensated heart failure. On arrival, he was noted to have marked liver function derangement with a significant transaminitis and elevation in his INR. The question was posed as to the likely aetiology, including if secondary to his concurrent cardiac issues or reflective of a primary issue such as underlying cirrhosis. This in turn would guide whether our centre was the most appropriate for ongoing care.
		Because the patient was intubated, no history was able to be gathered at our centre and the rapid decline at the regional centre had limited the information gathered regarding comorbidities. Collateral from his family described no overt history of liver disease but had raised potential liver function derangements on blood tests around 3 months prior conducted interstate on holiday, though the location of the testing service and the details of derangement were unclear.
		Through utilisation of the My Health Record it was possible to locate the interstate blood tests. These demonstrated no significant abnormalities. Furthermore, it was also possible to review results for a 2-year period prior, which demonstrated no abnormalities, including no features of synthetic dysfunction or portal hypertension that would be consistent with a diagnosis such as cirrhosis. This enabled a preliminary diagnosis of ischaemic hepatitis to be made in conjunction with available imaging and appropriate advice to be provided.
		Case 2: A 21-year-old man was scheduled for review in liver clinic. His past medical history was significant for chronic hepatitis B diagnosed over 10 years ago and had been on Tenofovir for 6 years with good viral suppression. On review of his blood tests in preparation, an increasing viral load and ALT was noted despite having previously achieved viral suppression and normalisation respectively. This raised concerns for differentials such as tenofovir resistance and

	potential non-adherence as well as a concurrent separate insult with respect to the ALT.
	Through utilisation of the My Health Record it was possible to review the prescribing history which suggested no new medications had been commenced, which was later corroborated with the patient. It was also possible to review the prescribing history of the tenofovir itself, which confirmed a dispensing pattern consistent with ongoing adherence, and to confirm if any previous antivira therapy had been used for the chronic hepatitis B.
	Through gathering this information prior, it was possible to targe the consultation. This led to the disclosure that despite regular dispensing the patient had been missing doses due to a family member running out of their own supply of this agent. Subsequently the patient was able to be appropriately counselled along with assistance provided for follow-up for their family member as well.
	Case 3: A 59-year-old male presented for review in endoscopy clinic for consideration of expedited repeat colonoscopy. This was for exclusion of an underlying colonic malignancy in the setting of a pulmonary embolus with no identifiable provoking factors. He had a previous colonoscopy last year at our service, which had been significant for multiple colonic polyps with endoscopic removal.
	As prior care had been delivered at a different health service limited information was available regarding the admission. Whils the patient was aware of the diagnosis, he was uncertain o additional details, such as anticipated length of anticoagulation and clot burden which would modulate the balance of his bleeding and thromboembolic risk if a decision was made to repeat the procedure.
	Through the My Health Record, it was possible to access the discharge summary of the relevant admission during the clinic review itself. This provided the anticipated duration of anticoagulation, highlighted the significant right ventricle dysfunction noted on echocardiography and the additional investigations performed to assess for an alternate provoking cause. This facilitated the decision to be made for review in clinic in 3 months following the planned repeat echocardiography.
Case Study/Workflow/Integration Objective:	Case 1: This case outlines the utility of the My Health Record, specifically the capacity to see diagnostic tests from eligible providers around Australia and its impact on clinical decision making in the setting of a critically unwell patient.
Please state the objective of this example and why you focussed on it.	Case 2: This case outlines the utility of prescribing data on the My Health Record in corroborating patient compliance and excluding alternate pathologies allowing for expedited decision making and provision of targeted counselling in the outpatient setting.
	Case 3: This case outlines the improved efficiency of consultations through provision of discharge summaries on the My Health Record by reducing the need to contact external health

	information services thereby preventing delays in progression of care and resource inefficiency.
Benefits & Considerations: Please outline the benefits and considerations in the use of My Health Record and/or related digital health initiatives in this example.	Case 1: In the management of the critically unwell patient, accurate and timely decision making is critical, but is challenging in a patient where limited information is available. The capacity to access pathology results over a two-year period, along with the results from an unknown interstate provider was critical to enabling a preliminary diagnosis even in the setting of an after-hours phone consultation. In the absence of the My Health Record, this would have likely involved a delay at least until the next business day at which time pathology results could have been obtained from external sources.
	Case 2: The provision of medication history is a significant asset of the My Health Record. The ability to access an accurate record of dispensing history rapidly at time of clinic consultation is indispensable, partially alleviating the need to contact external parties to corroborate patient history which can lead to delays in progression of care. This is particularly critical with the increasing degree of polypharmacy which makes it harder for patients to accurately recall their medications. In this case, review of the My Health Record allowed for assessment of other potential drug aetiologies and non-adherence prior to the review itself, allowing for a more effective consultation with the patient.
	Case 3: With an increasingly multi-morbid population, a holistic understanding is critical to a safe clinical decision being made that offers the optimal balance of risks and benefits. This process is made more challenging by the increasing time limitations in outpatient clinics, particularly since caseloads have increased after the COVID pandemic. In this case, the ability to access the discharge summary from an external health service via the My Health Record during the clinic review was not only pivotal to an informed decision, but also prevented resource inefficiency by mitigating the need for a further clinic review following this information being gathered by contacting the external health service directly.
Additional Advice and Comments:	Nil
Please list any items of interest which have arisen as a result of documenting this particular example.	

Acknowledgements	Nil

Award Recipient Signature:

I certify that the information supplied in this report is true and correct. I consent to enquiries made by the Royal Australasian College of Physicians to verify this information with any institution or individual.

Signature:

Please submit completed and signed report to: RACP/ADHA Digital Health Scholarship engage@racp.edu.au