ACT Government | ACT Health

Our reference: **ACTHDFOI22-23.39**

[redacted]

Dear [redacted]

DECISION ON YOUR ACCESS APPLICATION

I refer to your application under section 30 of the *Freedom of Information Act 2016* (FOI Act), received by ACT Health Directorate (ACTHD) on **Monday 13 February 2023**.

This application requested access to:

> *'Briefs to the Health Minister, or minutes provided to the Director-General of ACT Health and/or CEO of Canberra Health Services on implementation issues in connection with the Digital Health Record since 1 October 2022, including any bugs, technical challenges, 'code reds', security issues.'*

I am an Information Officer appointed by the Director-General of ACT Health Directorate (ACTHD) under section 18 of the FOI Act to deal with access applications made under Part 5 of the Act. ACTHD was required to provide a decision on your access application by **Wednesday 19 April 2023**.

I have identified ten documents holding the information within scope of your access application. These are outlined in the schedule of documents included at Attachment A to this decision letter.

Decisions

I have decided to:

- grant full access to six documents; and
- grant partial access to four documents.

My access decisions are detailed further in the following statement of reasons and the documents released to you are provided as Attachment B to this letter.

In reaching my access decision, I have taken the following into account:

- The FOI Act;
- The contents of the documents that fall within the scope of your request;
- The views of relevant third parties; and
- The *Human Rights Act 2004*.

Full Access

I have decided to grant full access to documents at references 3-5 and 7-9.

Partial Access

I have decided to grant partial access to four documents at references 1-2, 6 and 10 as they contain information that I consider, on balance to be contrary to the public interest to disclose under the test set out in section 17 of the Act.

Public Interest Factors Favouring Disclosure

The following factors were considered relevant in favour of the disclosure of the documents:

- Schedule 2, 2.1 (a)(i) promote open discussion of public affairs and enhance the government's accountability;
- Schedule 2, 2.1 (a)(ii) contribute to positive and informed debate on important issues or matters of public interest.

Public Interest Factors Favouring Non-Disclosure

The following factors were considered relevant in favour of the non-disclosure of the documents:

- Schedule 2, 2.2 (a)(xi) prejudice trade secrets, business affairs or research of an agency or person.

On balance, the factors favouring disclosure did not outweigh the factors favouring non-disclosure as the release of the redacted information would or could reasonably be expected to prejudice the business affairs of a non-ACT Government entity. Therefore, I determined the information identified is contrary to the public interest and I have decided not to disclose this information.

Charges

Processing charges are not applicable to this request.

Disclosure Log

Under section 28 of the FOI Act, ACTHD maintains an online record of access applications called a disclosure log. The scope of your access application, my decision and documents released to you will be published in the disclosure log not less than three days but not more than 10 days after the date of this decision. Your personal contact details will not be published.
https://www.health.act.gov.au/about-our-health-system/freedom-information/disclosure-log.

Ombudsman review

My decision on your access request is a reviewable decision as identified in Schedule 3 of the FOI Act. You have the right to seek Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day that my decision is published in ACT Health's disclosure log, or a longer period allowed by the Ombudsman.

If you wish to request a review of my decision you may write to the Ombudsman at:

The ACT Ombudsman
GPO Box 442
CANBERRA ACT 2601
Via email: ACTFOI@ombudsman.gov.au
Website: ombudsman.act.gov.au

ACT Civil and Administrative Tribunal (ACAT) review

Under section 84 of the Act, if a decision is made under section 82(1) on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision. Further information may be obtained from the ACAT at:

ACT Civil and Administrative Tribunal
Level 4, 1 Moore St
GPO Box 370
Canberra City ACT 2601
Telephone: (02) 6207 1740
http://www.acat.act.gov.au/

Further assistance
Should you have any queries in relation to your request, please do not hesitate to contact the FOI Coordinator on (02) 5124 9831 or email HealthFOI@act.gov.au.

Yours sincerely

Rishi Dutta
A/g Chief Information Officer
Digital Solutions Division
ACT Health Directorate

19 April 2023

ACT Government | ACT Health

FREEDOM OF INFORMATION SCHEDULE OF DOCUMENTS

Please be aware that under the *Freedom of Information Act 2016*, some of the information provided to you will be released to the public through the ACT Government's Open Access Scheme. The Open Access release status column of the table below indicates what documents are intended for release online through open access.
Personal information or business affairs information will not be made available under this policy. If you think the content of your request would contain such information, please inform the contact officer immediately.
Information about what is published on open access is available online at: http://www.health.act.gov.au/public-information/consumers/freedom-information

APPLICANT NAME	WHAT ARE THE PARAMETERS OF THE REQUEST	FILE NUMBER
[redacted]	*'Briefs to the Health Minister, or minutes provided to the Director-General of ACT Health and/or CEO of Canberra Health Services on implementation issues in connection with the Digital Health Record since 1 October 2022, including any bugs, technical challenges, 'code reds', security issues.'*	**ACTHDFOI22-23.39**

Ref Number	Page Number	Description	Date	Status Decision	Factor	Open Access release status
1.	1 – 17	Ministerial Briefing with attachments – MIN22/1390 Digital Health Record (DHR) Program – Monthly Briefing October 2022	14 October 2022	Partial Release	Schedule 2, 2.2(a)(xi) Business Affairs	YES
2.	18 – 29	Ministerial Briefing with attachments – MIN22/1667 Digital Health Record (DHR) Program – Monthly Briefing November 2022	18 November 2022	Partial Release	Schedule 2, 2.2(a)(xi) Business Affairs	YES
3.	30 – 64	Digital Solutions Division Performance Report October 2022	22 November 2022	Full Release		YES
4.	65 – 91	Digital Solutions Division Performance Report November 2022	16 December 2022	Full Release		YES

5.	92 – 100	Ministerial Briefing with attachments – MIN23/5 Digital Health Record Program – January 2023 update	9 January 2023	Full Release		YES
6.	101 – 113	Ministerial Briefing with attachments – MIN23/6 Digital Health Record Program – Monthly Briefing February 2023	16 February 2023	Partial Release	Schedule 2, 2.2(a)(xi) Business Affairs	YES
7.	114 – 145	Digital Solutions Division Performance Report December 2022	24 February 2023	Full Release		YES
8.	146 – 148	Director-General Minute – GC23/91 External reporting from Digital Health Record	27 February 2023	Full Release		YES
9.	149 – 184	Digital Solutions Division Performance Report January 2023	9 March 2023	Full Release		YES
10.	185 – 198	Ministerial Briefing with attachments – MIN23/7 Digital Health Record Program – Monthly Briefing March 2023	14 March 2023	Partial Release	Schedule 2, 2.2(a)(xi) Business Affairs	YES
Total Number of Documents						
10						

OFFICIAL MINISTERIAL BRIEF

ACT Health Directorate

To:	Minister for Health	**Tracking No.: MIN22/1390**
CC:	Rebecca Cross, Director-General ACT Health Directorate	
From:	Peter O'Halloran, Chief Information Officer and Executive Group Manager, Digital Solutions Division (DSD)	
Subject:	Digital Health Record (DHR) Program – Monthly Briefing October 2022	
Critical Date:	14/10/2022	
Critical Reason:	For the briefing to be available for the DHR Update with the Minister on Monday 17 October 2022	

Recommendation

That you:

1. Note the update on the status of the Digital Health Record Program as per the Program Status Report as of 6 October 2022 at Attachment A.

Noted / Please Discuss

2. Note the Epic provided Executive Summary on the Digital Health Record – September 2022 at Attachment B.

Noted / Please Discuss

Rachel Stephen-Smith MLA ..../...../.....

Minister's Office Feedback

Background

1. At a meeting held with the ACT Health Directorate (ACTHD) on 21 January 2021, you requested a monthly briefing on the DHR Program to keep you up to date with the status of the Program. These meetings have been scheduled for the third Monday of every month and commenced on 24 May 2021.

Issues

2. The DHR Program is currently in Tranche 2 – Delivering the Capability. The DHR Technical Project within the DHR Program is reporting a red status due to impacts to the schedule and both the DHR Implementation and DHR Business Intelligence and Data Projects are reporting amber status.

3. The program is currently reporting a red status. Epic are reporting the program at a 2.5/5 which is stable from last month against an average customer score of 3.45/5. The Business Intelligence and Reporting area has improved from critical to serious. There is one critical area in the technical space around the commissioning of connected systems in the health enclave and this is being managed daily with plans in place to deliver the Go-Live critical systems by 12 November 2022.

4. The following achievements have been delivered in the last month:

    - Patient Flow Day occurred at CHS and Calvary on the 27 and 28 September 2022 respectively and this provided a good understanding of end-to-end patient movement across the health system.
    - Referral Management Day was held on 5 October 2022 with over 150 people in attendance in person and online. This provided information on the end-to-end referral processes for administration and clinical staff.
    - Manual Data Abstraction processes commenced on 4 October 2022. In the first four working days, 162 patients have been abstracted into the DHR. There are 66 medical, nursing, and allied health university students commencing over the next three weeks to assist with data abstraction work. Therapy plan abstraction will commence from Monday 10 October 2022 and retired clinicians are assisting with this abstraction.
    - Technical Dress Rehearsal (TDR) processes continued with 31% of the over 6,000 devices tested and passed. This process will continue through until Go-Live.
    - The two weeks of dedicated Super User training finished on 23 September 2022 with end user training commencing on 26 September 2022. Super users have also been attending end user training to solidify their knowledge of the system. Super User meetings are being held regularly to assist with dissemination of information to assist them to perform their role at Go-Live.

5. The areas of highest risk areas to the 12 November Go-Live are as follows:

    - The My Health Record integration with the DHR – the DHR technical team have been working closely with Australian Digital Health Agency (ADHA), Services Australia, Deloitte and Accenture to complete conformance testing of the My

Health Record integration. A plan is in place to complete all deliverables by 7 November 2022; however, there is no ability to slip any of the planned dates. Peter O'Halloran has escalated through executives at ADHA to ensure this work is prioritised. There is a risk that this work is not completed within the timelines which may mean that the ACT does not submit documentation to the My Health Record until this conformance testing is completed.

- The availability of an upgraded Clinical Patient Folder (CPF) system to integrate with the DHR system is currently at risk. The DHR program has tested the integration to the CPF system on the upgraded version of the product (v4.7). The elements required for DHR integration work; however, the new version has seven (7) critical issues that impact the Health Information Management Services functions within CPF. The Infomedix vendor has committed to providing fixes to these critical issues by 11 October 2022, but these will need to be tested and approved prior to upgrading the product. Without an upgraded version of CPF, the link between DHR and the historical record will not be seamless, and clinicians will need to search for patient historical records in CPF rather than be taken from the DHR to the correct patient record in CPF.
- The delays in the connectivity of the Pharmacy Inventory Management System (PIMS) and the Pyxis cabinets in ED have impacted the Mapped Record Testing (MRT) required for all medications in the DHR. The connectivity is now operational, but the DHR Medications team are currently 40% complete of checking every medication in the system (1500 medications passed of 3707). They are aiming to complete this by 14 October 2022; however, timelines are tight to complete this work.
- Training data is difficult to work with due to the issues with the HR data across the health system. At present, it looks like approximately 76% of required staff have registered for training or have completed their training. The health services are reviewing the data and finding multiple staff on long term leave, staff who have left the organisation and staff who have changed roles and no longer need access. The DHR Program Board have set the target of 80% staff need to be trained in the system prior to Go-Live and this will be challenging to meet if the denominator staff number is incorrect.

6. The milestones for the DHR Program to the 12 November Go-Live are as follows:

Milestone	Date
Technical Dress Rehearsal (TDR) Processes	18 July 2022 – 4 November 2022
Super User Training	29 August 2022 – 9 September 2022 (Complete)
Testing Report approved by DHR Program Board	6 September 2022 (Complete)
Load of production data extracts for testing	9 September 2022 (Complete)
End User Training	12 September 2022 – 11 November 2022
60-Day Go-Live Readiness Assessment	15 September 2022 (Complete)
Data Abstraction processes	4 October 2022 – 11 November 2022
30-Day Go-Live Readiness Assessment	13 October 2022 (Complete)
15-Day Go-Live Readiness Assessment	27 October 2022
Cutover processes	4 November 2022 – 11 November 2022
Go-Live	4am 12 November 2022

Financial Implications

7. The 8-year DHR Program now has a total budget of $308.931 Million over 8 years (including offsets) with the ACTHD portion of the Supplementary Business Case added. The Program is currently forecasting a $2.313 Million overspend in Capital expenditure and a $16.262 Million underspend in Operational expenditure from the Treasury allocated funds. This does not include the $7.515 Million Capital reallocation to the notifiable disease management system.

8. The overall forecast with expenditure for the commitments in the DHR Supplementary Business Case added is for a total overspend $23.376 Million over the 8 years which is 7% of the total $308.931 Million and therefore the budget is reporting amber is it is under the 10% tolerance for the project.

9. The approved Treasury Budget and actuals for the DHR Program is as follows:

	Budget	Actuals to August 2022	Variance
Capital (original)	$114,932,000	$74,283,000	$40,649,000
Capital (ACTHD Supplementary Business Case)	$15,855,000	$0	$15,855,000
Total Capital	$130,787,000	$74,283,000	$56,504,000
Operational (original)	$50,568,170	$16,635,000	$33,933,170
Operational (ACTHD Supplementary Business Case)	$4,493,000	$0	$4,493,000
Total Operational	$55,061,170	$16,635,000	$38,426,170

Consultation

Internal

10. Nil for the purpose of this briefing.

Cross Directorate

11. Over 500 subject matter experts have been identified from across the health services to provide key clinical guidance to the Program team to ensure the program remains clinically led.

External

12. Keith McNeil, Chief Clinical Information Officer, Queensland Health, is the independent Chair of the Program Board and Darlene Cox, Executive Director, Health Care Consumers Association ACT is a member of the Program Board.

13. External organisations such as Winnunga Nimmityjah Aboriginal Health and Community Services continue to be consulted through attendance at direction setting sessions and meetings with the Senior Director, DHR Implementation Project.

14. The ACT Health Chief Nursing and Midwifery Information Officer (CNMIO) Rebecca Heland, attends the ACT Health quarterly Nursing Leadership meetings to discuss the DHR. These meetings have Residential Aged Care Facility leadership such as St Andrews in attendance. The workflow for Residential Aged Care Facilities will be that public health facilities can provide summary information as they do today as part of a transfer of care. These facilities may also be able to pilot the use of the DHR Link solution in the future.

15. There are representatives from the following external organisations on the following Steering Committees for the Program:

    Consumer Experience Steering Committee
    - Health Care Consumers Association
    - ACT Mental Health Consumer Network
    - Carers ACT
    - Meridian
    - People with Disabilities ACT
    - A consumer representative from Calvary Public Hospital Bruce

    Union Engagement Advisory Committee
    - Australian Nursing & Midwifery Foundation
    - Australian Salaried Medical Officers Federation
    - Community and Public Sector Union
    - Professionals Australia
    - Health Services Union
    - Visiting Medical Officers Association (ACT)
    - Australian Medical Association (ACT)

Work Health and Safety

16. The DHR Program are being advised of some areas with Worksafe ACT recommendations (like the Alexander Machonichie Centre (AMC)) and are working with CHS to understand the implications of these on the rollout of the DHR.

Benefits/Sensitivities

17. A Benefits Realisation Plan was drafted by Abt Associates/ bdna and this has been endorsed by the DHR Program Board which includes 14 headline benefits incorporating the following items:

BM-001	Improved Standards of Clinical Care (NSQHS)
BM-002	Improved Patient Engagement
BM-003	Improved Patient Satisfaction
BM-004	Reduced Length of Stay (LOS) in Emergency Department
BM-005	Improved Throughput in Surgery, Procedures and Outpatients
BM-006	Reduced Adverse Drug Events (ADE)
BM-007	Internal Pathology Improvements through Legacy System Replacement
BM-008	Improved Dental Decision Making and Holistic Care
BM-009	Medical Imaging Department Process Improvements
BM-010	Integrated Patient Administration System
BM-011	Improved Activity Based Classifications through improved digital documentation
BM-012	Increased Capability to Extract Data for Research and Data Driven Decision Making
BM-013	Provider satisfaction
BM-014	Enhanced Integrated Care across CHS and CPHB

The DHR Program Business Intelligence (BI) and Data resources have determined 23 metrics that will form baseline data for these headline benefits. To establish a trend, the BI and Data team are gathering data from 3 years (for quarterly metrics) to 7 years for annual metrics where possible. This baseline data will be presented to the DHR program Board on 25 October 2022.

Communications, media, and engagement implications

18. Communication plans are being finalised, and collateral is starting to be developed. There is a DHR Communications Strategy that incorporates a Consumer Communication Strategy. The DHR Change Manager is working with communication leads at CHS, CPHB and the ACT Health Directorate to deliver against the communications plan.

19. The Program team would like to continue to work with your office through the ACTHD Communications team to provide you with the opportunity to participate in media or community opportunities for the Digital Health Record.

Signatory Name:	Peter O'Halloran	Phone:	5124 9000
Action Officer:	Sandra Cook	Phone:	5124 9129

Attachments

Attachment	Title
Attachment A	DHR Program Status Report – Report compiled 6 October 2022
Attachment B	Epic Executive Summary on the Digital Health Record – September 2022

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period 7 September 2022 to 12 October 2022

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending

▲ Improving

Clinical Owner/s

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issu… Health Status	Scope Health Status	Benefits Health Status
🔴	🔴	🟡	🟢	🟡	🟢	🟢

Program Delivery Team

Approver	Sandra Cook
EBM, Future Capability	Justine Spina
Technical Project	Timothy Panoho
Implementation Project	Philippa Kirkpatrick
BI & Data Project	Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130,787,000.00	$56,185,737.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$56,521,974.00	$39,886,233.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting a red status due to risks to the schedule (particularly in the Technical Project). There are 13 risks that are rated as high. The reporting risk has improved from critical to serious. The technical project work to complete dependent systems in the health enclave is now reporting as critical but plans are in place to ensure the Go-Live critical systems are delivered into the health enclave by 12 November 2022. User access and provisioning is also rated at serious; work is continuing to gather the information on individual roles across the health service to ensure they get appropriate access to the system at Go-Live.

The Program Schedule is still tracking to 12 November 2022 Go-Live. The Critical Path for Go-Live has been developed and the DHR Program team are reviewing critical milestones against delivery of workstreams against critical dates for delivery.

The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Risks & Issues

Risks - There are currently 39 open risks. There are thirteen risks reporting a high rating:

#1 & 7 Insufficient Budget
#20 Data Quality in the DHR is poor
#22 The Clinical Record does not provide ready access to information
#24 Difficulty accessing historical data
#29 Clinical Engagement
#38 Slow decision making
#41 Health service resources unavailable
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues – there are 7 high issues still open the top one being:
End User Devices are required to ensure access to the Epic solution for different roles in different ways. With COVID-19 there have been supplier delivery issues so orders need to be placed with regard to these lead times.

Budget

The total budget for the DHR Program is now $308.931 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $51.028 Million Treasury Operational and $122.622 Million in Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to August 2022 are as follows - Capital $74.283 Million (Budget $73.042 Million) Opex $16.635 Million (Budget $20.068 Million). There is $56.504 Million Capital remaining and $39.887 Million Opex remaining. At the end of August 2022, the total forecast over-expenditure for Capital over the 8 years is $2.313 Million and a forecast underspend of Operational expenditure of $16.262 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast overspend for the whole of life DHR Program at present is $23.376 Million over the 8 years with including the BAU expenditure which is 7% of the total $308.931 Million budget. Therefore, the budget will be reporting Amber as it is under the 10% tolerance. Detailed quarterly reports will be provided to the Board on November 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Jan 2023).

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 18 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assuran… review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post Implementation Review in April 2023.

Benefits

Abt Associates (in partnership with bdna) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified and this will be presented to the DHR Program Board in October 2022 for review and approval.

Scope

Scope refinements are being managed through Change Request processes. None have been raised in this period. Change freeze commenced as of 1 June 2022.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The DHR Technical Project is reporting red for schedule. More casual resources are being employed to assist with Technical Dress Rehearsal processes to improve this issue.

Project Summary Dashboard

DHR Technical Project

RAG 🔴 **% Complete** 87%

Trending ▬

The project status remains red due to schedule impacts. Architecture is continuing to progress with the Production build almost complete. The team are continuing to develop architecture templates and once these are populated they will go through the Technical Steering Committee for review and approval. Patient data was loaded into the production system for the purposes of pre Go-Live

Technical Dress Rehearsal (TDR) commenced 18 July 2022 and will continue through to 12 November 2022. There is a rolling plan for TDR across health service sites. Pilot Technical Dress Rehearsal (TDR) commenced 18 July 2022. There is a rolling plan for TDR across health service sites and as of 06 October 2022 31% of equipment has been tested and passed.

Four new interfaces were agreed to through a change control process. With these 4 additions, 97% Primary Functional testing of the interfaces have been completed.

DHR Implementation Project

RAG 🟡 **% Complete** 92%

Trending ▬

The Digital Health Record (DHR) Implementation Project is reporting an overall amber status and is improving.

Data Abstraction commenced on 4 October 2022. The first Cutover Dry Run was completed on 20 September 2022 and a second Cutover Dry Run will occur on 11 October 2022. The Patient Flow Day was completed on 27 and 28 September 2022 and Referrals Management Day was completed 5 October 2022. All of these activities are to prepare operational end users for the tasks required over the transition to the DHR to make the implementation as successful as possible.

DHR Business Intelligence & Data Project

RAG 🟡 **% Complete** 65%

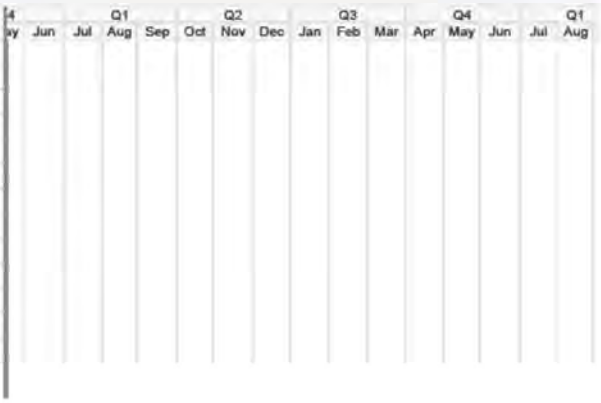
Trending ▲

This project is reporting amber and trending upwards. Scope for reporting for Go-Live is now locked in and testing has been progressing. 90% Dashboards, 75% Reporting Workbench reports and 86% Slicer Dicer models have been successfully tested and passed.

Key Program Activities

Key Program Activities

At Risk	Task Name	Start Date	End Date	Status
	Program authorised to commence	08/02/21	08/02/21	Complete
	Contract with vendor signed	01/01/19	01/01/19	Complete
	Completion of staffing and program team training	30/06/21	30/06/21	Complete
	Completion of detailed program planning	30/06/21	30/06/21	Complete
	Completion of system configuration base build	31/12/21	31/01/22	Complete
	Completion of testing and content build	30/06/22	29/07/22	In progress
	Completion of end user training	29/08/22	04/11/22	Not started
	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	In progress
	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Not started
	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Not started
	Execute Cutover	04/11/22	11/11/22	Not started
	Go live	12/11/22	12/11/22	Not started



Financial Performance

Whole of Life Budget & Expenditure

CapEx

Budget	$130,787,000.00
Actual	$74,601,263.00
Variance	$56,185,737.00

OpEx

Budget	$56,521,974.00
Actual	$16,635,741.00
Variance	$39,886,233.00

Current FY 2022/23

Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		1	7	2	
Possible			1	6	
Unlikely					
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High				5	
Moderate			1	2	
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Program Risks

Title	Residual Rating	Description
Insufficient budget due to schedule delays	High	"Epic's implementation based on a time and materials approach. The burn rate for the program team is very high. Task costs not estimated correctly."
Insufficient budget due to lack of contingency.	High	There is no contingency in the budget as the market analysis for the Digital Health Record and third party products identified costs slightly lower than the now expected costs.
The Territory may have problems with national reporting and submissions during the transition period from existing systems to the Digital Health Record.	High	"Significant changes to sources of many data items for mandatory submissions will be introduced by the DHR which may affect the quality of our submissions. Inability to meet national submission requirements impacting reputation and funding"
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields. "
The clinical record does not provide ready access to information.	High	"The record is difficult to navigate or strict access controls restrict appropriate access to information. Users and providers are not provisioned with the apporpriate access.
Difficulty accessing historical data	High	Dependencies to migrate existing data into Clinical Patient Folder and the Data Repository are not achieved.
Lack of or insufficient clinical engagement in the development and implementation of the DHR	High	The Program may be delayed, or may not deliver a high quality outcome.
Schedule delays due to slower than required decision-making or revisiting decisions already made	High	The project will require a devolved decision-making framework to ensure decisions are made in a timely manner. If this does not occur due to stakeholder unavailability or inability to reach a decision, this will delay the project. Scope creep/changes
Health services are unable to release staff for DHR requirements including training, certified trainers, superusers and data abstraction/conversion.	High	There is no funding for backfill of staff for training. High impact activties are scheduled for during the winter season. Staff for backfill may not be available due to the geography of the Territory.
The team are unable to complete all tasks in accordance with the schedule.	High	Causes of task non-completion may include: - The scope of work is larger than originally anticipated and there are issues that arise that take longer to troubleshoot delaying delivery of tasks - Delays to decision-making - team member's performance is not as expected - delays due to external pressures such as COVID-19 - delays to dependencies including conversions, interfaces and user provisioning Task effort not estimated correctly Recruitment and onboarding of staff Unplanned leave Unidentified scope
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability.
Technical Architecture Documentation may be siloed and not sight clinical workflow requirements required to ensure a seamless clinical end user experience	High	Lack of architecture documentation and end user journey maps due to a lack of resourcing in the technical team
The DHR solution does not work in an efficient and effective way for end users at the time of Go-Live	High	Medical Grade End User Devices are not available in time for Go-Live, there are not enough devices for the workflow or the wrong devices are procured for areas making the workflow slower than anticipated.
The DHR system is unavailable for end users after Go-Live	High	Enterprise Infrastructure Capacity fails and the system is unable to be accessed

Program Issues

Description	Residual Rating	Action to Be Taken
Delays in the technical project have resulted in delays for the DHR Implementation Project. The is particularly the case for interfaces and conversions.	High	Turbo rooms and regular stand ups have been established to monitor this. The technical team has recruited addditional resources. This is being managed well and is improving. The majority of interfaces have progressed to achieve integrated testing cycle 1. This will remain a high issue until resolution.
There are over one million open referrals in ACTPAS	High	CHS and CPHB are taking responsibility for closing referrals no longer required. This work is progressing.
User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	This has significantly improved but will remain high until the providers can be tested, and the scope of provider creation is finalised. There are additional resources working on this and it is progressing well. A onboarding web form has been created and is going out to health services 12/08/2022 to validate data and ensure user logins are right during login labs that will occur directly after training sessions. Will close this action once login labs have occurred.
Extracts for PAS conversions remains delayed	High	A matrix of required data extracts and responsibility for their delivery has been created. Regular communication is occurring. This is now progressing but remains delayed due to competing priorities of the DHR BI and Data team.
Interfaces and AETHER integration delivery is behind schedule.	High	This is the primary focus of the team and weekly reporting to the Board on progress is occurring. The Technical Team have implemented an approach that will support hybrid solution for production. Four additional interfaces added as part of a change request process.
The interface with Breastscreen is delayed as the solution has not yet been finalised.	High	The Technical Project are completing audits and working through the gaps to identify quantities that need to be ordered. They have prioritised based on their knowledge of current lead times. The Technical Team have progressed with orders and expect to have all major procurements completed in the timeframe. However, risk to delivery of hardware is still ongoing at the manufacturers. The DG has signed the upgrade for the BIS product and an interface with the current BIS has been developed and is in testing with the intent to reuse the knowledge from that to assist.
The Philips Intellispace solution for integration did not meet timeframes required for implementation to allow testing in integrated testing cycle 1. In addition, the production hardware for Philips is also delayed due to ordering monitors.	High	Mitigations are in place that allow for testing in Cycle 2 of integrated testing. The vendor has outlined the risk to the schedule if production qoutations are not signed off in the timeframes, however, the vendor has provided test equipment that will support the current schedule. The Technical Team are progressing the build required to support testing.

ACT Health Directorate

To:	Minister for Health	**Tracking No.: MIN22/1667**
CC:	Rebecca Cross, Director-General	
From:	Peter O'Halloran, Chief Information Officer and Executive Group Manager, Digital Solutions Division (DSD)	
Subject:	Digital Health Record (DHR) Program – Monthly Briefing November 2022	
Critical Date:	18/11/2022	
Critical Reason:	For the briefing to be available for the DHR Update with the Minister on Monday 21 November 2022	

Recommendation

That you note the Epic provided Executive Summary on the Digital Health Record, October 2022 at Attachment A.

Noted / Please Discuss

Rachel Stephen-Smith MLA …….. …../…../…..

Minister's Office Feedback

Background

1. At a meeting held with ACT Health Directorate (ACTHD) on 21 January 2021, you requested a monthly briefing on the DHR Program to keep you up to date with the status of the Program. These meetings have been scheduled for the third Monday of every month and commenced on 24 May 2021.

Issues

2. The DHR Program is currently in Tranche 2 – Delivering the Capability. The DHR System was implemented on Saturday 12 November 2022 at 5.30am.

3. Epic provided their status report for October 2022 on 9 November 2022 and reported the program at a 3/5 which is an improved status from last month against an average customer score of 3.45/5.

4. The following achievements have been delivered in the last month:
    - Manual Patient Administration System (PAS) data entry occurred over Saturday 5 and Sunday 6 November 2022. 95per cent total conversions occurred on that weekend and then soft Go-Live for the PAS functionality occurred on Monday 7 November 2022.
    - Manual Data Abstraction processes for therapy plans and six weeks of outpatient appointments occurred in the two weeks leading up to Go-Live. These processes were finished ahead of schedule in most areas (apart from Renal, Neurology and Cancer) however those areas were comfortable with the progress made.
    - 7-Day Go-Live Readiness Assessment was held on Friday 4 November 2022. Twelve issues outstanding were then moved to a daily Pre-Live Top10@10 meeting to review the progress on the outstanding areas. by Thursday 11 November 2022 there were only 3 Top 10 issues reported.
    - Go No-Go decision meetings were held on Thursday 11 November 2022 at 4pm and then 4 meetings were held at 11.30pm, 4.15am, 4.45am and 5.30am to review progress for Go-Live. All aspects of the Go No-Go decision-making framework were met except the Cutover activities from a technical perspective. The decision was made to progress with Go-Live with some outstanding interfaces that were then delivered by 8am Saturday 12 November 2022.

5. The issues that have occurred post the 12 November 2022 Go-Live are as follows:

    - On Sunday 13 November 2022, the DHR Production system was inaccessible from 11.46pm to 2.32am. This was a 2-hour 46-minute outage. This outage was caused by a failure in an element of the hosting infrastructure in our primary data centre in Fyshwick. A formal incident report is being compiled by NTT but the root cause of the issue (failure of Palo Alto firewall infrastructure) was partially remediated on Wednesday 16 November 2022 at 11pm.

- Once the system was back online, messages went out to MyDHR users for historical results within the system to say that a new test result was available. These results were all historical pathology and radiology results. Of the 186,000 Canberrans that have a MyDHR, around 75,000 received a message to say new results were available. There were reports that some people received other people's results but on investigation the DHR program found only 3 instances of this which were related to inappropriate merges of records (1 case involved twins and 2 cases involved same name and date of birth cases).
- As of Friday 18 November 2022, 8206 tickets have been raised for rectification since the DHR system went live on Saturday 12 November 2022. 5588 tickets have been resolved. There are no outstanding Priority 1 issues, 74 Priority 2 issues, 111 Priority 3 issues and the remainder are Priority 4 issues. The majority of Priority 4 issues are to do with user access and are waiting for the end user to tell the support line if they are happy that their access issue is resolved.
- The top issues reported to Friday 18 November 2022 through the Top10@10 meetings include the following:
    - User Access issues – these issues are lessening now we have had over 8,500 unique users access the system.
    - End User Device concerns – printers and scanners not working appropriately.
    - Business Continuity (BCP) Computers – some of the BCP computers did not have the correct area information in the BCP reports and then had challenges with printing. These have been rechecked and 6 Master BCP computers have been commissioned (2 at TCH, 2 at Calvary, 1 at UCH and 1 at Bowes Street).
    - Diet Orders – the information on patient dietary requirements was not consistently flowing through from Epic to the Food Services MyMeal and CBORD systems. It is not all diet orders, so it is making the root cause analysis difficult to find.
    - Health Link content and layout – Clinical Pathology reports were not formatted well when being sent through Healthlink to GPs. Epic have been working to improve the layout.
    - Scheduling – restrictions were placed in the system when configured that meant that an order needed to be completed before an appointment could be scheduled. This restriction has been removed and now patient appointments can be scheduled via a more flexible "Book It" functionality. The DHR program team will work with the health services on long term processes for scheduling appointments.
    - Patient Flow – there are several smaller issues that are combining to create patient flow issues within the system. There are issues with referral and results routing, the cleaning workflow, issues with the transfer centre and inpatient allied health care team challenges. These are all being actively worked on but together are slowing down movement through the system.

- Outpatient and discharge orders appear to be missing – this is a configuration and education process around different processes in different services (pools of information versus individual in basket messages versus work queues).

- F1 Learning Home Dashboard – this is where tip sheets on how to use the system are located. These are currently going to a SharePoint link, but that has been found to be unreliable. These will be moved to be stored within the Epic system.
- My Health Record interface for pathology results – this interface has been paused whilst we work on the issues related to cumulative results and the way they are displaying in My Health Record. Troubleshooting is occurring now with a timeline for fixing once the root cause is found.

6. The DHR Program will finish the hypercare period milestones for the DHR Program on Friday 9 December 2022. This is when resources will start to reduce from an Epic perspective, and we will commence transitioning to a stabilisation phase. That stabilisation phase will occur from 9 December 2022 to 10 March 2023. From beginning of February 2023, optimisation requests will be reviewed and prioritised to be completed in the system through regular change windows. The DHR Program will formally close on 24 March 2023 and will be operating as a Business As Usual (BAU) system with an ongoing support team in place by then.

Financial Implications

7. The 8-year DHR Program now has a total budget of $308.931 Million over eight years (including offsets) with the ACTHD portion of the Supplementary Business Case added. A deep dive of the financial position will be provided over the next month post Go-Live activities.

Consultation

Internal

8. Nil for the purpose of this briefing.

Cross Directorate

9. Over 500 subject matter experts have been identified from across the health services to provide key clinical guidance to the Program team to ensure the program remains clinically led.

External

10. Keith McNeil, Chief Clinical Information Officer, Queensland Health, is the independent Chair of the Program Board and Darlene Cox, Executive Director, Health Care Consumers Association ACT is a member of the Program Board.

11. External organisations such as Winnunga Nimmityjah Aboriginal Health and Community Services continue to be consulted through attendance at direction setting sessions and meetings with the Senior Director, DHR Implementation Project.

12. There are representatives from the following external organisations on the following Steering Committees for the Program:

Consumer Experience Steering Committee

- Health Care Consumers Association
- ACT Mental Health Consumer Network
- Carers ACT
- Meridian
- People with Disabilities ACT
- A consumer representative from Calvary Public Hospital Bruce

Union Engagement Advisory Committee

- Australian Nursing & Midwifery Foundation
- Australian Salaried Medical Officers Federation
- Community and Public Sector Union
- Professionals Australia
- Health Services Union
- Visiting Medical Officers Association (ACT)
- Australian Medical Association (ACT)

Work Health and Safety

13. The DHR Program have not received any issues with Work Health and Safety post go-live but will monitor with the health services.

Benefits/Sensitivities

14. A Benefits Realisation Plan was drafted by Abt Associates/ bdna and this has been endorsed by the DHR Program Board which includes 14 headline benefits incorporating the following items:

BM-001	Improved Standards of Clinical Care (NSQHS)
BM-002	Improved Patient Engagement
BM-003	Improved Patient Satisfaction
BM-004	Reduced Length of Stay (LOS) in Emergency Department
BM-005	Improved Throughput in Surgery, Procedures and Outpatients
BM-006	Reduced Adverse Drug Events (ADE)

BM-007	Internal Pathology Improvements through Legacy System Replacement
BM-008	Improved Dental Decision Making and Holistic Care
BM-009	Medical Imaging Department Process Improvements
BM-010	Integrated Patient Administration System
BM-011	Improved Activity Based Classifications through improved digital documentation
BM-012	Increased Capability to Extract Data for Research and Data Driven Decision Making
BM-013	Provider satisfaction
BM-014	Enhanced Integrated Care across CHS and CPHB

The DHR Program Business Intelligence (BI) and Data resources have determined 23 metrics that will form baseline data for these headline benefits. To establish a trend, the BI and Data team are gathering data from three years (for quarterly metrics) to seven years for annual metrics where possible. Baseline data is continued to be collected and will be provided through governance forums every six months.

Communications, media, and engagement implications

15. Communication and media engagements occurred over the Go-Live period.

16. The Program team would like to continue to work with your office through the ACT Health Communications team to provide you with the opportunity to participate in media or community opportunities for the Digital Health Record now it is in production.

Signatory Name: Peter O'Halloran, Chief Information Officer, Executive Group Manager, Digital Solutions Division — **Phone:** 5124 9000

Action Officer: Sandra Cook, Executive Group Manager, Digital Health Record — **Phone:** 5124 9129

Attachment

Attachment	Title
Attachment A	Epic Executive Summary on the Digital Health Record – October 2022

ACT Government | ACT Health

Digital Solutions Division Performance Report

October 2022

Issued 22 November 2022

Connecting Your Care

Contents

Cover photo – A collaboration of staff from the Health Services, Digital Solutions Division along with the Digital Health Record's vendor Epic, undertaking a workflow dress rehearsal within the operating theatres at the Canberra Hospital. Workflow dress rehearsals provide the opportunity to test the workflows that have been developed within the Digital Health Record in collaboration with the health services to ensure the theory is put into practice.

1. Service Metrics

1.1. Service Metrics Summary

DSD operates a 24/7 support service (Digital Solutions Support or DSS) to support our colleagues in the ACT public health system. This team operate out of the Digital Solutions Operations Centre (DSOC) at 4 Bowes Street Phillip.

The DSS team operates as our level 1 support service across the Territory with staff, citizens and external health professionals (from the ACT and interstate) able to access support by telephone, email, online portal and in person. The DSS team resolve many issues on first contact with issues that cannot be resolved in this manner handed off to our level 2/3 support teams (whether those teams be DSD, DDTS, NTT or the Calvary ICT team) in a manner that is seamless to the person seeking the support.

The volume of support can fluctuate significantly during the year based on the peaks and troughs of the ACT public health system (such as the on-boarding of new staff early in the calendar year).

As part of our client service revolution within DSD, we have established a series of performance goals or KPIs for our Technology Operations Branch team members that helps them to prioritise and support our colleagues across the system. These KPIs have been progressively introduced over the last year and will continue to evolve in the coming year.

Service	Time Goal
Request First Response	4 hours
Request Complete	24 hours
Password Reset Complete	2 hours
Urgent Request First Response	30 minutes
Urgent Request Complete	2 hours
Incident First Response	30 minutes
Incident Complete	4 hours

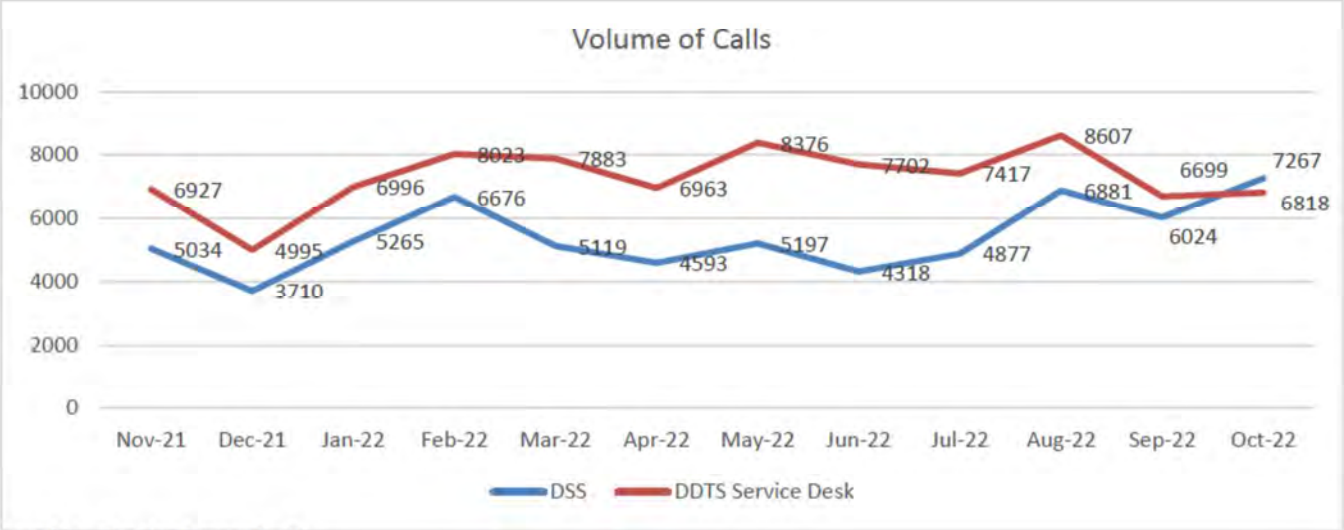
Where possible, we aim to include the last twelve months of performance to enable readers to understand our current month metrics in context. At times, we are unable to provide the full twelve months of data as the metrics may not have been collected in a manner that enables the analysis to occur or in other areas (such as digital records management) we may not have been providing the full service provision over 12 months. Further, where our metrics can be directly bench-marked against the whole of government DDTS provider, we also include their metrics to provide both context and to enable bench-marking to occur. DDTS metrics are sourced from the DDTS reports to the Quality and Measurement Advisory Committee (QMAC).

For this reporting period DSS seen an increase of phone calls and support requests. A contribution towards this was coordinating the end user training that was being undertaken in preparation for the implementation of the Digital Health Record.

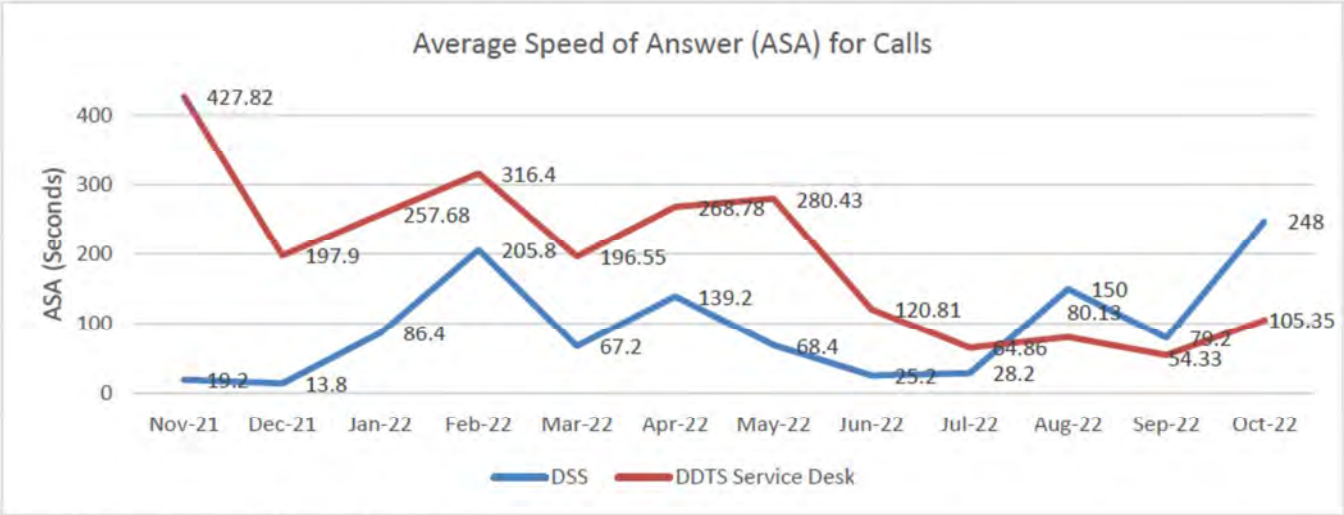
Another attributing factor was the need for a large group of users to update their passwords following the upgrade of the Clinical Patient Folder (CPF).

Monthly Request Summary

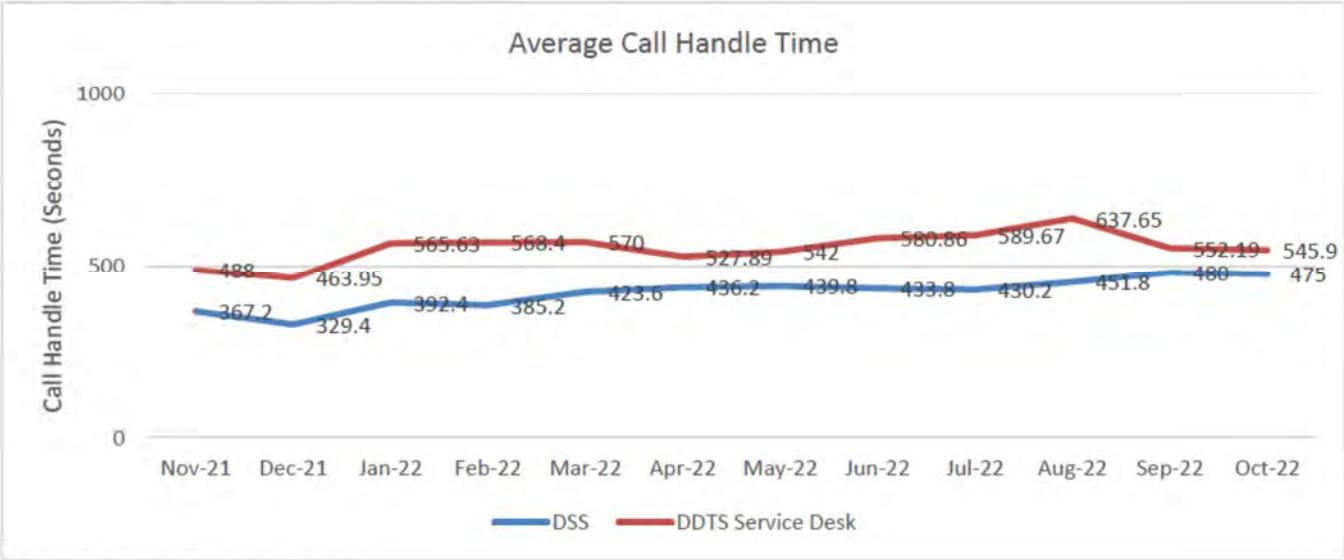
Metric	October 2022
Requests Created	9975
Requests Resolved	10054
Requests Open	640
Standard Requests Responded to within KPI Timeframe (4 hours)	81.70%
Standard Requests Resolved within KPI Timeframe (24 hours)	87.00%
Total Number of Urgent Requests	441
Urgent Requests Responded to within KPI Timeframe (30 minutes)	82.30%
Urgent Requests Resolved within KPI Timeframe (2 hours)	59.50%
Total Number of Password Reset Requests	1562
Password Reset Requests Resolved within KPI Timeframe (2 hours)	80.40%



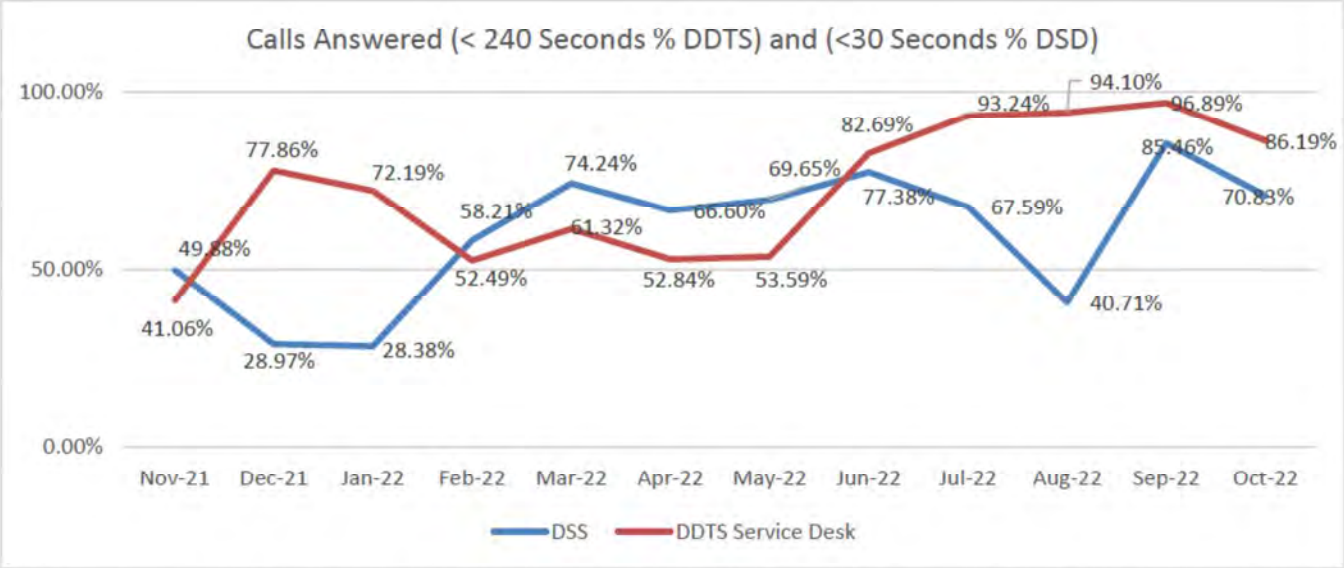
Graph 1 – Total volume of calls



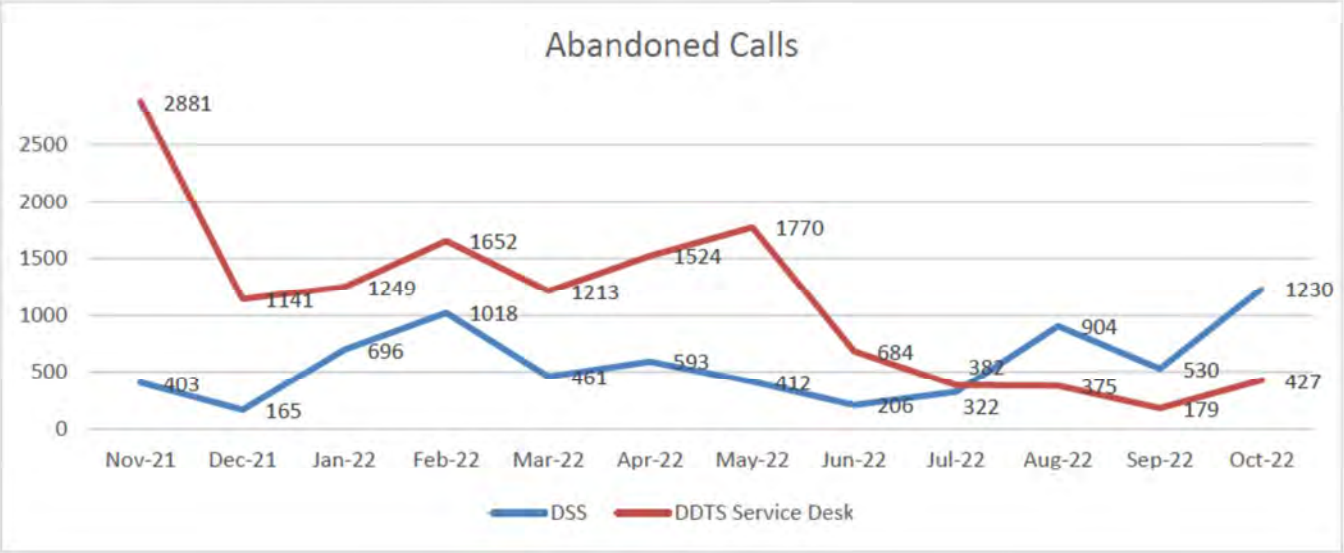
Graph 2 – Average speed of answer for calls



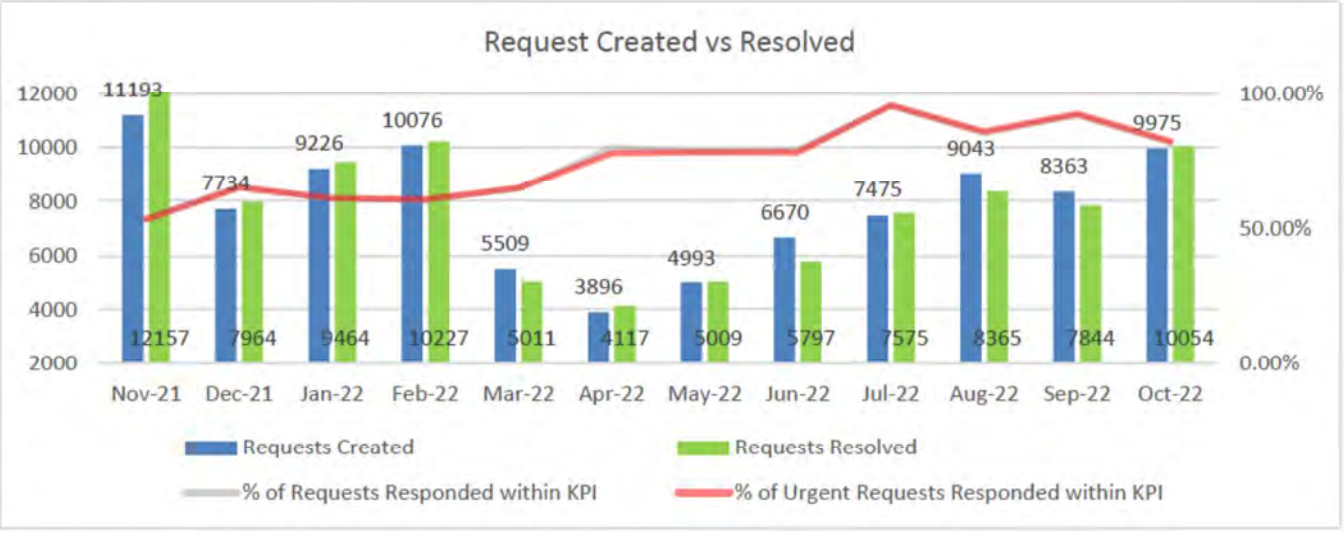
Graph 3 – Average Call Handle Time



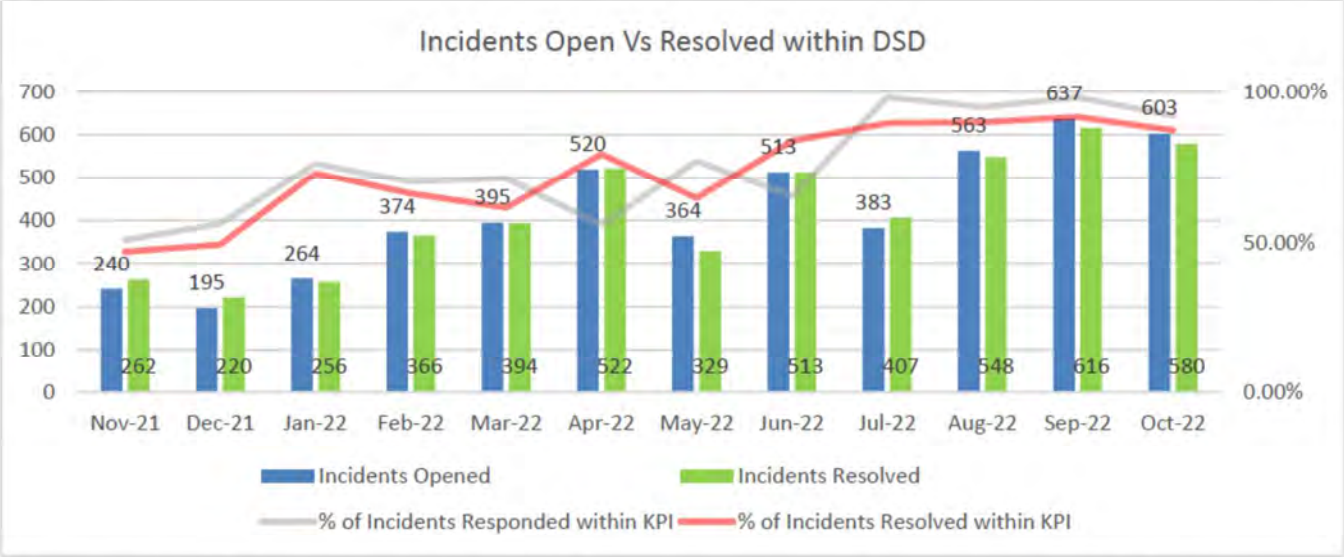
Graph 4 – Total percentage of calls answered within SLA. Please note DSD's SLA was previously set to <30 Seconds prior to September 22 in addition, DDTS numbers have all been retrospectively updated to represent the latest figures provided in the QMAC Report as there is discrepancies between the October 2022 and November 2022 reports.



Graph 5 – Percentage of calls abandoned



Graph 6 – Total number of requests open vs closed per month, including the KPI turn arounds on time to respond to standard and urgent requests.



Graph 7 - Total number of incidents created vs resolved per month, including the KPI turn arounds on time to respond to an incident and the resolution.

Graph 8 – Digital Solutions Division User Satisfaction rate out of 5 stars

1.2. Incident Management

An incident is defined as but not limited to an application system issue, fault, or unplanned downtime. DSD reports on all incidents where DSD is responsible for the service (ie excluding WhOG incidents managed and reported by DDTS).

Any issue may be categorised as an incident by either the user reporting the issue or by a DSD team member working on the issue.

Incidents are defined under four priority levels;

Priority 1 (Critical) – Total system dysfunction and/or shut down of operations, severely impacting government critical services
Priority 2 (High) – Disruption impacts effective delivery of business services of an entire site, which could impact other sites
Priority 3 (Medium) – Disruption to a number of services or programs within a site, possible flow on to other sites
Priority 4 (Low) – Some disruption manageable by altered operational routine in a local site, workarounds available

For this reporting period DSD recorded 603 new incidents raised with a total of 580 closed for the month. That left a total of 73 incidents open which weren't resolved by the end of the month. These incidents may require additional investigation for a solution in many cases workarounds are provided until a permanent resolution can be successfully tested and implemented through a structured change control process.

From the 603 incidents open, there were no critical (priority 1) incidents raised. There were 11 recorded as a high priority (priority 2) that are summarised in the table below.

Title	Incident Summary	SNOW #	Jira #	Priority
CPF – Read Only Issue	An issue occurred which resulted in scanned orders not transferring into CPF. The vendor was engaged, and the message feed was resolved.		DSD-243215	P2
Clinical Vision 5 (CV5)– Dialysis machines not connecting	The dialysis machines across several health sites were not connecting to CV5, DDTS were engaged to manually process the backlog of messages queuing up	INC0867335	DSD-243563	P2
MerlinMAP – System Licensing Issue	The system occurred a 10-minute outage across both CHS and CPHB. The vendor was engaged as this is a vendor managed service.		DSD-243793	P2
EMM MedChart	A server error occurred while users were trying to prescribe and administer medication. DDTS was engaged to host a	INC0859361	DSD-245287	P2

	session with the vendor to troubleshoot the server.			
CIS Unavailable	The CIS website was unavailable across CHS and CPHB. DDTS were engaged to restart the services	INC0862508	DSD-248301	P2
CHS RiskMan 'Out of Memory"	The RiskMan application experienced an outage across CHS due to memory issue. DDTS CAPS team were engaged to correct the URL on the server	INC0862699	DSD-248361	P2
EMM MedChart – DWS Stopped	The SQL server was unable to process a batch order, which stopped the processing. DDTS CAPS team were engaged to restore the services. This was escalated due to the peak time in Pharmacy to dispense medications at CHS.	INC0864859	DSD-250345	P2
ACTPAS – Message Feed	Some users reported an incident of message not coming across from the Emergency Department System to ACTPAS. DDTS were engaged to restart the services which resolved the message feed.	INC0865251	DSD-250803	P2
Kestral Orion interface	There was degraded performance in the HL7 feed on the Orion interface – DDTS were engaged to investigate the interface	INC0865545	DSD-251089	P2
EMM MedChart 3 Nodes Down	DDTS were engaged to restart three of the EMM nodes as they were appearing offline.	INC0867335	DSD-252927	P2
Clinical Patient Folder (CPF) Unable to access Login Page	Following the upgrade of CPF, end users were unable to access the login page due to a change in the URL – Communications were provided to end users until all links were updated		DSD-253910	P2

1.3. Change Management

All changes that occur within the ICT environment are documented in our IT Service Management tool (Jira) and undertake an established approval process. Changes are defined into four separate categories that are minor, major, significant and emergency. The category of the change request defines the approval process.

The definition of the changes recorded are:

Minor – Low risk, standard, repeatable, non-time critical and have a low risk/impact of failure

Significant – Moderate complexity with a moderate risk/impact of failure

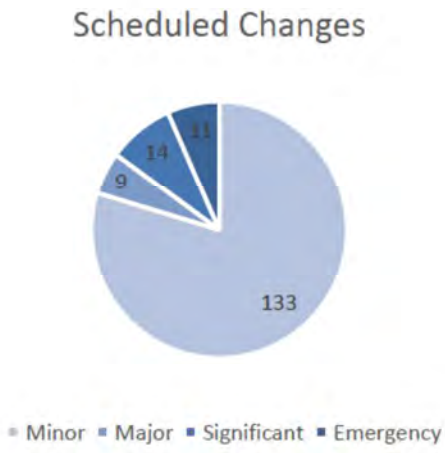
Major – High consequence of failure, that are technically complex, represent a significant financial investment or are politically sensitive

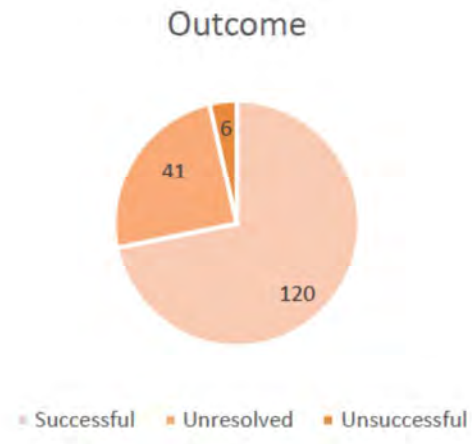
Emergency – Must be introduced as soon as possible to resolve an urgent incident address an unacceptable level of risk, or prevent disruption to critical business services

All Major and Significant changes must be considered through the Change Control Board (CCB) approval process prior to proceeding. The CCB met on the following dates for the reporting period:

- 05 October 2022
- 12 October 2022
- 19 October 2022
- 26 October 2022

1.3.1. Scheduled Changes





Emergency changes included of the following:

DSD implemented eleven (11) emergency changes during the October reporting period.
To summaries the top three, the first was a result of a high priority incident that occurred with the MerlinMap application in relation to the dispense and packaging module.
The vendor provided a hot fix which incurred a 5 minute downtime outside of the CHS Pharmacy business hours to implement a successful resolution.

A change was required on the Notifiable Diseases Management System (NDMS) to update the rules around the Covid isolation period to increase it to 35 days to ensure the system was in line with the latest public health advice.

Lastly a medication in the MerlinMap system was required to be reactivated following a brief period of being deactivated due to stock backorders.

Significant changes included the following:

There were fourteen 14 significant changes logged for the month of October, some of these changes to highlight included, implementing single sign on for the Digital Health Record production environments for Hyperspace and the mobile Rover devices.

Implementing a server connectivity product to allow 30 Electrocardiogram machines to connect to the Cardiology business system Epiphany/Cardioserver.

There were three (3) physical servers relocated that were being hosted in a temporary environment until a permanent location became available in October.

Unsuccessful changes greater than 30 days

CCB Approval Date	Planned Implementation Date	Change #	System Name	Description	Comment
03/06/2022	05/12/2022→ 25/01/2023	DSD-207244	Kestral-PLS	Medicare upgrade master change request.	Postponed due to external resource availability
17/08/2022	20/01/2023	DSD-227446	NxClinical	NxClinical upgrade to version 6.2	Awaiting business to review BCP for NxClinical
07/09/2022	TBC	DSD-233216	ProAct	ProAct – Reporting update to ensure compliance with mandatory Nurse ratio reporting requirements – Currently undergoing interface testing	Pending, expected to be finalised by mid-December 2022.

1.4. Legacy Records Management (Paper Records)

DSD manages the physical (paper) administrative files for the ACT Health Directorate and Canberra Health Services. With ACT Health undertaking the majority of record keeping digitally now, new paper files are primarily created for Canberra Health Services (only the ACT Government Analytical Laboratory team are still permitted to create new paper files in ACT Health).

The legacy records management is currently undertaken by a team based at the DSD warehouse in Hume where 205,872 files are currently stored in records boxes on box shelving. A file census was completed in early 2022 where 99.32% of files marked as located in the warehouse were sighted and recorded during the census. This was the first census undertaken in over a decade and followed significant consolidation (such as the closure of the Mitchell warehouse, Mitchell office and file rooms in building 5 and 6 at Canberra Hospital) and warehouse rearrangement at Hume over the last four years. The team are now actively searching for the outstanding files.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Service	Nov 21	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22
Record transfer of a paper files to another officer	3	0	0	1	0	0	2	14	6	25	12	24
Paper File Retrieval Request	6	1	2	8	10	9	10	5	14	12	18	27
New Paper File Request	204	177	136	175	241	101	164	216	181	160	192	161
New File Part Request	10	14	0	8	4	3	2	17	4	17	19	7
Transfer Paper File to Records/Storage	7	5	1	23	10	6	3	15	7	19	5	6

1.5. Digital Records Management

ACT Health continues to migrate all administrative record keeping over to digital (primarily using the WhOG Objective solution) with only one business unit still remaining on paper (ACT Government Analytical Laboratory) and one group of functions (ministerial) remaining in HP Content Manager. Migration of documents from the network shared drive (Q) across to Objective were undertaken throughout the month by DSS and the Records Management team as capacity in the WhOG instance permitted.

During July, drafting of the re-written ACT Health Records Management Policy and Records Management Procedures was completed and consultation on these documents was opened to all ACT Health staff. At the request of Canberra Health Services, these documents (and the ACT Health Records Management Program approved in March 2022) do not apply to Canberra Health Services who have undertaken to develop their own records management program, policy and procedures.

Canberra Health Services are undertaking all record keeping functions on paper at present and have not commenced the migration to digital records management. The decision on when and how to commence this migration rests with Canberra Health Services.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Metric	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22
General objective enquiry	4	4	4	10	5	35	50	44	43	60	44
Request Objective access + new user	10	6	9	11	3	31	42	51	37	31	16
Objective Training	0	1	0	4	4	20	119	149	26	35	14
Request Access/Restriction on a file or folder	1	1	0	7	1	7	14	24	19	19	19
Change an approver in Objective	1	4	15	8	7	12	33	40	43	24	20
Change to position number in Objective	0	0	0	0	0	2	2	12	5	5	4
Request to Deactivate Objective Access	0	0	0	0	0	0	0	0	2	7	3

2. Projects and Program

2.1. Summary Overview

The Digital Solutions Division (DSD) has a work program with 26 active projects in progress.
The Division tiers projects from 1 to 4 in accordance with the Portfolio Delivery Framework.
The Tier 1 projects are the most complex and Tier 4 are considered smaller and less complex.

Projects that have been classified as a Tier 1 or Tier 2 are required to report monthly to the Executive Sponsor and Chief Information Officer. The below reporting dashboards are derived from the reports submitted by Project Managers for the period ending 16 October 2022.

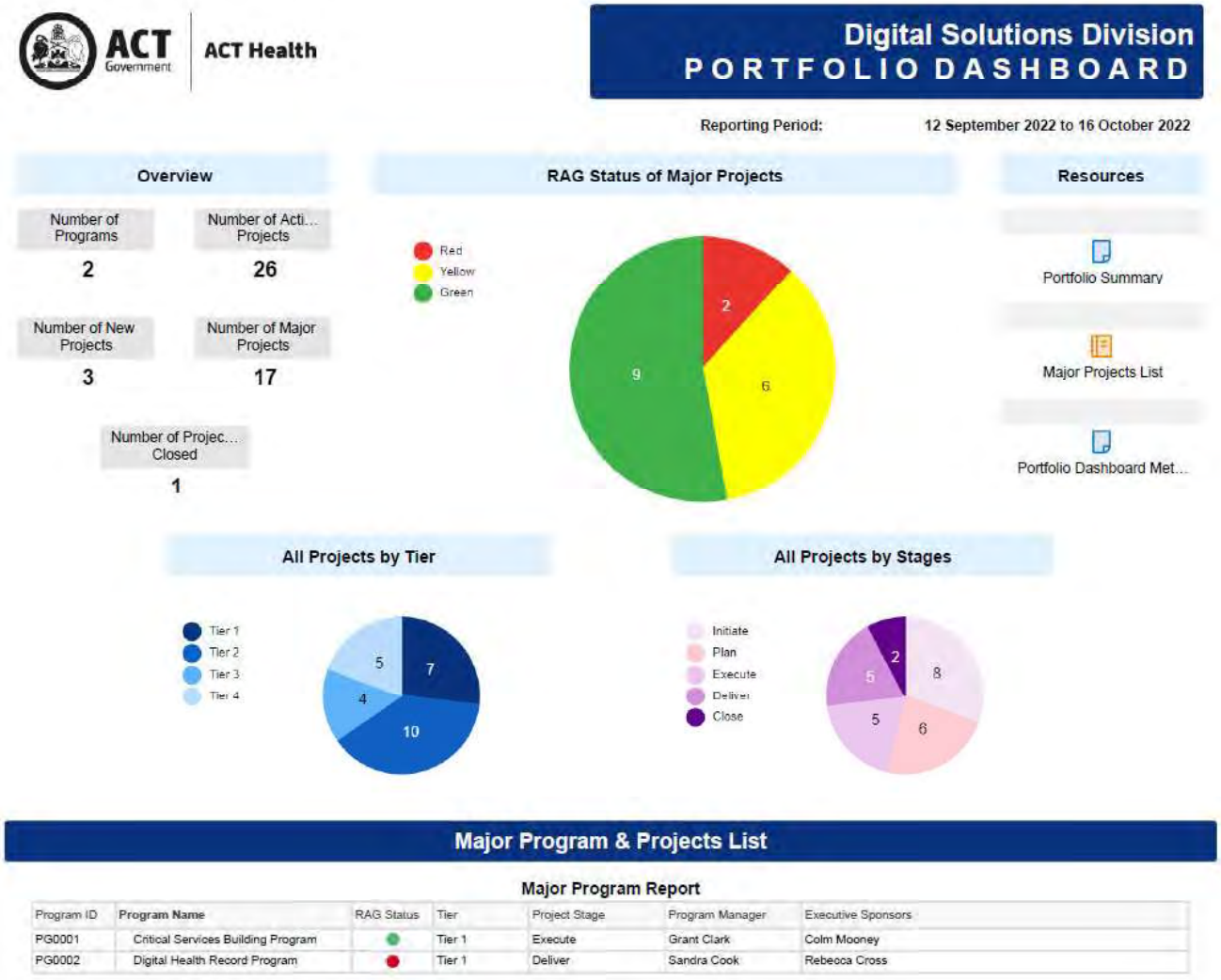
For the period ending 16 October 2022, of the 17 active major Tier 1 and 2 projects, there was only one project which was reporting one extreme issue which has carried over from the previous month. Pharmacy Inventory Management System (PIMS) Project reported their MerlinMAP implementation may delay Digital Health Record (DHR) interface testing.

Two projects (Digital Health Record (DHR) Technical Project and PIMS Project) are reporting an overall red status rating. The DHR Technical Project remains red for schedule due to delays with interface build, there are 13 risks that remain as high which has reduced the rating risk from critical the serious.
The priority for the technical team is to complete connectivity testing for these systems.

The PIMS Project is reporting red due to the schedule exceeding tolerances. CHS Merlin/MerlinMAP solution has deployed into production environment with a minimum viable product (MVP) on 26th of September and PIMS project has transitioned into BAU support. CHS MerlinMAP dispense module was deployed into test environment as part of Phase 2 on 4 October 2022 and incorporated the critical fixes in readiness for DHR go-live. It has been agreed by the Digital Committee and PIMS Board that other risks and issues associated with the system that are categorised as non-critical (high, medium, and low) will be addressed post DHR go-live.

The DHR Program is reporting red status for Risks and Issues, with 39 open risks and 13 of these rated as high.

2.1. Digital Solutions Divisions Portfolio Dashboard



Major Program & Projects List

Major Program Report

Program ID	Program Name	RAG Status	Tier	Project Stage	Program Manager	Executive Sponsors
PG0001	Critical Services Building Program		Tier 1	Execute	Grant Clark	Colm Mooney
PG0002	Digital Health Record Program		Tier 1	Deliver	Sandra Cook	Rebecca Cross

Major Project Report

Project ID	Project Name	Project Health	Project Tier	Approval Stage or Tranche	Digital Health Strategy Theme	Executive Sponsor	Go-Live Tracking
PJ0002	Centenary Hospital for Women and Children Expansion Project	🟡	Tier 1	Execute	• Patient-centred • Health services enabled by contemporary technology	'Chris Tarbuck	30/11/23
PJ0004	CSB (Critical Services Building) Main Build	🟢	Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology	'Chief Minister	31/12/24
PJ0005	Digital Health Record Implementation Project	🟡	Tier 1	Execute	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0006	Digital Health Record Technical Project	🟡	Tier 1	Execute	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0007	Digital Health Record Business Intelligence and Data Project	🟡	Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0009	Notifiable Disease Management System (NDMS)	🟡	Tier 1	Deliver	• Patient Centred • Research, discovery and collaboration	'Kerryn Coleman	22/09/2022 Phase 2
PJ0010	Power Billing and Revenue Collection (PBRC) Upgrade: Phase Two - DHR Integration, Pathology & Dental Billing	🟢	Tier 1	Initiate	• Health services enabled by contemporary technology	'Paul Ogden	18/11/22
PJ0011	Birth of a Child	🟡	Tier 2	Deliver	• Patient-centred	'Peter O'Halloran	30/06/23
PJ0012	Clinical Patient Folder v4-2 Upgrade	🔴	Tier 2	Deliver	• Patient-centred	'Paul Ogden	01/10/2022
PJ0013	Pharmacy Inventory Management System	🔴	Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology	'Peter O'Halloran	20/06/2022 (CPHB) 26/09/2022 (CHS);
PJ0015	TCH Building 12 ICU Redevelopment	🟢	Tier 2	Close	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/03/22
PJ0016	TCH Building 12 Medical Imaging Refurbishment	🟢	Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0017	TCH Building 19 Level 3 Pharmacy Refurbishment	🟢	Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/07/23
PJ0018	TCH Building 20 L1 RadOnc Linac Replacement	🟢	Tier 2	Deliver	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/12/22
PJ0019	Weston Creek CHC Medical Imaging Expansion	🟢	Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0033	Calvary Public Hospital Bruce OneID Implementation and EACS Replacement	🟢	Tier 2	Plan	• Health services enabled by contemporary technology	'Jarrad Nuss	30/06/23
PJ0036	BIS Upgrade Project	🟢	Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Julianne Siggins	09/11/22

Tier 3 & 4 Projects

Project Name	Executive Sponsor	Digital Health Strategy Theme	Approved Baseline Budget (Capex)	Approved Baseline Budget (Opex)	Approval Stage or Tranche
UCH Carpark Credit Card Payment	'Colm Mooney	• Health services enabled by contemporary technology	$0.00	$76,000.00	Close
TechLauncher Clinical Trials Administration System	'Peter O'Halloran	• Research, discovery and collaboration	$0.00	$50,000.00	Execute
MyMeal System Upgrade to v15	'Peter McNiven	• Patient-centred • Health services enabled by contemporary technology	$0.00	$10,000.00	Execute
Food Safety Monitoring System	'Colm Mooney	• Health services enabled by contemporary technology	$25,000.00	$0.00	Deliver
Mainpac Expansion	'David Jones	• Health services enabled by contemporary technology	$254,375.00	$38,958.75	Initiate
Electric Vehicle Charging ICT Standard	'Colm Mooney	• Health services enabled by contemporary technology			Initiate
Medical Imaging Additional Nurse Call Equipment	'Sean Fenotti	• Health services enabled by contemporary technology	$22,000.00		Initiate
DALI System Upgrade	'Chris Tarbuck	• Health services enabled by contemporary technology	$50,000.00		Initiate
TCH B3 L1 Rheumatology & Dermatology Consultation Room Upgrades	'Chris Tarbuck	• Health services enabled by contemporary technology			Initiate

Red Synopsis Report

Synopsis Status	Project ID	Project Name	Project Tier	Approval Stage or Tranche	Comments
●	PJ0012	Clinical Patient Folder v4-2 Upgrade	Tier 2	Deliver	Implementation before DHR go live is at risk for this project, with the number of defects and LDAP issues to be resolved. CPF product implementation is under daily attention of vendor's CEO.
●	PJ0013	Pharmacy Inventory Management System	Tier 2	Initiate	The project is reporting red with several identified risks and issues. Agreement from the board that this would only address issues prioritised as critical. Twice weekly meetings with the vendor to prioritise action between the parties.

Closed Projects

Project ID	Project	Project Overview
PJ0022	Proact Upgrade for HRIMS	Administrative closure with project dormant for over two years. DDTS to co-ordinate procurement for HRIMS component in the future.

New Projects

Project ID	Project Title	Project Overview
PJ0039	Medical Imaging Additional Nurse Call Equipment	CSI team to supply and install ICT hardware (including Test and Commissioning) to 4 beds of Nurse Call in Holding Bay; two annunicators in MI corridor and four Chimes to increase volume
PJ0040	DALI System Upgrade	Upgrade to the existing DALI centralisation system to enable effective use and access provisioning
PJ0042	TCH B3 L1 Rheumatology & Dermatology Consultation Room Upgrades	The refurbishment of office and storage space to increase consultation capacity by four consultation rooms. This will include ICT cabling and an upgrade to the Hills Nurse Call Solution.

Major Project Risks Heat map

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain	1		6		
Likely	1	9	15	9	
Possible	2	11	64	22	
Unlikely	2	37	35	13	
Rare	4	10	8	2	1
	Insignificant	Minor	Moderate	Major	Catastrophic

Major Project Issues Heat map

Primary	2	3	4	5	6
Issue Matrix					
Critical				1	
High		1	14	20	
Moderate	2	7	19	10	
Low	3	3	4		
Planning	1	1	1		
	Insignificant	Minor	Moderate	Major	Catastrophic

Major Projects Critical Risks/Issues Report

Project Name	Risk/Issue	Title	Residual Rating	Description
Pharmacy Inventory Management System	Issue	MerlinMAP implementation may delay DHR interface testing	Extreme	The PIMS and DHR teams meet with the vendor twice weekly to prioritise actions. CHS MerlinMAP dispense module was deployed on 4 October and incorporated the critical fixes in readiness for DHR go-live.

2.2. Major Projects (Tier 1 & 2) to be delivered by the end of 2022

Project Name	Tier	Scope and Status Update	Executive Sponsor
Digital Health Record • Implementation • Technical • Business Intelligence and Data Projects	1	Digital Health Record (DHR) will provide a person-centred view of clinical information at the point of care across public health facilities across the ACT and will significantly reduce the number of systems that staff need to access. DHR Implementation Project will deliver configuration, testing, implementation and training of all end users of the Digital Health Record. DHR Technical Project will deliver the technology components to support the migration of ACT Health systems, DHR and Related Systems environments, interfaces, end user devices, medical devices and foundational technology solutions. DHR Business Intelligence and Data project will engage expertise from Business Intelligence teams to deliver data and reporting capabilities.	Rebecca Cross
Notifiable Disease Management System (NDMS) (Phase 2)	1	NDMS Phase 1 - Implementation of Sunquest WorldCare and integration with RedCap used for public declarations and daily monitoring of people in quarantine was implemented in November 2021. Phase 2 – Implementation of 73 other notifiable diseases into Sunquest WorldCare, HL7 messaging and integration with ACTPAS. Implementation scheduled by the end of September 2022.	Kerryn Coleman
Clinical Patient Folder (CPF) 4.5 Upgrade	2	CPF and its data is being migrated to the NTT environment. The implementation of the upgrade to version 4.5 is being tested. The upgrade to version 4.7 is being built to include the DHR Interfaces. Once the vendor has completed their system testing it will be built in the NTT non-prod for testing before the environment is turned into production. The aim is to have all the work completed by the end of Oct 2022.	Paul Ogden
Pharmacy Inventory Management System (PIMS) project	2	The PIMS project will implement one consolidated PIMS across Canberra Health Services sites which will result in a more streamlined integration with the DHR. PIMS went live at Calvary Public Hospital Bruce and scheduled implementation at Canberra Hospital is for October 2022.	Peter O'Halloran
Power Billing and Revenue Collection Upgrade – Phase 2 DHR integration, Pathology and Dental Billing	1	The core upgrade phase of the project was delivered in December 2021. The project will deliver Phase Two which includes the DHR Integration of all DHR Modules, Pathology and Oral Health Services billing by 12 November 2022.	Paul Ogden

3. Digital Health Record (DHR)

3.1. Digital Health Record Program Report

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 Sept 2022 to 12 Oct 2022

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending

▲ Improving

Clinical Owner/s

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issu... Health Status	Scope Health Status	Benefits Health Status
🔴	🔴	🟡	🟢	🟡	🟢	🟢

Program Delivery Team

Approver	Sandra Cook
EBM, Future Capability	Justine Spina
Technical Project	Timothy Panoho
Implementation Project	Philippa Kirkpatrick
BI & Data Project	Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130.787.000.00	$50.733.242.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$57,481,489.00	$39,241,152.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting a red status due to risks to the schedule (particularly in the Technical Project). There are 13 risks that are rated as high. The reporting risk has improved from critical to serious. The technical project work to complete dependent systems in the health enclave is now reporting as critical but plans are in place to ensure the Go-Live critical systems are delivered into the health enclave by 12 November 2022. User access and provisioning is also rated at serious; work is continuing to gather the information on individual roles across the health service to ensure they get appropriate access to the system at Go-Live.

The Program Schedule is still tracking to 12 November 2022 Go-Live. The Critical Path for Go-Live has been developed and the DHR Program team are reviewing critical milestones against delivery of workstreams against critical dates for delivery.

The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Risks & Issues

Risks - There are currently 39 open risks. There are thirteen risks reporting a high rating:

#1 & 7 Insufficient Budget
#20 Data Quality in the DHR is poor
#22 The Clinical Record does not provide ready access to information
#24 Difficulty accessing historical data
#29 Clinical Engagement
#38 Slow decision making
#41 Health service resources unavailable
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues – there are 7 high issues still open the top one being: End User Devices are required to ensure access to the Epic solution for different roles in different ways. With COVID-19 there have been supplier delivery issues so orders need to be placed with regard to these lead times.

Budget

The total budget for the DHR Program is now $308.931 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $51.028 Million Treasury Operational and $122.622 Million in Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to August 2022 are as follows - Capital $74.283 Million (Budget $73.042 Million) Opex $16.635 Million (Budget $20.068 Million). There is $66.504 Million Capital remaining and $39.887 Million Opex remaining. At the end of August 2022, the total forecast over-expenditure for Capital over the 8 years is $2.313 Million and a forecast underspend of Operational expenditure of $16.262 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast overspend for the whole of life DHR Program at present is $23.376 Million over the 8 years with including the BAU expenditure which is 7% of the total $308.931 Million budget. Therefore, the budget will be reporting Amber as it is under the 10% tolerance. Detailed quarterly reports will be provided to the Board on November 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Jan 2023).

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 10 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assuran... review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post Implementation Review in April 2023.

Benefits

Abt Associates (in partnership with bdna) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified and this will be presented to the DHR Program Board in October 2022 for review and approval.

Scope

Scope refinements are being managed through Change Request processes. None have been raised in this period. Change freeze commenced as of 1 June 2022.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The DHR Technical Project is reporting red for schedule. More casual resources are being employed to assist with Technical Dress Rehearsal processes to improve this issue.

Project Summary Dashboard

DHR Technical Project

RAG 🔴 % Complete 87%

Trending ➖

The project status remains red due to schedule impacts. Architecture is continuing to progress with the Production build almost complete. The team are continuing to develop architecture templates and once these are populated they will go through the Technical Steering Committee for review and approval. Patient data was loaded into the production system for the purposes of pre Go-Live

Technical Dress Rehearsal (TDR) commenced 18 July 2022 and will continue through to 12 November 2022. There is a rolling plan for TDR across health service sites. Pilot Technical Dress Rehearsal (TDR) commenced 18 July 2022. There is a rolling plan for TDR across health service sites and as of 06 October 2022 31% of equipment has been tested and passed.

Four new interfaces were agreed to through a change control process. With these 4 additions, 97% Primary Functional testing of the interfaces have been completed.

DHR Implementation Project

RAG 🟡 % Complete 92%

Trending ➖

The Digital Health Record (DHR) Implementation Project is reporting an overall amber status and is improving.

Data Abstraction commenced on 4 October 2022. The first Cutover Dry Run was completed on 20 September 2022 and a second Cutover Dry Run will occur on 11 October 2022. The Patient Flow Day was completed on 27 and 28 September 2022 and Referrals Management Day was completed 5 October 2022. All of these activities are to prepare operational end users for the tasks required over the transition to the DHR to make the implementation as successful as possible.

DHR Business Intelligence & Data Project

RAG 🟡 % Complete 65%

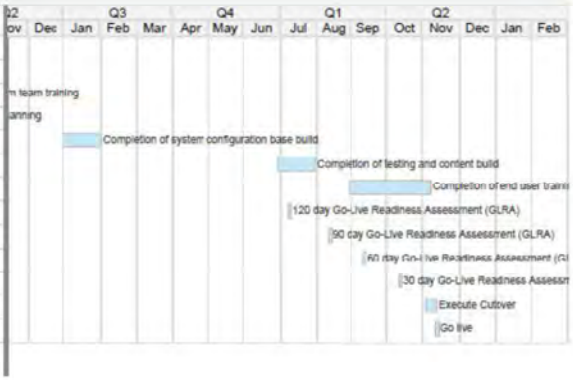
Trending ▲

This project is reporting amber and trending upwards. Scope for reporting for Go-Live is now locked in and testing has been progressing. 90% Dashboards, 75% Reporting Workbench reports and 86% Slicer Dicer models have been successfully tested and passed.

Key Program Activities

Key Program Activities

At Risk	Task Name	Start Date	End Date	Status
	Program authorised to commence	08/02/21	08/02/21	Complete
	Contract with vendor signed	01/01/19	01/01/19	Complete
	Completion of staffing and program team training	30/06/21	30/06/21	Complete
	Completion of detailed program planning	30/06/21	30/06/21	Complete
	Completion of system configuration base build	31/12/21	31/01/22	Complete
	Completion of tesing and content build	30/06/22	29/07/22	In progress
	Completion of end user training	29/08/22	04/11/22	Not started
	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	In progress
	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Not started
	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Not started
	Execute Cutover	04/11/22	11/11/22	Not started
	Go live	12/11/22	12/11/22	Not started



Financial Performance

Whole of Life Budget & Expenditure

CapEx

Budget	$130,787,000.00
Actual	$80,053,758.00
Variance	$50,733,242.00

OpEx

Budget	$57,481,489.00
Actual	$18,240,337.00
Variance	$39,241,152.00

Current FY 2022/23

Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		1	6	2	
Possible			2	5	
Unlikely					
Rare					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High				5	
Moderate			1	2	
Low					
Planning					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Program Risks

Title	Residual Rating	Description
Insufficient budget due to schedule delays	High	"Epic's implementation based on a time and materials approach. The burn rate for the program team is very high. Task costs not estimated correctly."
Insufficient budget due to lack of contingency.	High	There is no contingency in the budget as the market analysis for the Digital Health Record and third party products identified costs slightly lower than the now expected costs.
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields. "
The clinical record does not provide ready access to information.	High	"The record is difficult to navigate or strict access controls restrict appropriate access to information. Users and providers are not provisioned with the appropriate access.
Difficulty accessing historical data	High	Dependencies to migrate existing data into Clinical Patient Folder and the Data Repository are not achieved.
Lack of or insufficient clinical engagement in the development and implementation of the DHR	High	The Program may be delayed, or may not deliver a high quality outcome.
Schedule delays due to slower than required decision-making or revisiting decisions already made	High	The project will require a devolved decision-making framework to ensure decisions are made in a timely manner. If this does not occur due to stakeholder unavailability or inability to reach a decision, this will delay the project Scope creep/changes
Health services are unable to release staff for DHR requirements including training, certified trainers, superusers and data abstraction/conversion.	High	There is no funding for backfill of staff for training. High impact activties are scheduled for during the winter season. Staff for backfill may not be available due to the geography of the Territory.
The team are unable to complete all tasks in accordance with the schedule.	High	Causes of task non-completion may include: - The scope of work is larger than originally anticipated and there are issues that arise that take longer to troubleshoot delaying delivery of tasks - Delays to decision-making - team member's performance is not as expected - delays due to external pressures such as COVID-19 - delays to dependencies including conversions, interfaces and user provisioning Task effort not estimated correctly Recruitment and onboarding of staff Unplanned leave Unidentified scope
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability.
Technical Architecture Documentation may be siloed and not sight clinical workflow requirements required to ensure a seamless clinical end user experience	High	Lack of architecture documentation and end user journey maps due to a lack of resourcing in the technical team
The DHR solution does not work in an efficient and effective way for end users at the time of Go-Live	High	Medical Grade End User Devices are not available in time for Go-Live, there are not enough devices for the workflow or the wrong devices are procured for areas making the workflow slower than anticipated.
The DHR system is unavailable for end users after Go-Live	High	Enterprise Infrastructure Capacity fails and the system is unable to be accessed

Program Issues

Description	Residual Rating	Action to Be Taken
Delays in the technical project have resulted in delays for the DHR Implementation Project. The is particularly the case for interfaces and conversions.	High	Turbo rooms and regular stand ups have been established to monitor this. The technical team has recruited addditional resources. This is being managed well and is improving. The majority of interfaces have progressed to achieve integrated testing cycle 1. This will remain a high issue until resolution.
There are over one million open referrals in ACTPAS	High	CHS and CPHB are taking responsibility for closing referrals no longer required. This work is progressing.
User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	This has significantly improved but will remain high until the providers can be tested, and the scope of provider creation is finalised. There are additional resources working on this and it is progressing well. A onboarding web form has been created and is going out to health services 12/08/2022 to validate data and ensure user logins are right during login labs that will occur directly after training sessions. Will close this action once login labs have occurred.
Extracts for PAS conversions remains delayed	High	A matrix of required data extracts and responsibility for their delivery has been created. Regular communication is occurring. This is now progressing but remains delayed due to competing priorities of the DHR BI and Data team.
Interfaces and AETHER integration delivery is behind schedule.	High	This is the primary focus of the team and weekly reporting to the Board on progress is occurring. The Technical Team have implemented an approach that will support hybrid solution for production. Four additional interfaces added as part of a change request process.
The interface with Breastscreen is delayed as the solution has not yet been finalised.	High	The Technical Project are completing audits and working through the gaps to identify quantities that need to be ordered. They have prioritised based on their knowledge of current lead times. The Technical Team have progressed with orders and expect to have all major procurements completed in the timeframe. However, risk to delivery of hardware is still ongoing at the manufacturers. The DG has signed the upgrade for the BIS product and an interface with the current BIS has been developed and is in testing with the intent to reuse the knowledge from that to assist.
The Philips Intellispace solution for integration did not meet timeframes required for implementation to allow testing in integrated testing cycle 1. In addition, the production hardware for Philips is also delayed due to ordering monitors.	High	Mitigations are in place that allow for testing in Cycle 2 of integrated testing. The vendor has outlined the risk to the schedule if production qoutations are not signed off in the timeframes, however, the vendor has provided test equipment that will support the current schedule. The Technical Team are progressing the build required to support testing.

3.1. Digital Health Record Implementation Project Report

ACT Health

Digital Health Record Implementation Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: As at 15 October 2022

Project Overview

The Digital Health Record Implementation Project will deliver the configuration, testing, implementation, and training of all end users of the Digital Health Record.

Trending

Stable

Project Governance

Project ID	PJ0005
P3M ID	PROJ10112
Approval Stage	Execute
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Philippa Kirkpatrick
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issu... Health Status	Scope Health Status	Benefits Health Status

Project Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
02/08/21	02/08/21	$74,598,945.00	$27,252,781.00
Actual Start Date	Baseline Start Date	Baseline (Capex)	Variance (Capex)
30/12/22	30/12/22	$20,368,158.00	$16,611,567.00
Actual End Date	Baseline End Date	Baseline (Opex)	Variance (Opex)

Project Status Commentary

Project Status

The Digital Health Record (DHR) Implementation Project is reporting an overall amber status. It is reported as stable.

Four areas are reporting red. These are dental, patient administration, health information management and pharmacy. Training registrations have improved but still remain at around 75%. Courses are only 63% full for the week commencing 17 October, which is a concern.

Schedule

The implementation project is reporting amber for schedule. The team are now focussed on go-live critical activities with other requests being added to the optimisation register.

Super user training was successfully completed and end-user training is progressing well. Feedback is predominately positive. Training registrations remain lower than planned. Work on data extracts to support health services target those that have not yet registered is likely to assist over the coming weeks

The 60 and 30 day go-live readiness assessments were held according to schedule. 15 and 7 day GLRAs have been planned to review any areas still reporting a red status.

PAS conversions is behind schedule and represents the biggest risk to the go-live with regard to the deliverables of the implementation project. Additional staff have been allocated to support this effort.

Scope

The change freeze commenced 1 June 2022. Any requests for change from that point onwards will follow the agreed change control process.

An optimisation register has been developed to capture requests for changes that are not go-live critical. An Optimisation Framework is under development that will guide the management of optimisation activities including the prioritisation of work on optimisation requests.

A configuration freeze is planned for 31 October 2022. Any exceptions will need to be agreed at the Application Alignment Review.

Budget

The project budget remains to be forecasting a budget surplus. This may be reallocated to the program if it is not required but may be required to fund additional Epic resources at go-live.

The capital forecast has improved and is currently forecasting a surplus of $2.4 million. However, many team members are working overtime to get work completed, which requires access to this surplus. The operational forecast is $9.4 million under budget. This will be required to support the BAU team as the transition is made to that arrangement as some systems have been made read only rather than decommissioned while work is underway on the legacy data arrangements.

Risks & Issues

There are 6 risks rated high (noting that risks with a different source are counted separately). This is a reduction from 14. While some risks were resolved, the outcome for many was that they became issues.

The risks of greatest concern remain the health services ability to release staff for end user activities required as we approach implementation. While the approval of the business case has assisted, capacity issues at the health services mean this is still a significant risk for the project.

The other risk of concern is completion of training by all staff. Data has been improved to allow health services to follow this up.

There are 14 issues designated as high (increase of eight since the last report). Delays to PAS conversions as well as problems in the pharmacy space are the highest issue in the project. Additional staff have been allocated to support this work. There are also delays to technical dress rehearsal, which is impacting work including shadow charting and printer mapping.

Benefits

The project benefits are being managed at the program level and is reported in the program status report.

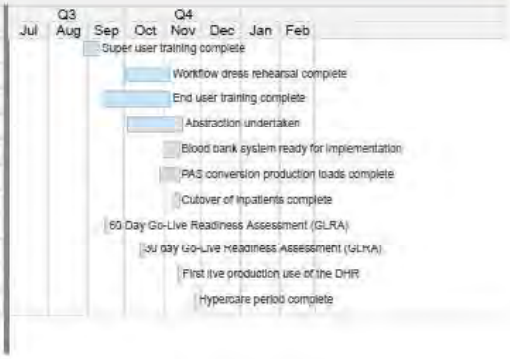
Quality

Quality and assurance activities are being managed at the program level and is reported in the program status report.

Key Project Activities

Key Project Activities - Implementation

Task Name	Status	At Risk	Start Date	End Date
Super user training complete	Complete		29/08/22	09/09/22
Workflow dress rehearsal complete	In progress		01/10/22	04/11/22
End user training complete	In progress		13/09/22	04/11/22
Abstraction undertaken	In progress		03/10/22	14/11/22
Blood bank system ready for implementation	In progress		01/11/22	11/11/22
PAS conversion production loads complete	Not started		29/10/22	11/11/22
Cutover of inpatients complete	Not started		07/11/22	11/11/22
60 Day Go-Live Readiness Assessment (GLRA)	Complete		15/09/22	15/09/22
30 day Go-Live Readiness Assessment (GLRA)	Complete		13/10/22	13/10/22
First live production use of the DHR	Not started		12/11/22	12/11/22
Hypercare period complete	Not started		25/11/22	25/11/22



Financial Performance

Whole of Life Budget & Expenditure

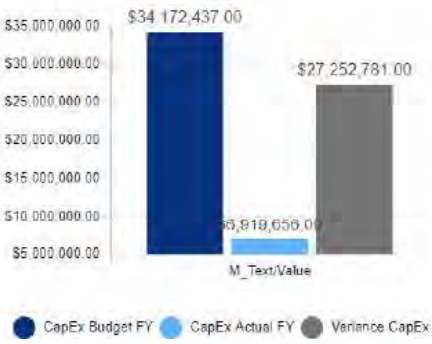
CapEx

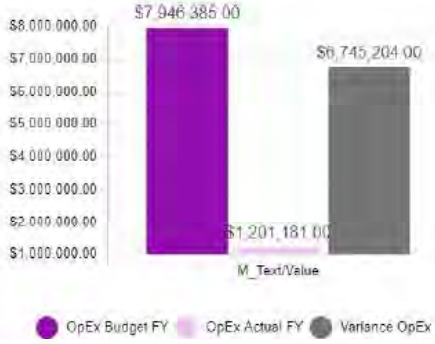
Budget	$74,598,945.00
Actuals	$47,346,164.00
Variance	$27,252,781.00

OpEx

Budget	$20,368,158.00
Actuals	$3,756,591.00
Variance	$16,611,567.00

Current FY 2022/23





Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		1	1		
Possible		4	9	2	
Unlikely		12	6	3	
Rare		1			
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Critical					
High			7	3	
Moderate	1	4	7	4	
Low		1			
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Project Risks

ID#	Title	Source	Residual Rating	Existing Risk Controls
DHRIMP01	Insufficient budget due to schedule delays	Epic's implementation based on a time and materials approach. The burn rate for the project team is very high.	High	A back on track plan has been implemented to remediate delays caused by COVID-19. Additional Epic resources have been procured to support teams that are behind schedule. Casuals have been recruited. The Board has approved progression to the testing phase while final configuration tasks are being completed. Additional funding has been allocated by Treasury to cover schedule delays due to COVID. Further schedule delays would result in significant additional budgetary requirements.
DHRIMP18	Lack of organisational readiness for such a significant change.	Failure to undertake Territory wide workforce planning, resourcing and infrastructure will negatively impact training. Currently no workforce plan in place.	High	Health services have engaged organisational readiness teams who are considering workforce planning. The impact has been reduced at 30 days until go-live given many resources have been identified. Abstraction and cutover planning are progressing well with resources identified for most efforts.
DHRIMP39	Health services are unable to release staff for DHR requirements including training, certified trainers, superusers and data abstraction/conversion.	Failure to release staff for training will impact go live. Training is scheduled during the Winter Bed Strategy period when bed numbers are increased and extra inpatient clinical staff are required to manage the increase in hospital capacity. High clinical demands may reduce the number of staff available to attend training.	High	CHS and CPHB will develop a Service Delivery Plan individually and then develop a Territory-wide workforce strategy to ensure staff are trained for go-live. Training may occur over 8 weeks instead of 6 weeks to allow staff more time to attend training, if they need to cancel due to clinical workload. (This would require DHR Board Approval to extend the training delivery timeframe). Provide 2 weeks of training after go-live for staff who have been unable to attend previous offerings. (This would not initially be available for bookings.) May require refresher training to be scheduled. Staff are being released but some staff have not yet registered for training.
DHRIMP40	Health services are unable to release staff for DHR requirements including training, certified trainers, superusers and data abstraction/conversion.	Health services are unable to release staff for DHR requirements including training, certified trainers, superusers and data abstraction/conversion. If staff are unable to be released from clinical areas due to high demand, training may be impacted and the number of trained staff will be significantly less then required for a successful go-live.	High	Training is planned to allow extra offerings to accommodate staff who are recalled to clinical areas. Agreed that 90% of staff should be trained for go-live, with an 80% target in the go/no-go framework. The Change and User Adoption Committee has been established which will identify issues which may impact on training. Superusers have been identified. There remains a concern that not all superusers will be supernumary.
DHRIMP49	The team are unable to complete all tasks in accordance with the schedule.	Causes of task non-completion may include: - The scope of work is larger than originally anticipated and there are issues that arise that take longer to troubleshoot delaying delivery of tasks - Delays to decision-making - team member's performance is not as expected - delays due to external pressures such as COVID-19 - delays to dependencies including conversions, interfaces and user provisioning	High	Back on track plan has been implemented to motivate the team as well as to concentrate effort on tasks required to be completed for application testing. Additional Epic resources have been engaged. Casuals have commenced to support the team. Go-live priorities have been identified.
DHRIMP52	Health services policies or procedures may not align with the configuration of the DHR.	Changes in workflows need to be reflected in changes in policy. The health services may not be resourced to undertake all required policy updates.	High	Health services leads are planning this work. A register of known policy changes has been developed.

Project Issues

ID#	Title	Description	Residual Rating	Action to Be Taken
DHRIMP-I16	Scope	There are over one million open referrals in ACTPAS	High	Discussions are underway about how to manage this including the BAU team doing some clean up. 28/1/2022 Lucas is leading this decision. Data has been provided on open referrals, which have no activity in the past 12 months, no future activity and were received >12 months ago. Seeking follow up 1/2 Met with Kerri last Friday. Has provided numbers for each service. Waiting for Dee to commence who will do the service-specific engagement. 11/2 Meeting each week with Dee. They are working on service-specific engagement. CPHB is not quite as bad but Lucas will talk to Rachael. 17/2 Dee working on service-specific engagement for CHS. Lucas to request contact from Rachael but the problem is a lot less. 18/3/2022 File is available in Kiteworks. Dee is commencing engagement with CHS staff. Lucas is getting access for Caitlyn. 26/5/2022 Weekly reporting on progress to commence next week. There is a risk that this will not be sufficiently cleaned up. 1/8/2022 There is no contract in place yet to perform this work. There are also concerns regarding system stability for the closure work and BAU to continue together. EBM, Future Capability is progressing the contract and overseeing this work. 15/10/22 The contract is in place and the work undertaken. Awaiting validation. This must be complete prior to PAS conversions.
DHRIMP-I23	Dependent projects	User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	Hakan Gultekin and Tim Panoho are leading this activity. Collection and analysis of data is progressing. Weekly reports on progress are provided to the Board. 16/3/2022 This is improving. It is now progressing and an initial upload of providers underway. 26/5/2022 Sonya Floyer has been engaged to support this work. 1/8/2022 Sonya to implement app to collect this data. 15/10/22 Data is being collected via a webform. However updated provider information will not be uploaded until late October.
DHRIMP-I24	People	Some staff have reported burnout or stress at rates that are not healthy.	High	This is a limited number of staff but has resulted in turnover. Managers are monitoring any staff where this has been reported, and for those that have remained with the team, there have been improvements. However, with high workloads and schedule delays, this issue may remain. Therapy dogs were organised. All staff were encouraged to take at least two weeks off over the Christmas period. 16/3/2022 Last week was meeting free week which was well received. Another time period when we will encourage leave is being identified (possibly last two weeks of July - one week per team member at their own choice) 26/5/2022 Additional boost request going in to support the team over go-live. 1/8/2022 Retention of some Boost over go-live has been approved. There is still some turnover in the team with two team members resigning in the past few weeks. Action is for ongoing monitoring by managers and escalation as required. 15/10/22 This continues and around 5 staff have left recently. Managers continue to support their teams and assist with prioritisation. The team is focussed on go-live critical activities.
DHRIMP-I29	Technical	The technical team has not yet determined the strategy by which users will access Epic. This includes where Imprivata will be used, and how users will access it remotely. This makes end-user engagement on the entire workflow difficult.	High	17/3/2022 Test scripts that incorporate SSO will be scheduled for late in the testing phase. Login strategy under development. 1/8/2022 A draft of the login strategy has been progressed and is undergoing approvals. It is expected that test workstations will be available to end users at the 90 day GLRA to reduce concerns it will not work. 15/10/22 While the strategy has been agreed, there remains an issue that some applications are unlikely to go-live due to security assessments not yet being complete. The shared iPhone solution has not yet been implemented which is delaying training of cleaners and other user groups.
DHRIMP-I51	Technical	iPhone shared arrangements have not been finalised.	High	17/2 The team has met with Hakan and will keep up to date with Hakan's work to deliver this 26/5/2022 The is progressing and is planned for delivery prior to go-live. 1/8/2022 Progressing but slowly. Action is for Hakan to deliver the solution for shared iPhones. 15/10/22 This is still not available, resulting in a delay to training of cleaners.
DHRIMP-I53	Data	Extracts for PAS conversions remains delayed	High	17/3/2022 Sean and Bill have developed a schedule with Shaun Griffith to support this effort. Some delays still occuring and have been escalated to Justine for management. 26/5/2022 Two additional resources have been identified to support this work. Sean/Justine supporting this from a leadership perspective. 1/8/2022 Ongoing delays with this work. Sean and Justine have agreed to allocate an additional data expert to support this work. 15/10/22 While this is progressing, it is still not complete. Sandra Cook is managing this closely.
DHRIMP-I74	Training	Managers in HRIMS Learning are often incorrect and there is a concern that reporting functionality will not meet our needs.	High	26/5/2022 This has been escalated to the EGM, DHR who has been discussing with DDTS. Health services are also progressing a clean up of reporting arrangements. 1/8/2022 This is an ongoing issue. It is being fixed gradually by managers. 15/10/22 This continues to be an issue. The health services are now focussed on the people without managers list, as their training registrations are low.
DHRIMP-I79	Technical	The DHR team is experiencing ongoing issues with system accessibilty and slowness.	High	26/5/2022 This has become worse, with the training team unable to progress MST build some days as they could not access the environments. The technical team has advised this will not be prioritised for action until late June, after focus on prod build is complete. 1/8/2022 This remains an issue even after production infrastructure has been delivered. It is being investigated. 4/9/2022 Following some issues that occurred during the first week of training, this appears to have improved. This issue will be downgraded if this improvement is sustained for a further week. 15/10/22 This continues to be the case for training environments including play. It is being monitored.
DHRIMP-I87	Technical	Delays receiving messages into the DHR. This is delaying load of medications stocked in cabinets.	High	15/10/22 Being investigated by technical team
DHRIMP-I88	Technical	Merlin MAP went live at CHS and CPHB. However the environment is not stable.	High	15/10/22 Continue to investigate and resolve.
DHRIMP-I89	Regulatory	Slade report still not approved by the Commonwealth and NSW.	High	15/10/22 Peter O'Halloran to continue to escalate with FAS at Commonwealth
DHRIMP-I92	Workflow	CPF integration has critical defects	High	15/10/22 Monitor resolution of critical defects. CIO escalating with Infomedix frequently.
DHRIMP-I93	Technical	Dental MiPACS provisioning is delayed. Data migration plan not yet agreed.	High	15/10/22 Prioritise packaging of dental solutions.
DHRIMP-I94	Technical	MyDHR app URLs are not yet ready for provisioning to Apple and Google store, and security assessment not yet finalised.	High	15/10/22 Mel to continue to work with Epic to finalise this.

3.2. Digital Health Record Technical Project Report

ACT Government | ACT Health

Digital Health Record Technical Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme
- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 6 September 2022 to 10 October 2022

Project Overview

The Project will deliver technology components to support the migration of ACT Health systems, DHR and Related Systems environments, interfaces, end user devices, medical devices, and foundational technology solutions.

Trending
Stable

Project Governance

Project ID	PJ0006
Approval Stage	Execute
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Tim Panoho
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issu... Health Status	Benefits Health Status	Quality Heal... Status	Scope Health Status
🟡	🟡	🟡	🟡	⚫	🟢	🟡

Project Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
11/05/21 Actual Start Date	01/08/21 Baseline Start Date	$18,715,578.00 Baseline (Capex)	$6,098,627.00 Capex
07/03/23 Actual End Date	30/12/22 Baseline End Date	$11,070,267.00 Baseline (Opex)	$6,306,149.00 Opex

Project Status Commentary

Project Status

The technical project remains stable from the last reporting period, with the team continuing to work hard to complete key tasks and outstanding items. On 6 October the Technical Steering Committee agreed to the roll out of the Epic Hyperspace Production Citrix Icon.

Architecture
- Abstraction and third party readiness in production has started in October.
- Shadow Charting commences on 31 October.
- Penetration Report to be delivered on 4 November.
- Cut over dry run has commenced.
- PAS appointment/scheduling has commenced.

End User Devices
- The team are working to completed build instructions for SOE deployments (Trackboards/Welcome/ Patient Boards).
- The team are actively testing on site deployments (58%).
- The team are continuing to work with vendors to confirm delivery dates.

User Provisioning
- The team are continuing collecting Provider Information through the onboarding webform.
- The team are working to prioritise abstraction access.

Interfaces
- The team have completed 99.5% of overall scripts.
- The team are working on cutover plans and verifying that systems are ready.
- The team are working on getting Production Rhapsody setup and configured.
- Continuous progress is being made on outstanding interfaces:
  - CPF – access to system to perform regression testing post upgrade
  - Merlin – Vendor to work on bug fixes

Schedule

The interfaces build remains at serious due to the outstanding systems that have not passed connectivity testing, however continuous progress is being made on these. The team have completed 99.5% of overall scripts and are working on cutover plans and verifying that systems are ready. Technical Dress Rehearsal (TDR) remains at serious due to several concerns which have been escalated for intervention and plans in place to address:
- Concerns with the progress of the capital works project at CHS and when the infrastructure will be ready to accommodate the majority of new devices that need to be connected.
- CPHB infrastructure project delays impacting the teams ability to undertake TDR.
- Availability for TDR staff to turn up to restricted clinical areas.
- Device scope changes due to increases in requirements from new workflows in the DHR.

Large efforts from the technical team have resolved many issues in the environments including:
- Identifying the root cause of the slowness of login speeds

Scope

Original scope for the DHR Program (incorporating the Technical Project) was approved through the Digital Health Record Program Board at of August 2020 meeting.

The DHR Technical Project Initiation Document (PID) has been updated to split the Execute phase into two stages, build and test. The updated PID was approved by the Technical Steering Committee on 10 March 2022.

If variances in the scope for these occur through further engagement meetings, these will be dealt with as Change Requests.

Budget

To address the Capital overspent on this project, we have requested an operational funding reprofile to capital. For this year, $8.415 million in DHR recurrent funding will be moved to DHR capital funding.

Quality

A Quality and Assurance plan are being managed at the program level and is reported in the DHR Program status report.

Risks & Issues

Please refer to the risks and issues summary report below.

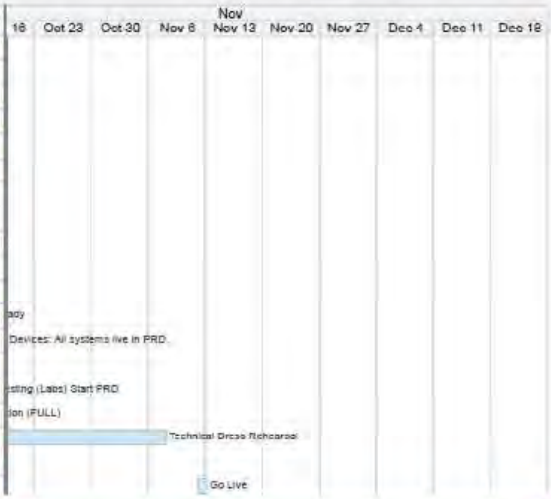
Benefits

Benefits are being managed at the program level and is reported in the DHR Program status report.

Key Project Activities

Key Project Activities - Technical

Health	Task Name	Start Date	End Date	Status	Milestones
	Interfaces: PRD DHR Integrated related systems connected	31/08/22	31/08/22	In progress	
	Load Provider (SER) PRD Records	08/08/22	26/08/22	Complete	
	Import EMP into PRD Hyperspace	08/08/22	26/08/22	Complete	
	September 2022 Upgrade	29/08/22	05/09/22	Complete	
	Imprivata PRD Completed	29/08/22	29/08/22	Complete	
	External Access Available: Public facing	12/08/22	12/08/22	Not started	
	Security Assurance: Pentest completed	26/08/22	26/08/22	In progress	
	PHI: First Patient Load into PRD	09/09/22	09/09/22	In progress	
	PHI: Kestral Data Load	12/09/22	12/09/22	In progress	
	Environment: Rhapsody PRD Environment ready	12/09/22	12/09/22	Not started	
	Active Directory Synch in place	20/08/22	20/08/22	In progress	
	PRD Downstream Systems Ready	25/07/22	30/09/22	In progress	
	Medical Devices: All systems live in PRD.	14/10/22	14/10/22	Complete	
	Business Continuity Tested	0 days	07/09/22	Complete	
	Login Testing (Labs) Start PRD	14/10/22	14/10/22	Complete	
	Abstraction (FULL)	14/10/22	14/10/22	In progress	
	Technical Dress Rehearsal	01/08/22	07/11/22	In progress	
	Milestone: Production Environment Completed	29/08/22	29/08/22	In progress	
	Go Live	12/11/22	12/11/22	Not started	



Financial Performance

Whole of Life Budget & Expenditure

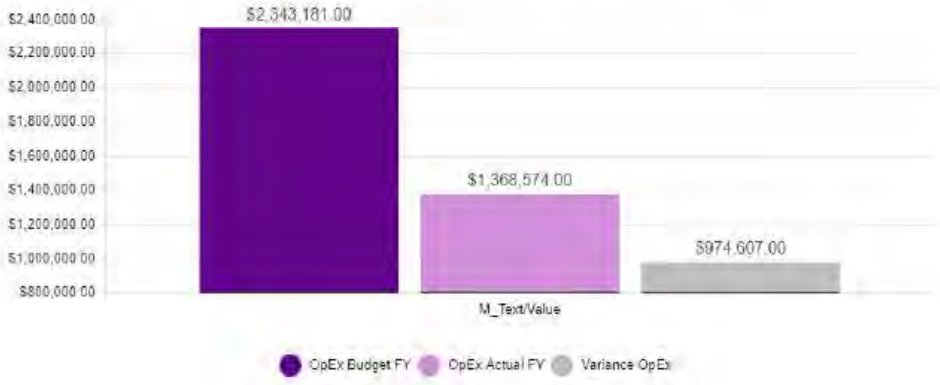
CapEx

Budget	$18,715,578.00
Actuals	$12,616,951.00
Variance	$6,098,627.00

OpEx

Budget	$11,070,267.00
Actuals	$4,764,118.00
Variance	$6,306,149.00

Current FY 2022/23



Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		2		1	
Possible			38	1	
Unlikely		2	5		
Rare	2	2	5		
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High				1	
Moderate			5		
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Risks

Title	Description	Residual Rating	Action to Be Taken
Difficulty accessing historical data in the timeframes of data conversions	Unable to provide the data from legacy systems in a format that clinicians can interpret. A risk exists for the following systems if we cannot convert all data into either the DHR or the data repository there will be a potential requirement to keep the system after go live. For example; Kestral has a complex data model that requires specific subject matter experts to extract from, the time to fully replace Kestral will not be possible within the timeframes of the DHR. Data from legacy systems have not been fully migrated into Epic, CPF, or the data repository. Access to data from vendor systems is not usable or trusted to provide an accurate patient record that is meaningful and fit for use.	High	
Third party vendor software do not meeting the compliance of the security requirements	Unable to migrate systems into the Health Enclave. Engagement from service providers, understanding a production environment to meet high availability. Service provider is not clear with the technical complexities with their software and require specialised resources. Service provider systems are developed with old technology that requires further risk assessments	High	Vendors that do not met strict security compliance measures for protecting data will be assessed and controls will be implemented to reduce the risk and mitigate any vulnerabilities by placing specific controls and boundaries around these solutions.

Project Issues

Title	Description	Residual Rating	Action to Be Taken
Technical - End User Devices	End User Devices are required to ensure access to the Epic solution for different roles in different ways. With COVID-19 there have been supplier delivery issues so orders need to be placed with regard to these lead times.	High	The Technical Project are completing audits and working through the gaps to identify quantities that need to be ordered. They have prioritised based on their knowledge of current lead times.

3.3. Digital Health Record Business Intelligence and Data Project Report

ACT Health

Digital Health Record Business Intelligence and Data Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 12 September - 16 October 2022

Project Overview

The DHR Business Intelligence and Data project brings together existing resources from across the health system business intelligence teams and engages expertise to deliver the technical and enabling capabilities, with the existing DHR project resources under a single project structure to ensure successful delivery of data and reporting capabilities.

Trending

▲ Improving

Project Governance

Project ID	PJ0007
Approval Stage	Plan
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Sean Winefield
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issu... Health Status	Benefits Health Status	Quality Heal... Status	Scope Health Status
●	●	●	●	●	●	●

Project Baseline

Current Schedule	Baseline Schedule	Baseline Budget	Budget Variance
01/03/22 Actual Start Date	01/03/22 Baseline Start Date	$1,496,215.00 Capex	$1,200,972.00 Capex
23/04/23 Actual End Date	23/04/23 Baseline End Date	$1,161,948.00 Opex	$4,964.00 Opex

Project Status Commentary

Project Status

- BI Summary of Work is finalised and has been circulated to WSMs, Epic AMs, and BI stakeholders at CHS and Calvary
- Sprint 11 commenced 10 October. Focus on finalising Day 1 deliverables
- Approximately 50 per cent of Day 1 deliverables are blocked by outstanding requirements/mappings
- BI team continues to liaise with Analyst/SMEs this week to compile information on registry governance and data sharing agreements
- BI Scope Freeze: New requests will be considered for optimisation post Go Live.
- There is a continuing focus on data mapping and the requirements for registries and custom metrics.
- Data Custodian and Steward policy has returned to the services for second round of consultation
- Build pass 1 complete for encounters and patients
- Data Capability approved by the Data WG
- Proof of Concept (PoC) environment fully operational
- Build environment connection to REL and PRD commenced
- Data Analytics Branch provided with raw submissions data
- Continued development of core reporting set, data elements and detailed design
- Full scale validation continued with Cv5 and Vims systems
- Historical data conversion to Epic; Pre-load, Delta load and cut-over planning in-progress
- Legacy System Executive Summary has been circulated
- Legacy catalogue in development
- Legacy systems cutover planning in progress.

Schedule

- Test build of national submission elements is at 95 per cent complete. Testing is in progress for elements that have been mapped.
- Scope for custom metrics is complete
- Custom metric build for reports and Dashboards 75 per cent complete
- Mapping of data elements complete
- Building and testing reports and dashboards in Epic (Workbench, Radar, SlicerDicer) required for day 1 are 90 per cent finalised
- Finalising Data and Reporting Security Procedures is scheduled to be completed by mid-September
- Delta load and cut-over planning in progress.

Risks & Issues

- New reports and dashboards continue to be identified as Go-Live critical
- Risk to Go-Live metric and reporting approvals with minimal remaining data working groups to endorse methodologies and outputs.
- Completion of Reporting content for end user training
- Post Go-Live roles and responsibilities need agreement across the three Health agencies
- Limitations with test data

Scope

BI Summary of Work identifies all tasks that must be delivered by Go-Live
Expanding - updates to the BI Project scope continue as new reports and dashboards are included that were not identified during the planning stage of the project. If these additions DO NOT have an impact on any of the other project's deliverables, they will be presented to the Data WG for noting only.

Budget

Budget is being management at the program level
The new project team is focused bringing the project out of critical and will refine the budget expenditure over the coming weeks to provide more detailed information by next month's status report.

Quality

Quality and assurance is being managed at the program level and is reported in the program status report.

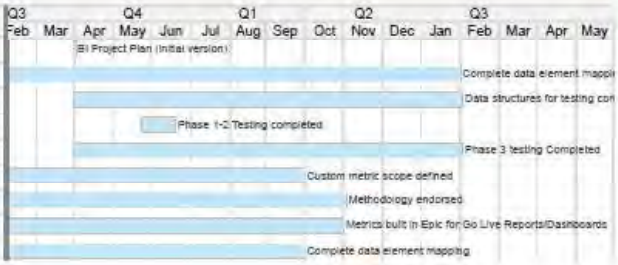
Benefits

Benefits are being managed at the program level and is reported in the program status report.

Key Project Milestones

Key Milestones Report - Digital Health Record Busi

At Risk	Health	Task Name	Start Date	Status
		BI Project Plan (initial version)	30/03/22	Complete
		Complete data element mapping	01/01/22	In progress
		Data structures for testing completed	01/04/22	Not started
		Phase 1-2 Testing completed	23/05/22	Not started
		Phase 3 testing Completed	01/04/22	Not started
		Custom metric scope defined	01/01/22	Complete
		Methodology endorsed	01/01/22	In progress
		Metrics built in Epic for Go Live Reports/Dashboards	01/01/22	In progress
		Complete data element mapping	01/01/22	Complete



Financial Performance

Whole of Life Budget & Expenditure

CapEx

Budget	$1,496,215.00
Actual	$295,243.00
Variance	$1,200,972.00

OpEx

Budget	$1,161,948.00
Actual	$1,156,984.00
Variance	$4,964.00

Current FY 2022/23

Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain			4		
Likely		1	5	1	
Possible		1	2	9	
Unlikely		10	4	4	
Rare				1	
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High			1	1	
Moderate			4	1	
Low			3		
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Risks

Title	Residual Rating	Action to Be Taken
National Reporting	High	Testing of data elements required for submissions. Close collaboration and communication with submission team. There are well-established processes for resubmission of data.
Critical Data Elements	High	We are working with app team and executives on mitigations, which include addressing through training Meetings will be scheduled week starting 5 September to discuss mitigation.
Limited Resources	High	Keep app workstream managers in the loop Escalate to senior management and executives as required
Changes to core system	High	Attendance at Change Control Meeting Communication to app teams the importance of consulting with BI and Data team on changes
Lack of organisational readiness for such a significant change.	High	Treatments include the health services recruiting additional staff to support the change management Robust end user training Data governance/literacy
Clients receive the wrong reports and use them incorrectly.	High	Efforts underway to identify users, job roles to ensure they are assigned to the appropriate user group and tiers Recruitment of additional staff to support change management Robust end user training Data governance/literacy
The Territory may have problems with national reporting and submissions during the transition period from existing systems to the Digital Health Record	High	Map data fields from the DHR into the ACT data repository. There are well-established processes for resubmission of data Sending brief to Minister and letter to DG and funding bodies about potential impact to submission timeline.
Inability to meet national submission requirements.	High	Testing of data elements required for submission Close collaboration and communication with submission team There are well established processes for re-submission of data
Loss of historical data - Audit data in chronicles is truncated regularly and if Clarity ETLs miss data it may be impossible to retrieve.	High	Regularly review all the specifications. Keep abreast of any new reporting requirements and/or standards Identify all relevant stakeholders for the BID project Extensive consultation regarding deliverable required by stakeholders Regular meetings with all stakeholders POTENTIAL: increase log audit retention in Chronicles, however, will affect cost and performance
Data migration is incomplete - Data is notified for migration prior to Go-Live	High	DHR Data conversion team is assessing the Legacy Systems migration strategy DHR and Epic are developing a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) ration strategy DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe Testing process is planned and coordinated with key stakeholders
Data is lost, corrupted or mapped incorrectly through migration progress	High	Legacy data is landed in the Data Repository Legacy data project will ensure documentation and processes are followed Validation sessions with clinical SMEs
Accidental release of confidential data -	High	Training in data governance and best practices Build secure data handling network zones
Software as implemented does not meet our mandatory reporting needs	High	Working with vendor to identify mandatory reporting concepts to ensure inclusion prior to Go-Live
Data Access & Security	High	Draft key procedures required for Go-Live and training Communicating dependencies and timelines to DAB for required policies Clear approval process
Waiting Times for ACT Consumer App	High	Work with Epic on what solutions will meet requirements Escalate decision if required before the next GLRA
Endorsed design for Data Capability	High	
Lack of dedicated resourcing	High	
Outstanding vendor-managed extracts	High	
Strategy for reporting of legacy data	High	Executive summary is being drafted will be available 2 September
Difficulty accessing historical data	High	a) Monitoring progress of the data migration into the data repository. b) Training staff in the data repository team early so that their work aligns with the future state after implementation of the Digital Health Record. c) Monitor the implementation of document level context switching in CPF. d) DHR Data conversion team and IDM team are assessing the Legacy Systems migration strategy with the intent that legacy system information will be migrated to either Clinical Patient Folder and/or the Data Repository and be the source for historic information. e) DHR and Epic have developed a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) and have this approved by the program governance. f) DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe g) DHR conversions team have developed business requirements for each system that will be converted upfront with the vendor agreed components h) Developing a proof of concept for a legacy data viewer for data that is unable to migrate to Epic"
Kestral Conversion	High	Will address the Rhapsody issue
Loss of Legacy system metadata	High	Consult with as many users to keep documentation and clarify metadata access from vendors.

Project Issues

Title	Residual Rating	Action to Be Taken
Unidentified scope	High	Extensive communication and consultation on the project scope App teams communicating with BI team about known report requests by SMEs Trainers collaborating with BI team on questions raised by end users during training
Recruitment and onboarding staff	High	Making sure recruitment paperwork is submitted in a timely manner Training is available and staff supported Training materials and documentation developed, including induction
Difficulty accessing historical data	High	DHR Data conversion team and IDM team are assessing the Legacy Systems migration strategy with the intent that legacy system information will be migrated to either Clinical Patient Folder and/or the Data Repository and be the source for historic information. DHR and Epic have developed a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) and have this approved by the program governance. DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe DHR conversions team have developed business requirements for each system that will be converted upfront with the vendor agreed components Developing a proof of concept for a legacy data viewer for data that is unable to migrate to Epic

4. Cyber Security

4.1. Cyber Incidents

Details of security related incidents, investigations and requests for information are not shared broadly across directorates due to privacy reasons, however statistics for ACT Health and Canberra Health Services are below.

The statistics in the cyber security section are supplied by DDTS quarterly.

During the most recent reporting period for DDTS (August 2022 – September 2022), neither DDTS nor DSD (including our vendors including NTT) have recorded any successful cyber attacks on our systems and infrastructure.

Investigations and Requests for information

Date	Reference	Investigation/RFI	Directorate	Status
30/08/2022	SEC-IST-22-125	E-discovery: Email	Health	Closed - Fully Resolved
27/09/2022	SEC-IST-22-156	E-discovery: Email and Messaging	Health	Closed - Fully Resolved

Incidents (5)

Date	Reference	Incident Type	Directorate	Status
18/08/2022	SEC-IST-22-110	Phishing Email	Health	Closed – Fully resolved
21/08/2022	SEC-IST-22-113	Malware	Health	Closed – Fully resolved
23/09/2022	SEC-IST-22-149	Phishing Email	ACT Health	Closed – Fully resolved

4.2. Operational Security Updates

4.2.1. Essential 8 maturity level

ACT Health has undertaken considerable work to establish the Health Enclave, which has enabled us to meet all the Essential 8 elements for hosting. The current maturity levels vary between level zero and three, however, ACT Health is on target to achieve a minimum of maturity level two across all the Essential 8 elements for hosting by 31 December 2022.

At a Whole of Government level, DDTS have a plan to reach maturity level one (the base level) over the coming years. Until DDTS reach a similar level of maturity in this space to that in the Health Enclave, this will continue to pose a significant security risk to our services and infrastructure.

4.2.2. National Critical Infrastructure legislation

The Commonwealth has amended the Security of Critical Infrastructure Act 2018 (Cth) (the Act) to introduce new regulations for Security of Critical Infrastructure (SOCI) and Systems of National Significance (SONS). This legislation expands critical infrastructure sectors and enhances protective security of these assets.

On 7 April 2022, the Minister for Home Affairs signed Application Rules under the Act to prescribe the following obligations under the Act to critical infrastructure assets not already captured under existing Rules:

Register of Critical Infrastructure Assets Reporting Obligation: An obligation to provide ownership and operational information to the Cyber and Infrastructure Security Centre, to commence on 8 October 2022.

Mandatory Cyber Incident Reporting Obligation: An obligation to notify the Australian Cyber Security Centre of a cyber-security incident within legislated timeframes, commenced on 8 July 2022.

DDTS and ACT Health are leading on the development of a Guidance/Protocol for the mandatory reporting of cyber security incidents under this obligation, including notifications to senior officials and stakeholders. DDTS will also record cyber security incidents reported under this obligation on a central whole of government register. ACT Health has collaborated with DDTS to update the whole of government incident response plan.

4.2.3. Privileged Account Management

DSD is in the process of implementing Beyond Trust's Privileged Account Management (PAM) solution within the Health Enclave. The benefits of this solution include the management of privileged accounts, vendor session monitoring/recording and password vault capabilities. Beyond Trust implementation has commenced with an expected go live date of late 2022.

4.2.4. Network and device visibility

DSD have procured ForeScout eyeSight and Medigate network device visibility tools to identify networked devices in ACT Health's various networks such as Pathology, Medical Imaging, Devices, Security and Radiation oncology. These tools enable us to identify and proactively address possible security vulnerabilities that may currently exist. The solution has been deployed and the team work with DDTS and CHS to remediate security issues as they are identified. Recent remediations include the identification and remediation of vulnerable computers in the Linac network.

4.2.5. Enabling port security on network switches (802.1X)

DDTS are implementing port level security (802.1X) across the ACTGOV network. 802.1X will improve the security posture of the ACTGOV network by preventing unauthorised devices from being connected. DSD have worked with DDTS to update all ACTHD network switches to 802.1x and are actively working with CHS to enable port security across CHS as part of the DDTS network modernisation project in 2022. Resource constraints within DDTS and hospital capacity issues within CHS are limiting the progress of this essential work, however plans are in place to accelerate this work in early 2023.

4.2.6. Network Monitoring and Segmentation

DSD has formed a working group with DDTS Security and DDTS Networks to explore network segmentation for health systems. This working group explores the current state of ACT Health's networks, limitations of current technologies used across ACTGOV and future requirements. This work will continue with the inclusion of the CHS CIO with the aim to implement improved network segmentation along with the network modernisation program. This work hasn't progressed as a broader project, however, it is being addressed as new systems are being brought online or migrated to the Health Enclave.

4.2.7. Personnel Security

We continue to engage the Australian Government Security Vetting Agency (AGSVA) through the Justice and Community Safety Directorate to assess various staff within DSD to a Negative Vetting Level 1 (NV1).

The staff that are being vetted are positions of trust and include staff that have elevated/admin access to multiple critical systems, can access and extract large amounts of sensitive data, have access to the data centres (which require an NV1 clearance) and other activities related to protective security functions.

There are approximately 317 staff that are fully vetted and roughly 50 staff that are in the process of being vetted.

4.3. Unsupported Operating Systems

4.3.1. Windows 7 Eradication

DSD and DDTS are collectively working towards reducing the Windows 7 devices across the ACT public health system. Over a 12-month period, we have seen a reduction of 265 assets removed from service or upgraded to Windows 10.

The below table provides an overview on the Windows 7 devices across the Government network in October 2022 excluding 39 kiosks in directorates outside Health which are being remediated in a separate DDTS project.

We are on track to remove all Windows 7 systems from the ACT public health system by the end of January 2023.

Directorate	Aug 21 – Oct 21	Nov 21 – Jan 22	Feb 22 – April 22	May 22 – July 22	Aug 22 – Oct 22
Health/CHS	312	165	58	57	47
Other	211	112	73	48	39
Total	523	279	131	105	86

4.3.2. Windows 10 – Out of Support

Windows 10 receives major releases every 12 months which remain in support by Microsoft for a total of 36 months. After this time security updates are no longer provided.

The below table provides an overview of the total number of devices that remain on an unsupported version.

Directorate	May 22 – July 22	Aug 22 – Oct 22
Health/CHS	24	14
Other	90	21
Total	114	35

DSS are actively pursuing all 14 machines to ensure that the latest Windows 10 updates are applied.

4.3.3. Legacy Servers

DSD have been working actively to migrate/decommission the Windows Server 2008. There are currently 27 systems, which are actively being address as a priority.

The follow table identified the legacy Windows Server 2008 operating system servers hosting Directorate business systems as at the end of September 2022. The count includes shared infrastructure servers used to host multiple Directorate systems such as IIS web servers and SQL servers.

Directorate	Server May Count	Server July Count	System September Count
Health	124	112	98
Other	174	151	151
Total	298	263	249

4.4. System Security Plans

Our Security Hub is actively working with relevant stakeholders, including DDTS Security, system administrators, vendors, and Business System Owners (BSO) to ensure business systems have up-to-date System Security Plans (previously known as Security Risk Management Plans). System Security Plans are being updated and/or developed as systems are being implemented, upgraded or migrated to the Health Enclave. System Security Plans for systems that will be decommissioned when DHR goes live will not be updated.

The below table is a snapshot from September 2022 outlining the status of the security plans across the ACT Government.

Directorate	Current	Expired	No Plan	Under Review	Not Required	Total
Health	13	21	17	14	15	82
Other	47	45	12	38	32	172
Total	60	66	29	52	47	254

The Security Hub are actively working to address the outstanding System Security Plans as can be evidenced from the table above where 14 are currently under review by either DDTS or DSD.

ACT Government | ACT Health

Digital Solutions Division Performance Report

November 2022

Issued 16 December 2022

Connecting Your Care

Contents

Cover photo – The official launch of the Digital Health Record on the early hours of Saturday 12 November 2022. Left to right, Philippa Kirkpatrick, Rebecca Heland, Sandra Cook, Rebecca Cross, Peter O'Halloran and Mallory Heinzeroth.

1. Service Metrics

1.1. Service Metrics Summary

DSD operates a 24/7 support service (Digital Solutions Support or DSS) to support our colleagues in the ACT public health system. This team operate out of the Digital Solutions Operations Centre (DSOC) at 4 Bowes Street Phillip.

The DSS team operates as our level 1 support service across the Territory with staff, citizens and external health professionals (from the ACT and interstate) able to access support by telephone, email, online portal and in person. The DSS team resolve many issues on first contact with issues that cannot be resolved in this manner handed off to our level 2/3 support teams (whether those teams be DSD, DDTS, NTT or the Calvary ICT team) in a manner that is seamless to the person seeking the support.

The volume of support can fluctuate significantly during the year based on the peaks and troughs of the ACT public health system (such as the on-boarding of new staff early in the calendar year).

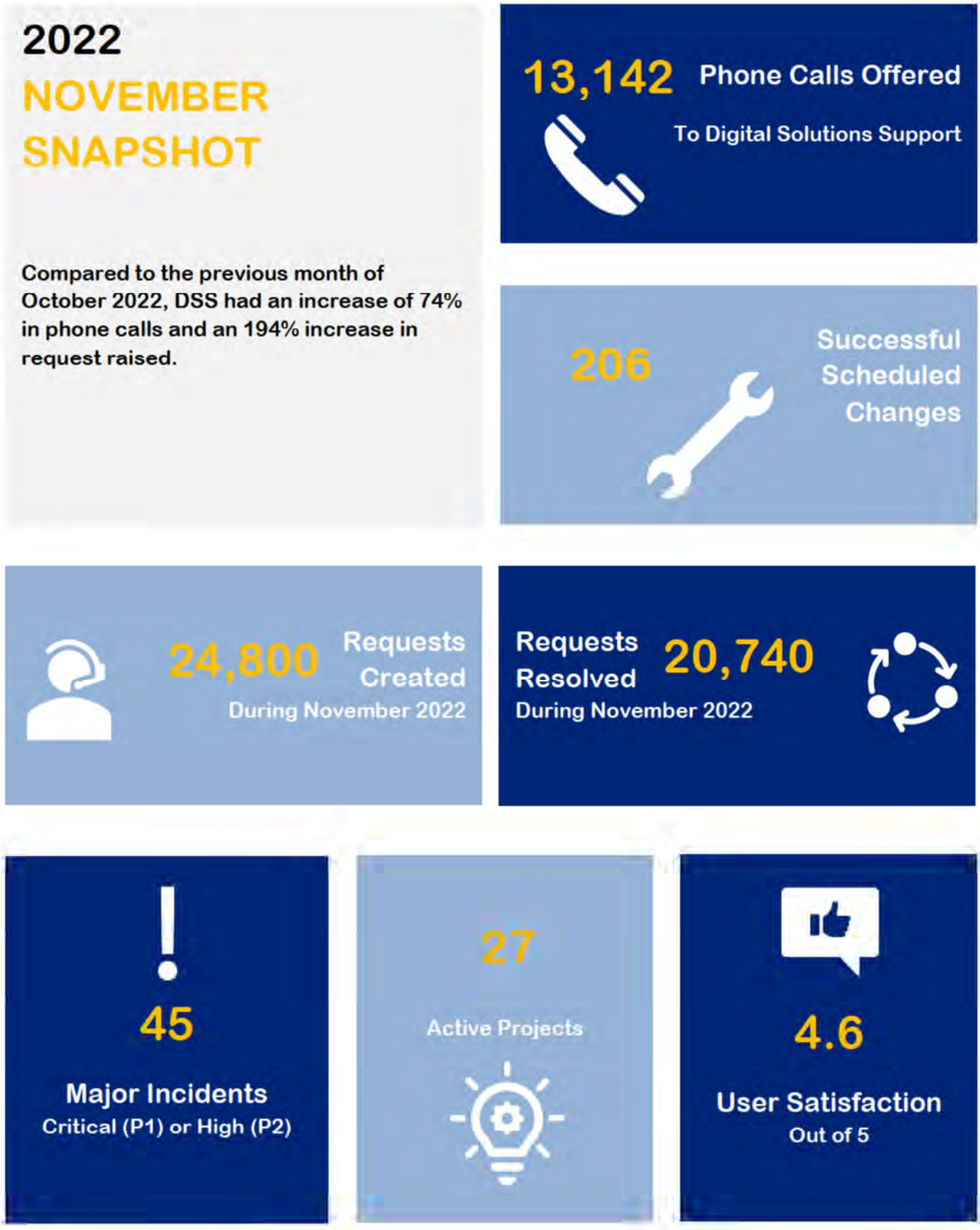
As part of our client service revolution within DSD, we have established a series of performance goals or KPIs for our Technology Operations Branch team members that helps them to prioritise and support our colleagues across the system. These KPIs have been progressively introduced over the last year and will continue to evolve in the coming year.

Service	Time Goal
Request First Response	4 hours
Request Complete	24 hours
Password Reset Complete	2 hours
Urgent Request First Response	30 minutes
Urgent Request Complete	2 hours
Incident First Response	30 minutes
Incident Complete	4 hours

Where possible, we aim to include the last twelve months of performance to enable readers to understand our current month metrics in context. At times, we are unable to provide the full twelve months of data as the metrics may not have been collected in a manner that enables the analysis to occur or in other areas (such as digital records management) we may not have been providing the full service provision over 12 months. Further, where our metrics can be directly bench-marked against the whole of government DDTS provider, we also include their metrics to provide both context and to enable bench-marking to occur. DDTS metrics are sourced from the DDTS reports to the Quality and Measurement Advisory Committee (QMAC).

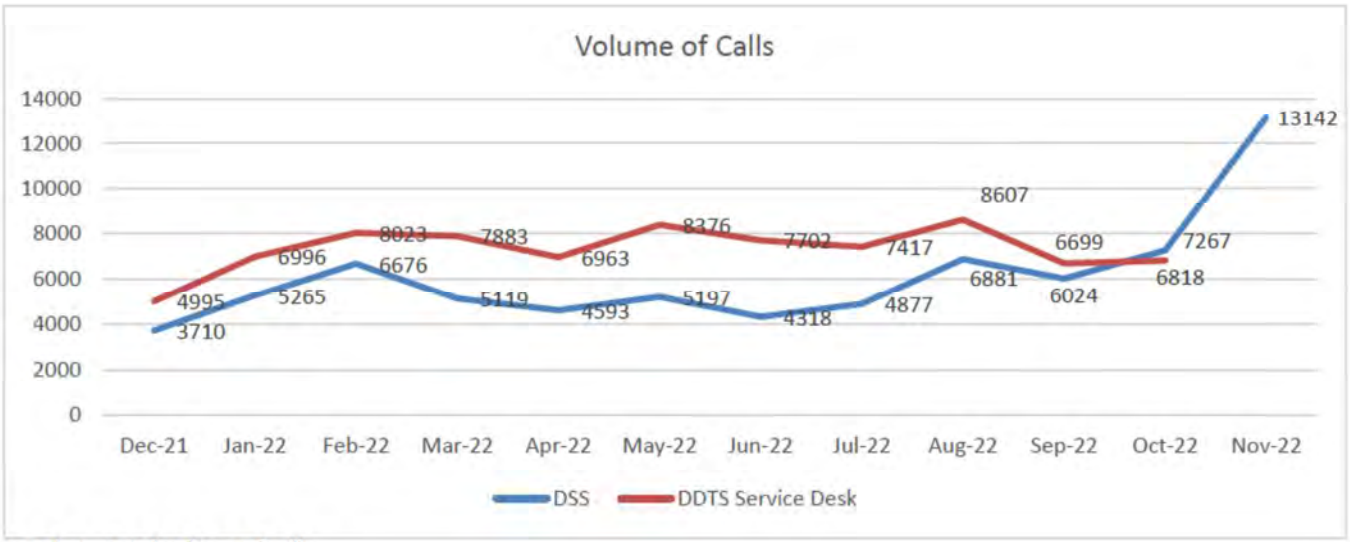
This reporting period was an extremely busy time for the entire Division as the Digital Health Record Go-Live occurred during the middle of this period. To support the Health Services across the Territory during the go-live/hyper care period the DHR program had a combination of Super User and Credentials Trainers onsite to provide face to face support to the change adoption. In addition to provide several escalation pathways to limit the disruption to clinical services.

1.2. Snapshot

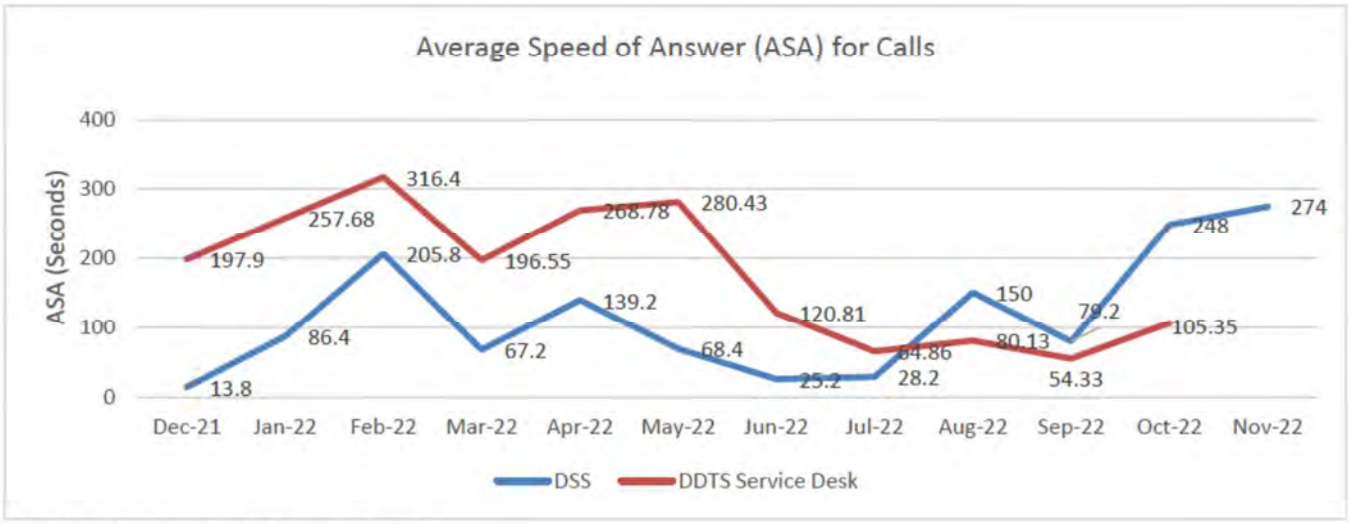

2022
NOVEMBER
SNAPSHOT
Compared to the previous month of October 2022, DSS had an increase of 74% in phone calls and an 194% increase in request raised.
13,142 Phone Calls Offered
To Digital Solutions Support
206
Successful Scheduled Changes
24,800 Requests Created
During November 2022
Requests Resolved 20,740
During November 2022
45
Major Incidents
Critical (P1) or High (P2)
27
Active Projects
4.6
User Satisfaction
Out of 5

Monthly Request Summary

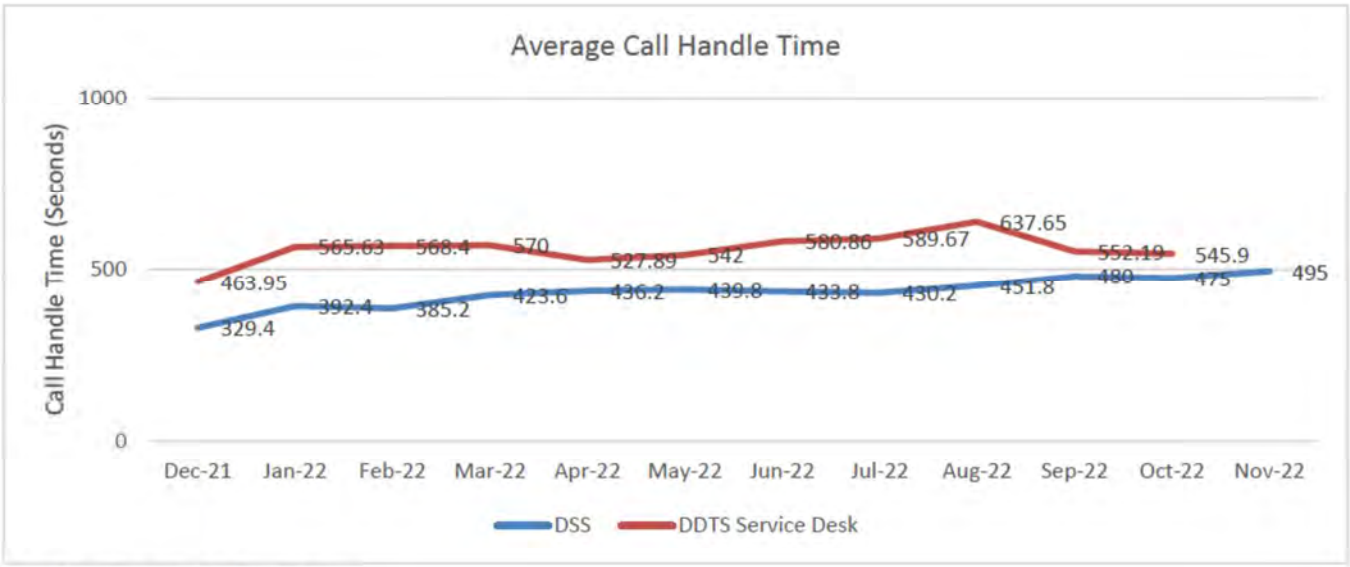
Metric	November 2022
Requests Created	24800
Requests Resolved	20740
Requests Open	3156
Standard Requests Responded to within KPI Timeframe (4 hours)	75.6%
Standard Requests Resolved within KPI Timeframe (24 hours)	83.2%
Total Number of Urgent Requests	1056
Urgent Requests Responded to within KPI Timeframe (30 minutes)	75.2%
Urgent Requests Resolved within KPI Timeframe (2 hours)	43.3%
Total Number of Password Reset Requests	2279
Password Reset Requests Resolved within KPI Timeframe (2 hours)	71.4%



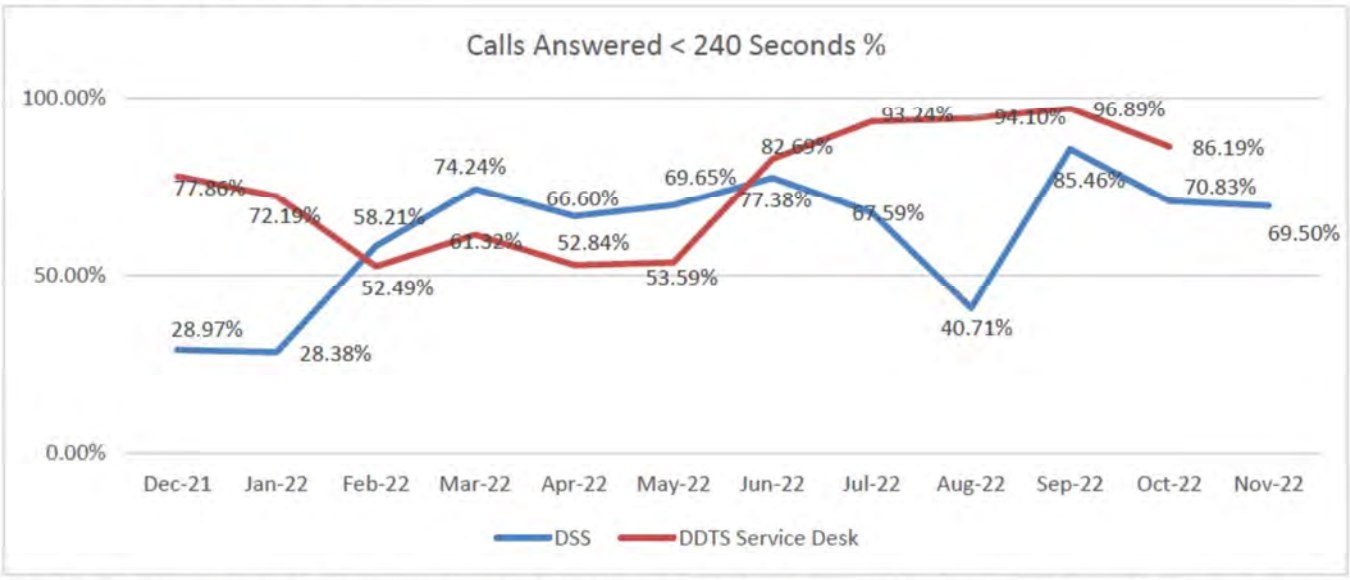
Graph 1 – Total volume of calls



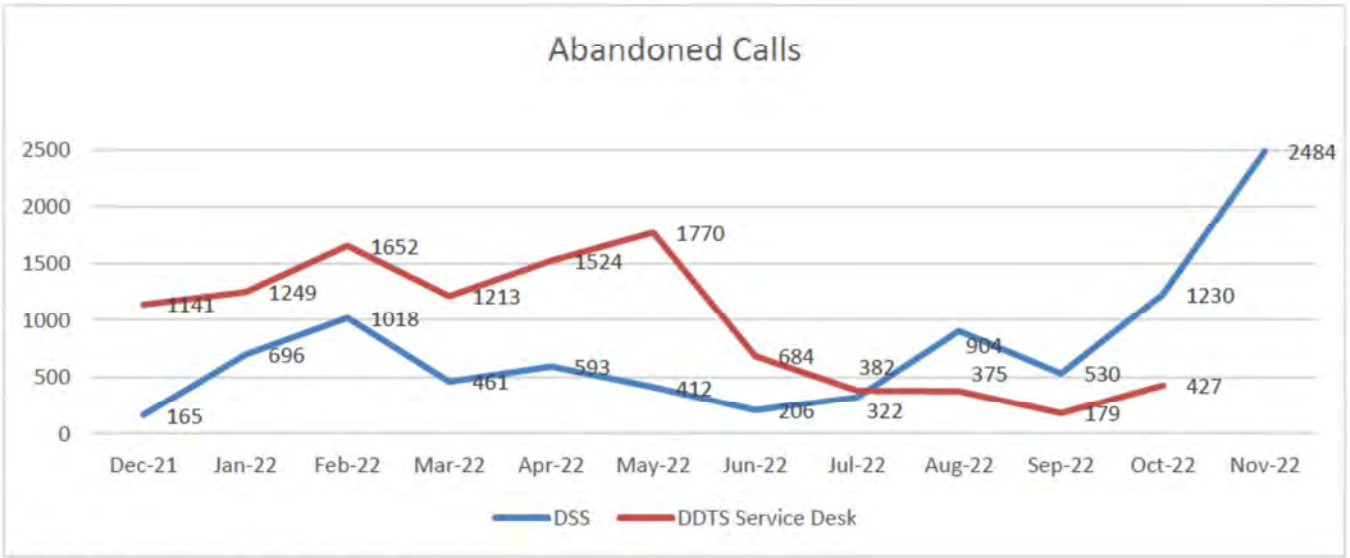
Graph 2 – Average speed of answer for calls



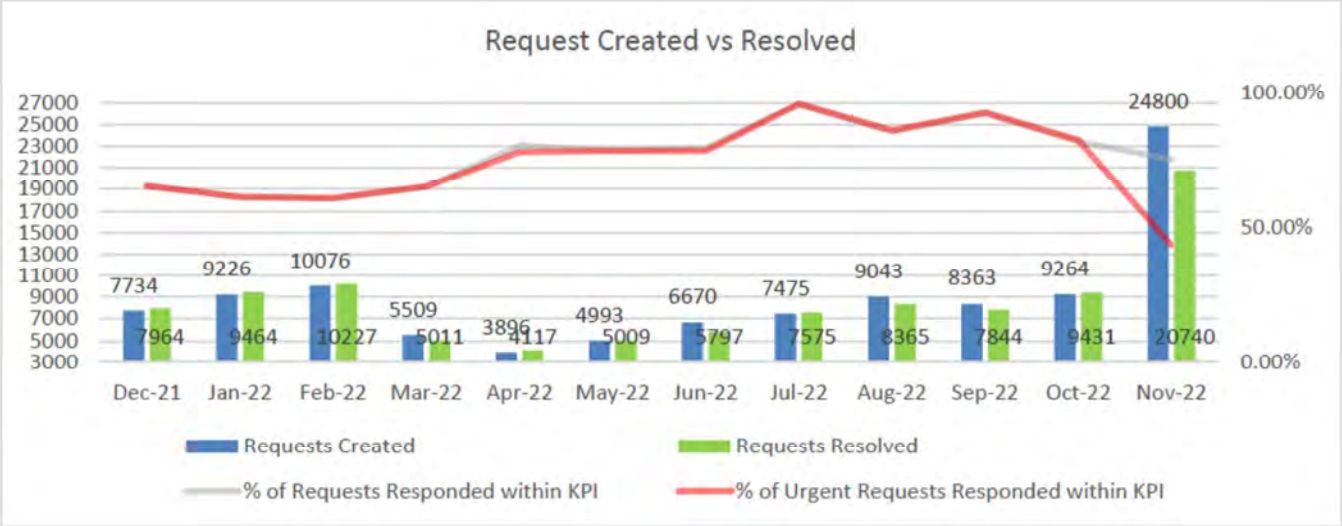
Graph 3 – Average Call Handle Time



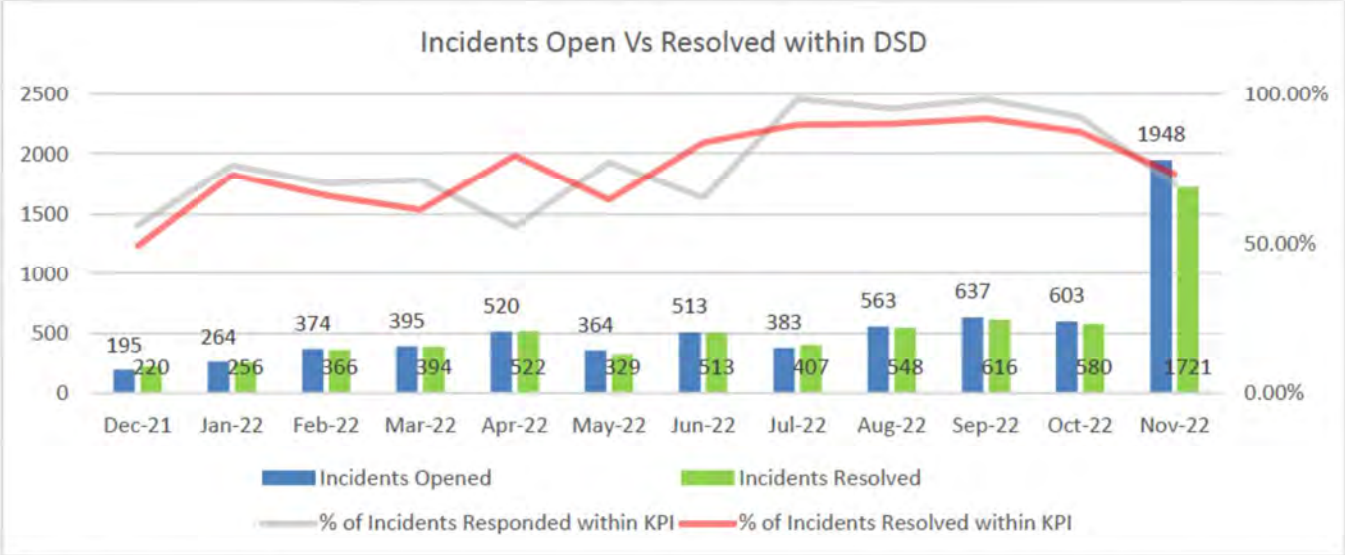
Graph 4 – Total percentage of calls answered within SLA. Please note DSD's SLA was previously set to <30 Seconds prior to September 2022.



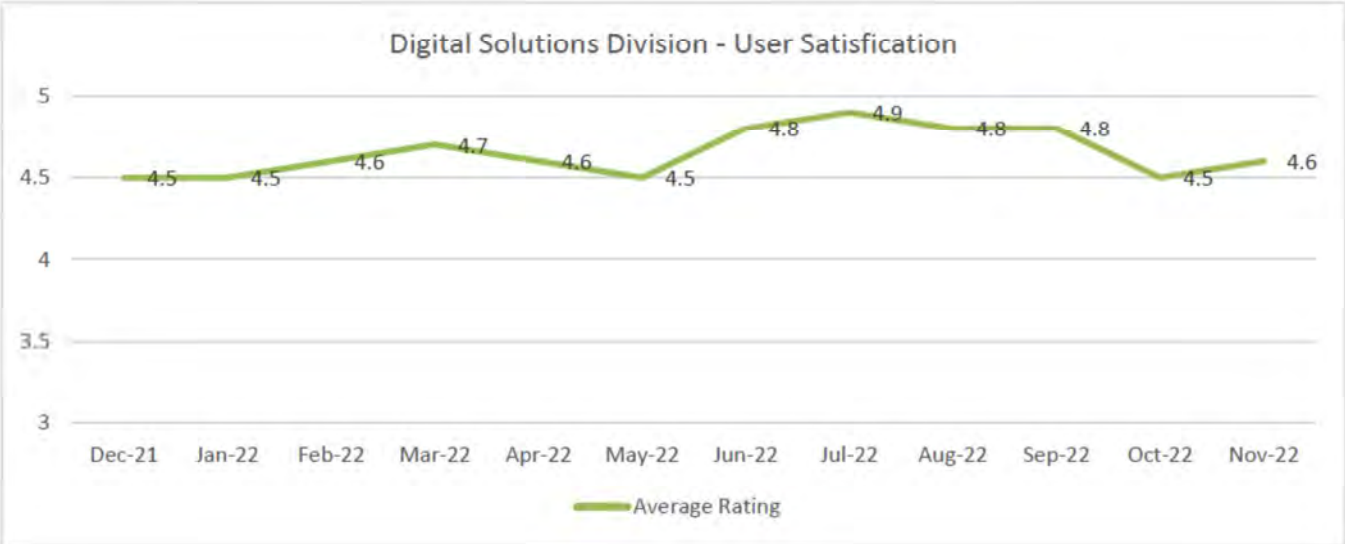
Graph 5 – Percentage of calls abandoned



Graph 6 – Total number of requests open vs closed per month, including the KPI turn arounds on time to respond to standard and urgent requests.



Graph 7 - Total number of incidents created vs resolved per month, including the KPI turn arounds on time to respond to an incident and the resolution.



Graph 8 – Digital Solutions Division User Satisfaction rate out of 5 stars

1.3. Incident Management

An incident is defined as but not limited to an application system issue, fault, or unplanned downtime. DSD reports on all incidents where DSD is responsible for the service (ie excluding WhOG incidents managed and reported by DDTS).

Any issue may be categorised as an incident by either the user reporting the issue or by a DSD team member working on the issue.

Incidents are defined under four priority levels;

Priority 1 (Critical) – Total system dysfunction and/or shut down of operations, severely impacting government critical services
Priority 2 (High) – Disruption impacts effective delivery of business services of an entire site, which could impact other sites
Priority 3 (Medium) – Disruption to a number of services or programs within a site, possible flow on to other sites
Priority 4 (Low) – Some disruption manageable by altered operational routine in a local site, workarounds available

For this reporting period DSD recorded 1948 new incidents raised with a total of 1721 closed for the month. A noticeable growth occurred on 12 November 2022 which aligns with the DHR implementation. The significant increase in numbers is not a true reflection due to a large number of requests being incorrectly raised as incidents due to the incorrect form type being used. This was rectified several days post go live by updating downstream links to the appropriate request types.

Given the increased volume of tickets there was a noticeable correlation with the KPIs, the 'time to first response' compared to the previous reporting period there was a 24% decrease in this area.

From the 1948 incidents open, two were classified as critical priority (priority 1) and 43 were recorded as a high priority (priority 2), some of these are summarised in the table below.

Title	Incident Summary	Jira #	Priority
DHR - Unplanned outage	The dedicated equipment that supports the Digital Health Record (DHR) and other systems experienced issues with connectivity. This resulted in a 2 and a half out window outage outside of business hours. NTT Engineers attended site to identify and rectify the issue. The root cause analysis identified a fault with the firewall.	DSD-263408	P1
DHR - Unable to log into Hyperspace PRD	Users that were assisting with pre-go-live activities were unable to login into the Epic Production (PRD) Environment. Issue was found to be a change made to the production NetScaler load balancer with services being restored once the change was rolled back.	DSD-258067 DSD-258071	P1

CV5 - System unavailable externally (NSW)	Users from NSW were unable to connect to CV5.It was found that the issue was caused by a damaged router at the Queanbeyan Renal space and was not caused by any ACT Health systems.	DSD-254549	P2
HL7Connect - KMG feeds unstable	Pathology results and orders were not being received or distributed. It was found that there was instability throughout the feed for 2 days before it appeared to self-rectify, service was restarted on the 8th and 9th of November respectively before it stabilised and returned to normal operation.	DSD-257911 DSD-258981	P2
Kestral CIS – System not responding	Some users were unable to view patient pathology results as they were unable to access CIS. CIS has had a history of becoming unresponsive, DDTS were unable to find root cause however the incident was resolved by restarting the server. Due to the system being migrated to a Read-only state, there was no further investigation on root cause.	DSD-257241	P2
NTT Citrix – Storefront and Hyperspace issues	Users were unable to start new Citrix sessions within the NTT Health enclave. This was due to storage issues within the NTT PGC Environment. Issue was caused by large snapshots being taken and stored on the affected servers.	DSD-258995	P2
MyMeal - Rhapsody messaging Issues between MyMeal and DHR	Messages from DHR were not feeding into MyMeal, causing disruptions with provisioning food to patients in the hospital. The issue itself was caused by issues with the ORM messages that feed from DHR to MyMeal which was successfully rectified.	DSD-275739	P2
MiPACS-Unable to Import Images to MiPACS	MiPACS was having permission issues which resulted in staff not being able to import images. A permissions change occurred which allowed staff to import images from the Soredex machines.	DSD-271449	P2
Clarity ETL – ETLs randomly getting stuck	It has been found that the ETL that is run overnight may sometimes drop and stop running. When they do not complete it causes disruptions to potentially critical reporting the next day. While the incidents have been resolved as they appear, there are further investigations ongoing to permanently resolve the issue.	DSD-277738 DSD-272153	P2

1.4. Change Management

All changes that occur within the ICT environment are documented in our IT Service Management tool (Jira) and undertake an established approval process. Changes are defined into four separate categories that are minor, major, significant and emergency. The category of the change request defines the approval process.

The definition of the changes recorded are:

Minor – Low risk, standard, repeatable, non-time critical and have a low risk/impact of failure

Significant – Moderate complexity with a moderate risk/impact of failure

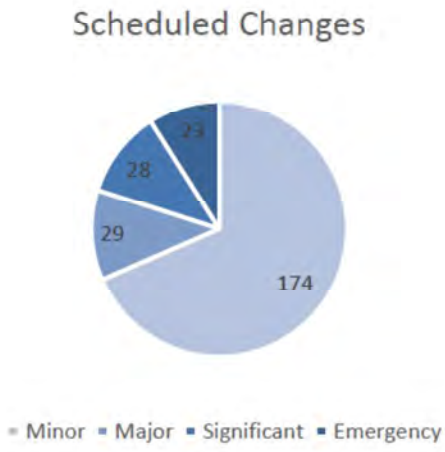
Major – High consequence of failure, that are technically complex, represent a significant financial investment or are politically sensitive

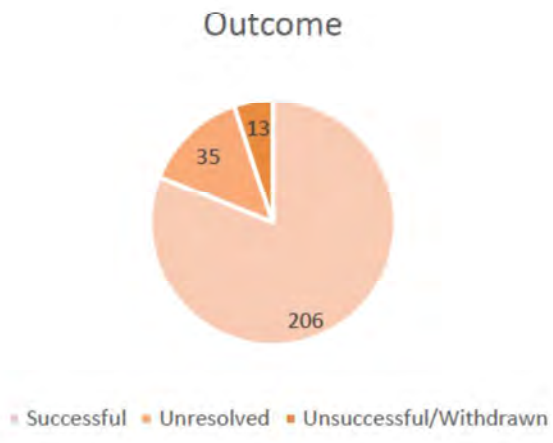
Emergency – Must be introduced as soon as possible to resolve an urgent incident address an unacceptable level of risk, or prevent disruption to critical business services

All Major and Significant changes must be considered through the Change Control Board (CCB) approval process prior to proceeding. The CCB met on the following dates for the reporting period, noting that there were additional sessions required to meet the increased volume of changes required for the DHR go-live. These sessions are indicated below with an asterisk:

- 02 November 2022
- 04 November 2022 *
- 07 November 2022 *
- 08 November 2022 *
- 09 November 2022
- 10 November 2022 *
- 11 November 2022 *
- 16 November 2022
- 23 November 2022
- 30 November 2022

1.4.1. Scheduled Changes





For the 13 unsuccessful/withdrawn changes reflected in the above 'outcome' chart, a small number were closed out and submitted under a new change request due to alterations to the initial proposed change.

There was a combined total of 57 major and significant changes which has doubled compared to recent months. A lot of these changes were needed to support the DHR, including completing the final upgrade for some of the related systems and establishing several integrations and new services into the production environment.

For the 23 emergency changes, many of these like the significant and major changes were directly relating to the DHR or had an impact.

Unsuccessful changes greater than 30 days

This table reflects changes that have been endorsed CCB and have yet to be successfully implemented.

CCB Approval Date	Planned Implementation Date	Change #	System Name	Description	Comment
03/06/2022	February 2023	DSD-207244	Kestral-PLS	Medicare upgrade master change request.	Postponed due to external resource availability
17/08/2022	20/01/2023	DSD-227446	NxClinical	NxClinical upgrade to version 6.2	Awaiting business to review BCP for NxClinical

1.5. Legacy Records Management (Paper Records)

DSD manages the physical (paper) administrative files for the ACT Health Directorate and Canberra Health Services. With ACT Health undertaking the majority of record keeping digitally now, new paper files are primarily created for Canberra Health Services (only the ACT Government Analytical Laboratory team are still permitted to create new paper files in ACT Health).

The legacy records management is currently undertaken by a team based at the DSD warehouse in Hume where 205,872 files are currently stored in records boxes on box shelving. A file census was completed in early 2022 where 99.32% of files marked as located in the warehouse were sighted and recorded during the census. This was the first census undertaken in over a decade and followed significant consolidation (such as the closure of the Mitchell warehouse, Mitchell office and file rooms in building 5 and 6 at Canberra Hospital) and warehouse rearrangement at Hume over the last four years. The team are now actively searching for the outstanding files.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Service	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22
Record transfer of a paper files to another officer	0	0	1	0	0	2	14	6	25	12	24	4
Paper File Retrieval Request	1	2	8	10	9	10	5	14	12	18	27	13
New Paper File Request	177	136	175	241	101	164	216	181	160	192	161	285
New File Part Request	14	0	8	4	3	2	17	4	17	19	7	15
Transfer Paper File to Records/Storage	5	1	23	10	6	3	15	7	19	5	6	8

1.6. Digital Records Management

ACT Health continues to migrate all administrative record keeping over to digital (primarily using the WhOG Objective solution) with only one business unit still remaining on paper (ACT Government Analytical Laboratory) and one group of functions (ministerial) remaining in HP Content Manager. Migration of documents from the network shared drive (Q) across to Objective were undertaken throughout the month by DSS and the Records Management team as capacity in the WhOG instance permitted.

During July, drafting of the re-written ACT Health Records Management Policy and Records Management Procedures was completed and consultation on these documents was opened to all ACT Health staff. At the request of Canberra Health Services, these documents (and the ACT Health Records Management Program approved in March 2022) do not apply to Canberra Health Services who have undertaken to develop their own records management program, policy and procedures.

Canberra Health Services are undertaking all record keeping functions on paper at present and have not commenced the migration to digital records management. The decision on when and how to commence this migration rests with Canberra Health Services.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Metric	Dec 21	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22
General objective enquiry	4	4	4	10	5	35	50	44	43	60	44	37
Request Objective access + new user	10	6	9	11	3	31	42	51	37	31	16	14
Objective Training	0	1	0	4	4	20	119	149	26	35	14	10
Request Access/Restriction on a file or folder	1	1	0	7	1	7	14	24	19	19	19	25
Change an approver in Objective	1	4	15	8	7	12	33	40	43	24	20	23
Change to position number in Objective	0	0	0	0	0	2	2	12	5	5	4	3
Request to Deactivate Objective Access	0	0	0	0	0	0	0	0	2	7	3	1

2. Projects and Program

2.1. Summary Overview

The Digital Solutions Division (DSD) has a work program with 27 active projects in progress.
The Division tiers projects from 1 to 4 in accordance with the Portfolio Delivery Framework.
The Tier 1 projects are the most complex and Tier 4 are considered smaller and less complex.

Projects that have been classified as a Tier 1 or Tier 2 are required to report monthly to the Executive Sponsor and Chief Information Officer. The below reporting dashboards are derived from the reports submitted by Project Managers for the period ending 13 November 2022.

A key highlight during this reporting period was successfully achieving the official go-live milestone of the Digital Health Record (DHR), that occurred on 12 November 2022. This point of the project involved several years of planning and working in close collaboration with the Health Services, to digitally transform the ACT Public Health system. Due to the reporting period ending during the DHR Hypercare period not all DHR dashboard reports are available for this month's report divisional performance report. The latest program reports will be available in the December 2022 DSD Performance Report.

From the 17 major (Tier 1 and Tier 2) the only project that remains to track red in the PIMS Project. The project is reporting red for Quality with only the minimum viable product delivered in phase 1. A series of system upgrades will be required to address the identified 185 defects as well as additional development to meet business requirements.

2.1. Digital Solutions Divisions Portfolio Dashboard

ACT Government | ACT Health

Digital Solutions Division
PORTFOLIO DASHBOARD

Reporting Period: 17 October 2022 to 13 November 2022

Overview

Number of Programs	Number of Acti… Projects
2	27
Number of New Projects	**Number of Major Projects**
1	17
Number of Projec… Closed	
0	

RAG Status of Major Projects

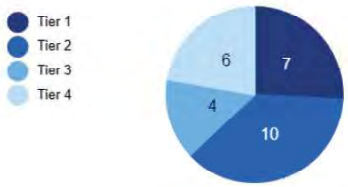
Resources

Portfolio Summary

Major Projects List

Portfolio Dashboard Met…

All Projects by Tier



All Projects by Stages

Major Program & Projects List

Major Program Report

Program ID	Program Name	RAG Status	Tier	Project Stage	Program Manager	Executive Sponsors
PG0001	Critical Services Building Program		Tier 1	Execute	Grant Clark	Colm Mooney
PG0002	Digital Health Record Program		Tier 1	Deliver	Sandra Cook	Rebecca Cross

Major Project Report

Project ID	Project Name	Project Health	Project Tier	Approval Stage or Tranche	Digital Health Strategy Theme	Executive Sponsor	Go-Live Tracking
PJ0002	Centenary Hospital for Women and Children Expansion Project		Tier 1	Execute	• Patient-centred • Health services enabled by contemporary technology	'Chris Tarbuck	30/11/23
PJ0004	CSB (Critical Services Building) Main Build		Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology	'Chief Minister	31/12/24
PJ0005	Digital Health Record Implementation Project		Tier 1	Deliver	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0006	Digital Health Record Technical Project		Tier 1	Deliver	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0007	Digital Health Record Business Intelligence and Data Project		Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0009	Notifiable Disease Management System (NDMS)		Tier 1	Deliver	• Patient Centred • Research, discovery and collaboration	'Kerryn Coleman	22/09/2022 Phase 2
PJ0010	Power Billing and Revenue Collection (PBRC) Upgrade: Phase Two - DHR Integration, Pathology & Dental Billing		Tier 1	Deliver	• Health services enabled by contemporary technology	'Paul Ogden	18/11/22
PJ0011	Birth of a Child		Tier 2	Deliver	• Patient-centred	'Peter O'Halloran	30/06/23
PJ0012	Clinical Patient Folder v4-2 Upgrade		Tier 2	Deliver	• Patient-centred	'Paul Ogden	01/10/2022
PJ0013	Pharmacy Inventory Management System		Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology	'Peter O'Halloran	20/06/2022 (CPHB) 26/09/2022 (CHS);
PJ0015	TCH Building 12 ICU Redevelopment		Tier 2	Close	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/03/22
PJ0016	TCH Building 12 Medical Imaging Refurbishment		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0017	TCH Building 19 Level 3 Pharmacy Refurbishment		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/07/23
PJ0018	TCH Building 20 L1 RadOnc Linac Replacement		Tier 2	Deliver	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/12/22
PJ0019	Weston Creek CHC Medical Imaging Expansion		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0033	Calvary Public Hospital Bruce OneID Implementation and EACS Replacement		Tier 2	Initiate	• Health services enabled by contemporary technology	'Jarrad Nuss	30/06/23
PJ0036	BIS Upgrade Project		Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Julianne Siggins	09/11/22

Tier 3 & 4 Projects

Project Name	Executive Sponsor	Digital Health Strategy Theme	Approved Baseline Budget (Capex)	Approved Baseline Budget (Opex)	Approval Stage or Tranche
UCH Carpark Credit Card Payment	'Colm Mooney	• Health services enabled by contemporary technology	$0.00	$76,000.00	Close
TechLauncher Clinical Trials Administration System	'Peter O'Halloran	• Research, discovery and collaboration	$0.00	$50,000.00	Execute
MyMeal System Upgrade to v15	'Peter McNiven	• Patient-centred • Health services enabled by contemporary technology	$0.00	$10,000.00	Execute
Food Safety Monitoring System	'Colm Mooney	• Health services enabled by contemporary technology	$25,000.00	$0.00	Deliver
Mainpac Expansion	'David Jones	• Health services enabled by contemporary technology	$254,375.00	$38,958.75	Initiate
Electric Vehicle Charging ICT Standard	'Colm Mooney	• Health services enabled by contemporary technology			Initiate
Medical Imaging Additional Nurse Call Equipment	'Sean Fenotti	• Health services enabled by contemporary technology	$22,000.00		Initiate
DALI System Upgrade	'Chris Tarbuck	• Health services enabled by contemporary technology	$50,000.00		Initiate
TCH B3 L1 Rheumatology & Dermatology Consultation Room Upgrades	'Chris Tarbuck	• Health services enabled by contemporary technology		$4,200.00	Initiate
1 Moore Street Security Upgrade	'Scott Harding	• Health services enabled by contemporary technology		$5,000.00	Initiate

Red Synopsis Report

Synopsis Status	Project ID	Project Name	Project Tier	Approval Stage or Tranche	Comments
	PJ0013	Pharmacy Inventory Management System	Tier 2	Initiate	The project is reporting red for Quality with only the minimum viable product delivered in Phase 1. A series of system upgrades will be required to address the identified 185 defects as well as additional development to meet business requirements.

Closed Projects

Project ID	Project	Project Overview

New Projects

Project ID	Project Title	Project Overview
PJ0043	1 Moore Street Security Upgrade	Installation of the associated infrastructure works in accordance with the approved design required for a security upgrade to the Moore Street health facility.

Major Project Risks Heat map

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain	1		4		
Likely	1	9	11	8	
Possible	2	12	63	22	
Unlikely	1	37	35	13	
Rare	4	10	8	1	1
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Major Project Issues Heat map

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High		1	12	19	
Moderate	2	6	20	9	
Low	2	2	6		
Planning	1	1	1		
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Major Projects Critical Risks/Issues Report

Project Name	Risk/Issue	Title	Residual Rating	Description

2.2. Major Projects (Tier 1 & 2) to be delivered by the end of 2022

Project Name	Tier	Scope and Status Update	Executive Sponsor
Digital Health Record • Implementation • Technical • Business Intelligence and Data Projects	1	Digital Health Record (DHR) will provide a person-centred view of clinical information at the point of care across public health facilities across the ACT and will significantly reduce the number of systems that staff need to access. DHR Implementation Project will deliver configuration, testing, implementation and training of all end users of the Digital Health Record. DHR Technical Project will deliver the technology components to support the migration of ACT Health systems, DHR and Related Systems environments, interfaces, end user devices, medical devices and foundational technology solutions. DHR Business Intelligence and Data project will engage expertise from Business Intelligence teams to deliver data and reporting capabilities.	Rebecca Cross
Notifiable Disease Management System (NDMS) (Phase 2)	1	NDMS Phase 1 - Implementation of Sunquest WorldCare and integration with RedCap used for public declarations and daily monitoring of people in quarantine was implemented in November 2021. Phase 2 – Implementation of 73 other notifiable diseases into Sunquest WorldCare, HL7 messaging and integration with ACTPAS. Implementation scheduled by the end of September 2022.	Kerryn Coleman
Clinical Patient Folder (CPF) 4.5 Upgrade	2	CPF and its data is being migrated to the NTT environment. The implementation of the upgrade to version 4.5 is being tested. The upgrade to version 4.7 is being built to include the DHR Interfaces. Once the vendor has completed their system testing it will be built in the NTT non-prod for testing before the environment is turned into production. The aim is to have all the work completed by the end of Oct 2022.	Paul Ogden
Pharmacy Inventory Management System (PIMS) project	2	The PIMS project will implement one consolidated PIMS across Canberra Health Services sites which will result in a more streamlined integration with the DHR. PIMS went live at Calvary Public Hospital Bruce and scheduled implementation at Canberra Hospital is for October 2022.	Peter O'Halloran
Power Billing and Revenue Collection Upgrade – Phase 2 DHR integration, Pathology and Dental Billing	1	The core upgrade phase of the project was delivered in December 2021. The project will deliver Phase Two which includes the DHR Integration of all DHR Modules, Pathology and Oral Health Services billing by 12 November 2022.	Paul Ogden

3. Digital Health Record (DHR)

3.1. Digital Health Record Technical Project Report

ACT Government | ACT Health

Digital Health Record Technical Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme
- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 17 October 2022 to 13 November 2022

Project Overview

The Project will deliver technology components to support the migration of ACT Health systems, DHR and Related Systems environments, interfaces, end user devices, medical devices, and foundational technology solutions.

Trending: Stable

Project Governance

Project ID	PJ0006
Approval Stage	Execute
Tier	Tier I
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issu... Health Status	Benefits Health Status	Quality Heal... Status	Scope Health Status
●	●	●	●	●	●	●

Project Delivery Team

Project Manager	Tim Panoho
Approver	Sandra Cook

Project Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
11/05/21 Actual Start Date	01/08/21 Baseline Start Date	$18,715,578.00 Baseline (Capex)	$5,089,097.00 Capex
07/03/23 Actual End Date	30/12/22 Baseline End Date	$17,697,823.00 Baseline (Opex)	$12,337,013.00 Opex

Project Status Commentary

Project Status

The Digital Health Record went live on Saturday 12 November 2022. This resulted in the completion of many outstanding items on the technical schedule.
The technical team are continuing to work with the broader program to resolve issues that are being raised across the Health Services from end users.

The following are ongoing issues that the team are continuing to work through:
- There have been several issues with the connectivity and usability of End User Devices. These include barcode scanners, shared iOS devices and med label printing. The team have largely resolved BCP printing issues and are continuing to work through the high priority tickets that are raised for End User Devices.
- The team are working with vendors to address login delays.
- The user provisioning team are working with Health Services to proactively review users without access and address access related issues.

Issue tracking is being documented within each application and managed at the program level. There is a dedicated meeting at 10am each day with program leads, CPHB and CHS representatives to inform and discuss the top 10 issues across the program and identify issue resolution pathways.

Schedule

The interfaces build remains at serious due to the outstanding systems that have not passed connectivity testing, however continuous progress is being made on these. The team have completed 99.5% of overall scripts and are working on cutover plans and verifying that systems are ready. Technical Dress Rehearsal (TDR) remains at serious due to several concerns which have been escalated for intervention and plans in place to address:
- Concerns with the progress of the capital works project at CHS and when the infrastructure will be ready to accommodate the majority of new devices that need to be connected.
- CPHB infrastructure project delays impacting the teams ability to undertake TDR.
- Availability for TDR staff to turn up to restricted clinical areas.
- Device scope changes due to increases in requirements from new workflows in the DHR.

Large efforts from the technical team have resolved many issues in the environments including;
- Identifying the root cause of the slowness of login speeds
- Citrix audio issues
- Delivery of packaged applications to workstations including BCP.

Scope

Original scope for the DHR Program (incorporating the Technical Project) was approved through the Digital Health Record Program Board at of August 2020 meeting.

The DHR Technical Project Initiation Document (PID) has been updated to split the Execute phase into two stages, build and test. The updated PID was approved by the Technical Steering Committee on 10 March 2022.

If variances in the scope for these occur through further engagement meetings, these will be dealt with as Change Requests.

Budget

To address the Capital overspent on this project, we have requested an operational funding reprofile to capital. For this year, $8.415 million in DHR recurrent funding will be moved to DHR capital funding.

Quality

A Quality and Assurance plan are being managed at the program level and is reported in the DHR Program status report.

Risks & Issues

Please refer to the risks and issues summary report below.

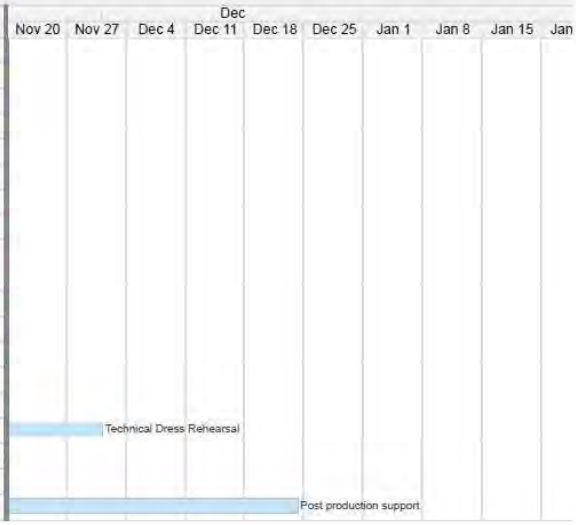
Benefits

Benefits are being managed at the program level and is reported in the DHR Program status report.

Key Project Activities

Key Project Activities - Technical

Health	Task Name	Start Date	End Date	Status	Milestones
	Interfaces: PRD DHR Integrated related systems connected	31/08/22	31/08/22	In progress	★
	September 2022 Upgrade	29/08/22	05/09/22	Complete	★
	Imprivata PRD Completed	29/08/22	29/08/22	Complete	★
	External Access Available: Public facing	12/08/22	12/08/22	Complete	★
	Security Assurance: Pentest completed	26/08/22	26/08/22	Complete	★
	PHI: First Patient Load into PRD	09/09/22	09/09/22	Complete	★
	PHI: Kestral Data Load	12/09/22	12/09/22	Complete	★
	Environment: Rhapsody PRD Environment ready	12/09/22	12/09/22	Complete	★
	Active Directory Synch in place	20/08/22	20/08/22	Complete	★
	PRD Downstream Systems Ready	25/07/22	30/09/22	Complete	★
	Medical Devices: All systems live in PRD.	14/10/22	14/10/22	Complete	★
	Business Continuity Tested	0 days	07/09/22	Complete	★
	Login Testing (Labs) Start PRD	14/10/22	14/10/22	Complete	★
	Abstraction (FULL)	14/10/22	14/10/22	Complete	★
	PAS: Appointment / Scheduling Tasks	14/10/22	14/10/22	Complete	★
	Technical Dress Rehearsal	01/08/22	30/11/22	In progress	★
	Milestone: Production Environment Completed	29/08/22	29/08/22	Complete	★
	Go Live	12/11/22	12/11/22	Complete	★
	Post production support	07/11/22	23/12/22	In progress	★



Financial Performance

Whole of Life Budget & Expenditure

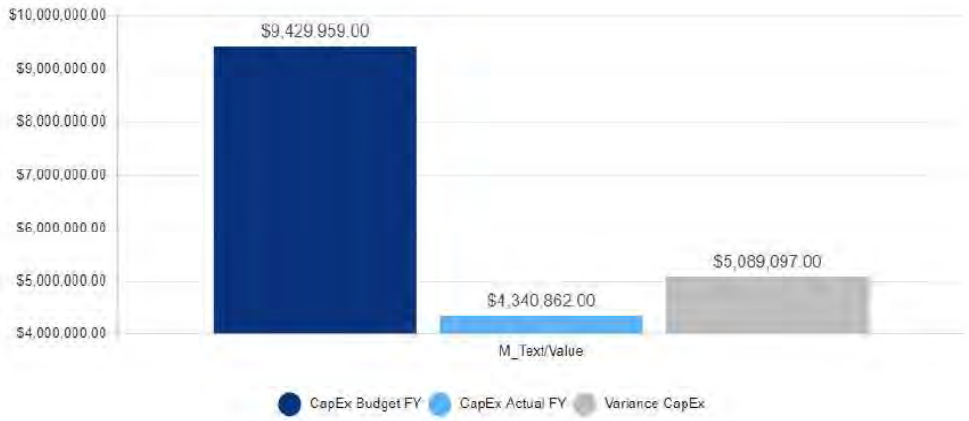
Current FY 2022/23

CapEx

Budget	$18,715,578.00
Actuals	$13,626,481.00
Variance	$5,089,097.00

OpEx

Budget	$17,697,823.00
Actuals	$5,360,810.00
Variance	$12,337,013.00



Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		2		1	
Possible			38	1	
Unlikely		2	5		
Rare	2	2	5		
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High				1	
Moderate			5		
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Risks

Title	Description	Residual Rating	Action to Be Taken
Difficulty accessing historical data in the timeframes of data conversions	Unable to provide the data from legacy systems in a format that clinicians can interpret. A risk exists for the following systems if we cannot convert all data into either the DHR or the data repository there will be a potential requirement to keep the system after go live. For example; Kestral has a complex data model that requires specific subject matter experts to extract from, the time to fully replace Kestral will not be possible within the timeframes of the DHR. Data from legacy systems have not been fully migrated into Epic, CPF, or the data repository. Access to data from vendor systems is not usable or trusted to provide an accurate patient record that is meaningful and fit for use.	High	
Third party vendor software do not meeting the compliance of the security requirements	Unable to migrate systems into the Health Enclave. Engagement from service providers, understanding a production environment to meet high availability. Service provider is not clear with the technical complexities with their software and require specialised resources. Service provider systems are developed with old technology that requires further risk assessments	High	Vendors that do not met strict security compliance measures for protecting data will be assessed and controls will be implemented to reduce the risk and mitigate any vulnerabilities by placing specific controls and boundaries around these solutions.

Project Issues

Title	Description	Residual Rating	Action to Be Taken
Technical - End User Devices	End User Devices are required to ensure access to the Epic solution for different roles in different ways. With COVID-19 there have been supplier delivery issues so orders need to be placed with regard to these lead times.	High	The Technical Project are completing audits and working through the gaps to identify quantities that need to be ordered. They have prioritised based on their knowledge of current lead times.

3.2. Digital Health Record Business Intelligence and Data Project Report

ACT Health

Digital Health Record Business Intelligence and Data Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme
- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 17 October - 13 November 2022

Project Overview

The DHR Business Intelligence and Data project brings together existing resources from across the health system business intelligence teams and engages expertise to deliver the technical and enabling capabilities, with the existing DHR project resources under a single project structure to ensure successful delivery of data and reporting capabilities.

Trending
▲ Improving

Project Governance

Project ID	PJ0007
Approval Stage	Plan
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Sean Winefield
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issu... Health Status	Benefits Health Status	Quality Heal... Status	Scope Health Status
🟡	🟡	🟢	🟡	⚫	⚫	🟡

Project Baseline

Current Schedule	Baseline Schedule	Baseline Budget	Budget Variance
01/03/22 Actual Start Date	01/03/22 Baseline Start Date	$1,496,215.00 Capex	$1,172,769.00 Capex
23/04/23 Actual End Date	23/04/23 Baseline End Date	$1,161,948.00 Opex	-$152,134.00 Opex

Project Status Commentary

Project Status

- Discussion with Analyst/SMEs to compile information on registry governance and data sharing agreements
- There is a continuing focus on data mapping and the requirements for registries and custom metrics. These have been finalised
- Data Custodian and Steward policy has been endorsed
- Report validations in Production are underway now that metrics are populating with real data
- Development of reports requested prior to Go Live continues with a focus on the reports due by mid-December
- New requests and issues raised during the Hypercare period are being actioned and prioritised by the team
- Release 1 due 25 November 2022
- Maturing data access approach with Calvary
- Build environment connection to REL and PRD commenced
- Data Analytics Branch provided with raw submissions data
- Developed core reporting set, data elements and detailed design
- Full scale validation finalised with Cv5 and Vims systems
- Historical data conversion to Epic; Pre-load, Delta load and cut-over planning now finalised
- Legacy System Executive Summary has been endorsed
- Legacy catalogue is now available in CHS, Calvary and DHR SharePoint
- Legacy systems cutover post Go-Live activity is currently being undertaken

Schedule

- Test build of national submission elements is complete. Testing is finalised for elements that have been mapped.
- Review and validation of methodologies target completion Feb 2023
- Validation of all reports in Epic – Jan 2023
- Tables to support National Submissions - February 2023

Risks & Issues

- Risk to post Go-Live metric and reporting approvals with minimal remaining data working groups to endorse methodologies and outputs.
- Errors in real data reporting due to the limitations of test data.
- Post Go-Live roles and responsibilities need agreement across the three Health agencies

Scope

BI Summary of Work have identified all tasks that must be delivered by Go-Live

Budget

Budget is being management at the program level
The new project team is focused bringing the project out of critical and will refine the budget expenditure over the coming weeks to provide more detailed information by next month's status report.

Quality

Quality and assurance is being managed at the program level and is reported in the program status report.

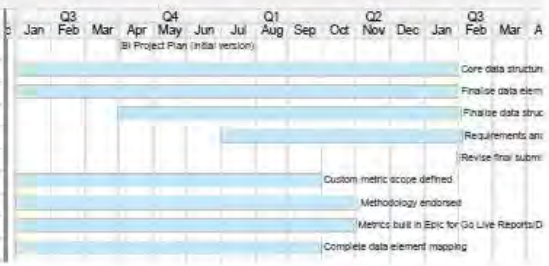
Benefits

Benefits are being managed at the program level and is reported in the program status report.

Key Project Milestones

Key Milestones Report - Digital Health Record Busi

At Risk	Health	Task Name	Start Date	Status
		BI Project Plan (initial version)	30/03/22	Complete
		Core data structures for Regulatory Submissions completed	01/01/22	In progress
		Finalise data element mapping	01/01/22	In progress
		Finalise data structures for testing	01/04/22	Not started
		Requirements and design refined for final submission structures	01/07/22	Not started
		Revise final submission structures	31/01/23	Not started
		Custom metric scope defined	01/01/22	Complete
		Methodology endorsed	01/01/22	Complete
		Metrics built in Epic for Go Live Reports/Dashboards	01/01/22	Complete
		Complete data element mapping	01/01/22	Complete



4. Cyber Security

4.1. Cyber Incidents

Details of security related incidents, investigations and requests for information are not shared broadly across directorates due to privacy reasons, however statistics for ACT Health and Canberra Health Services are below.

The statistics in the cyber security section are supplied by DDTS quarterly.

During the most recent reporting period for DDTS (August 2022 – September 2022), neither DDTS nor DSD (including our vendors including NTT) have recorded any successful cyber attacks on our systems and infrastructure.

Investigations and Requests for information

Date	Reference	Investigation/RFI	Directorate	Status
30/08/2022	SEC-IST-22-125	E-discovery: Email	Health	Closed - Fully Resolved
27/09/2022	SEC-IST-22-156	E-discovery: Email and Messaging	Health	Closed - Fully Resolved

Incidents (5)

Date	Reference	Incident Type	Directorate	Status
18/08/2022	SEC-IST-22-110	Phishing Email	Health	Closed – Fully resolved
21/08/2022	SEC-IST-22-113	Malware	Health	Closed – Fully resolved
23/09/2022	SEC-IST-22-149	Phishing Email	ACT Health	Closed – Fully resolved

4.2. Operational Security Updates

4.2.1. Essential 8 maturity level

ACT Health has undertaken considerable work to establish the Health Enclave, which has enabled us to meet all the Essential 8 elements for hosting. The current maturity levels vary between level zero and three, however, ACT Health is on target to achieve a minimum of maturity level two across all the Essential 8 elements for hosting by 31 December 2022.

At a Whole of Government level, DDTS have a plan to reach maturity level one (the base level) over the coming years. Until DDTS reach a similar level of maturity in this space to that in the Health Enclave, this will continue to pose a significant security risk to our services and infrastructure.

4.2.2. Privileged Account Management

DSD is in the process of implementing Beyond Trust's Privileged Account Management (PAM) solution within the Health Enclave. The benefits of this solution include the management of privileged accounts, vendor session monitoring/recording and password vault capabilities. Beyond Trust implementation has commenced with an expected go live date by late 2022.

4.2.3. Network and device visibility

DSD have had ForeScout eyeSight and Medigate implemented for several months now. These tools have been beneficial to provide visibility over the various ACT Health networks such as Pathology, Medical Imaging, Devices, Security and Radiation oncology. The security team work proactively with DDTS and CHS to remediate any vulnerabilities that may arise.

4.2.4. Enabling port security on network switches (802.1X)

DDTS are implementing port level security (802.1X) across the ACTGOV network. 802.1X will improve the security posture of the ACTGOV network by preventing unauthorised devices from being connected. DSD have worked with DDTS to update all ACTHD network switches to 802.1x and are actively working with CHS to enable port security across CHS as part of the DDTS network modernisation project in 2022. Resource constraints within DDTS and hospital capacity issues within CHS are limiting the progress of this essential work, however plans are in place to accelerate this work in early 2023.

4.2.5. Network Monitoring and Segmentation

DSD has formed a working group with DDTS Security and DDTS Networks to explore network segmentation for health systems. This working group explores the current state of ACT Health's networks, limitations of current technologies used across ACTGOV and future requirements. This work will continue with the inclusion of the CHS CIO with the aim to implement improved network segmentation along with the network modernisation program. This work hasn't progressed as a broader project, however, it is being addressed as new systems are being brought online or migrated to the Health Enclave.

4.2.6. Personnel Security

We continue to engage the Australian Government Security Vetting Agency (AGSVA) through the Justice and Community Safety Directorate to assess various staff within DSD to a Negative Vetting Level 1 (NV1).

The staff that are being vetted are positions of trust and include staff that have elevated/admin access to multiple critical systems, can access and extract large amounts of sensitive data, have access to the data centres (which require an NV1 clearance) and other activities related to protective security functions.

There are approximately 317 staff that are fully vetted and roughly 50 staff that are in the process of being vetted.

4.3. Unsupported Operating Systems

4.3.1. Windows 7 Eradication

DSD and DDTS are collectively working towards reducing the Windows 7 devices across the ACT public health system. Over a 12-month period, we have seen a reduction of 265 assets removed from service or upgraded to Windows 10.

The below table provides an overview on the Windows 7 devices across the Government network in October 2022 excluding 39 kiosks in directorates outside Health which are being remediated in a separate DDTS project.

We are on track to remove all Windows 7 systems from the ACT public health system by the end of January 2023.

Directorate	Aug 21 – Oct 21	Nov 21 – Jan 22	Feb 22 – April 22	May 22 – July 22	Aug 22 – Oct 22
Health/CHS	312	165	58	57	47
Other	211	112	73	48	39
Total	523	279	131	105	86

4.3.2. Windows 10 – Out of Support

Windows 10 receives major releases every 12 months which remain in support by Microsoft for a total of 36 months. After this time security updates are no longer provided.

The below table provides an overview of the total number of devices that remain on an unsupported version.

Directorate	May 22 – July 22	Aug 22 – Oct 22
Health/CHS	24	14
Other	90	21
Total	114	35

DSS are actively pursuing all 14 machines to ensure that the latest Windows 10 updates are applied.

4.3.3. Legacy Servers

DSD have been working actively to migrate/decommission the Windows Server 2008. There are currently 27 systems, which are actively being address as a priority.

The follow table identified the legacy Windows Server 2008 operating system servers hosting Directorate business systems as at the end of September 2022. The count includes shared infrastructure servers used to host multiple Directorate systems such as IIS web servers and SQL servers.

Directorate	Server May Count	Server July Count	System September Count
Health	124	112	98
Other	174	151	151
Total	298	263	249

4.4. System Security Plans

Our Security Hub is actively working with relevant stakeholders, including DDTS Security, system administrators, vendors, and Business System Owners (BSO) to ensure business systems have up-to-date System Security Plans (previously known as Security Risk Management Plans). System Security Plans are being updated and/or developed as systems are being implemented, upgraded or migrated to the Health Enclave. System Security Plans for systems that will be decommissioned when DHR goes live will not be updated.

The below table is a snapshot from September 2022 outlining the status of the security plans across the ACT Government.

Directorate	Current	Expired	No Plan	Under Review	Not Required	Total
Health	13	21	17	14	15	82
Other	47	45	12	38	32	172
Total	60	66	29	52	47	254

The Security Hub are actively working to address the outstanding System Security Plans as can be evidenced from the table above where 14 are currently under review by either DDTS or DSD.

ACT Health Directorate

To:	Minister for Health	**Tracking No.: MIN23/5**
CC:	Rebecca Cross, Director-General	
From:	Peter McNiven, A/g Chief Information Officer and Executive Group Manager, Digital Solutions Division	
Subject:	Digital Health Record Program – January 2023 update	
Critical Date:	09/01/2023	
Critical Reason:	Briefing to be available for the MyDHR Update on Monday 9 January 2023	

Recommendation

That you note the status of the Digital Health Record rollout across ACT Health facilities.

Noted / Please Discuss

Rachel Stephen-Smith MLA …….. …../…../…..

Minister's Office Feedback

Background

1. At a meeting held with the ACT Health Directorate (ACTHD) on 21 January 2021, you requested a monthly briefing on the Digital Health Record (DHR) Program to keep you up to date with the status of the Program. These meetings were scheduled for the third Monday of every month and commenced on 24 May 2021. The next meeting for 2023 is scheduled for 13 February 2023.

Issues

2. The DHR Program is currently in Tranche 2 – Delivering the Capability. The DHR System was implemented on Saturday 12 November 2022 at 5:30am.

3. Epic did not provide a status report over November 2022 due to the DHR Go-Live and Command Centre structures being in place and we have not yet received the December 2022 status report.

4. The ACT Health DHR Program Status report for the period 7 November 2022 to 6 December 2022 is provided at Attachment A.

5. The following achievements have been delivered in the last month:

    a. The 4-week Hypercare period for DHR support was completed on Sunday 11 December 2022.

    b. Over the Christmas Shutdown period:

        - The DSS Support line continued to operate 24/7.
        - Each DHR team had an on-call roster scheduled to support the solution.
        - A DSD Executive was rostered on call for any escalations required.
        - Epic, NTT and Third-Party systems had contact lines 24/7 for any issues that needed escalating during this time.
        - There was a DHR Change Freeze from Thursday 22 December 2022 to Tuesday 3 January 2023. No planned changes progressed during this time except for exemptions for break/fix changes required urgently.
        - There were no incidents related to DHR over the shutdown period.

    c. As of Wednesday 21 December 2022, there were 9,853 unique users that had logged into the DHR.

    d. Since Go-Live to Tuesday 3 January 2023, there have been 21,872 jobs logged for assistance with 17,874 of those jobs resolved and 530 jobs awaiting confirmation from the reporters that the job is resolved.

    e. The trend of jobs logged and resolved are provided in Attachment B.

6. The DHR Program has been running a Top 10@10 meeting that started out daily and has now moved to weekly:

    a. Since Go-Live we have recorded 36 main top ten issues.

    b. 31 of these issues have been resolved.

    c. Alongside the main issues we have tracked and monitored an additional 35 issues and seven of those remain on the list for discussion and monitoring.

    d. Huddle structures are continuing, and these are gathering the pulse of the health service with the use of the DHR as well as raising any issues that need to be rectified.

    e. The current issues being discussed are as follows:

Issue	Description	Status
Pathology Results to External Referrers	Multiple issues – •Large number of reports not sent due to errors in the interface for multiple reasons •Format of the Pathology reports and how they render in the different General Practice (GP) Practice Management Software (PMS) systems •Cumulative Reports solution in PDF and then atomic level data string to be •Manual entry of external results in the DHR trending with internal results	• Review of holistic reports in the system being reviewed. Over 10,000 reports have been retriggered and most successfully sent (38 errors occurred) • PMS licenses being procured for testing • Proposal provided by Epic for PDFs at cost $165,000, no timeline on longer solution • Options paper being circulated to assist with decision
Business Intelligence and Data	Multiple issues – • Emergency Department (ED) Data • Issues with Emergency Surgery Reporting • Theatre Data • Calvary Data Capability	• ED methodology changes documented for approval • Solution in progress • Testing data improvements this week • Access for Calvary Public Hospital Bruce (CPHB) provisioned this week
Business Continuity Plan (BCP) Arrangements not working consistently	BCP solution rectification in all areas (particularly community) BCP Dashboard for review of active nature of the BCP workstations Scenario testing of BCP	• Community updates for BCP progressing in PRD • Dashboard on hold whilst BI & Data work completed • Scenario testing planned regularly
Merged Patients	Initially 87 pairs of patient records were found to have been merged inappropriately. These have been unmerged and the process for chart correction is occurring. Around 22 pairs of new patient records have been sent to the Health Information yesterday for review and decision on if they need to be unmerged.	• Health Information Systems (HIS) continuing chart correction for initial 87 patients • HIS reviewing other 22 patient records • This will be ongoing work in future – process known

7. The DHR Program is now in the Stabilisation period which will run until 24 February 2023. From 24 February 2023 to 24 March 2023 the DHR Program will transition to Business As Usual (BAU) support structures and will start prioritising Optimisation requests. The DHR Program will formally close on 24 March 2023.

Financial Implications

8. The 8-year DHR Program now has a total budget of $328.803 Million over 8 years (including offsets) with the ACTHD portion of the Supplementary Business Case added. The detailed review of the budget has been done and the overall position over the 8 years is as follows:

	Actuals to October 2022 & Forecast expenditure	Difference to budget
Capital (Treasury funding – original Business Case plus New Initiative funding from 2022/23)	$135,778,671	-$4,991,671
Opex (Treasury funding – original Business Case plus New Initiative funding from 2022/23)	$39,639,469	$35,755,093
BAU	$151,173,260	-$28,551,217
Total	**$326,591,400**	**$2,212,205**

Consultation

Internal

9. Nil for the purpose of this briefing.

Cross Directorate

10. Over 500 subject matter experts have been identified from across the health services to provide key clinical guidance to the Program team to ensure the program remains clinically led.

External

11. Keith McNeil, Chief Clinical Information Officer, Queensland Health, is the independent Chair of the Program Board and Darlene Cox, Executive Director, Health Care Consumers' Association ACT is a member of the Program Board.

12. External organisations such as Winnunga Nimmityjah Aboriginal Health and Community Services continue to be consulted through attendance at direction setting sessions and meetings with the Senior Director, DHR Implementation Project.

13. There are representatives from the following external organisations on the following Steering Committees for the Program:

Consumer Experience Steering Committee

a. Health Care Consumers' Association
b. ACT Mental Health Consumer Network
c. Carers ACT
d. Meridian
e. People with Disabilities ACT
f. A consumer representative from CPHB

Union Engagement Advisory Committee

a. Australian Nursing & Midwifery Foundation
b. Australian Salaried Medical Officers Federation
c. Community and Public Sector Union
d. Professionals Australia
e. Health Services Union
f. Visiting Medical Officers Association (ACT)
g. Australian Medical Association (ACT)

Work Health and Safety

14. The DHR Program have not received any issues with Work Health and Safety post go-live but will monitor with the health services.

Benefits/Sensitivities

15. The following data has been pulled from the system from the first month of use:

Benefit	First month of use (12 November 2022 to 12 December 2022)
Medication Alerts and Action Taken	**204** medications were replaced after receiving a warning to check the dose **2,647** medications were updated after receiving a warning that the drug contained an active or inactive ingredient that the patient is allergic to **2,075** medications were removed after receiving a warning of a duplicate order **4,782** therapy orders were removed after receiving a warning of a duplicate therapy
Results released to patients	**94.67 per cent** of results are released to MyDHR within 1 day **35,598** results have been sent directly to patients MyDHR account within 1 day of the test being resulted between 15 November 2022 and 12 December 2022

Engagement with MyDHR	Patients submitted **2,808** history questionnaires in MyDHR to allow clinicians to provide better care Patients submitted **9,716** general questionnaires in MyDHR to allow clinicians to provide better care. This also pre-populates information in the patient's charts **955** patients have consented to share their details with their General Practitioner
Beaker Draws Saved	**6,772** patient draws were saved by adding on to an existing lab order
Increased communication amongst staff	**73,768** messages were sent via secure chat since go-live
Effectiveness of Rover via Barcoded Medication Administration (BCMA)	Nurses have administered **76,860** medications on Rover with **29 per cent** of all medications have been administered with Rover.

Communications, media and engagement implications

16. Communication and media engagements occurred over the Go-Live period.

17. The Program team would like to continue to work with your Office through the ACT Health Communications team to provide you with the opportunity to participate in media or community opportunities for the DHR now it is in production.

Signatory Name:	Peter McNiven, A/g Chief Information Officer and Executive Group Manager, Digital Solutions Division	Phone:	5124 9000
Action Officer:	Sandra Cook, Executive Group Manager DHR, Digital Solutions Division	Phone:	5124 9129

Attachments

Attachment	Title
Attachment A	ACT Health DHR Program Status Report
Attachment B	Trend of jobs logged and resolved over the Christmas 2022 shutdown

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme
- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 November 2022 to 6 December 2022

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending
▲ Improving

Clinical Owners

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issues Health Status	Scope Health Status	Benefits Health Status
🟡	🟢	🟢	🟢	🟡	🟢	🟢

Program Delivery Team

Approver	Sandra Cook
EBM, Future Capability	Justine Spina
Technical Project	Timothy Pancho
Implementation Project	Philippa Kirkpatrick
BI & Data Project	Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130,787,000.00	$47,610,970.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$77,752,000.00	$58,273,720.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting an amber status. The DHR system was successfully implemented on Saturday 12 November 2022 at 5.30am. The focus of the DHR Implementation Project, DHR Technical Project and the DHR BI and Data Project has been on managing support tickets and working through issues as they arise. As of 6 December 2022, there were 4,346 P4 issues, 96 P3 issues and 63 P2 issues with no P1 issues raised. The teams are working through the ticket volumes and even though there had been a reduction in resourcing available to help with this as the Hypercare period was winding down, the teams are managing to close almost the same volume of tickets opened on a daily basis.
The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Risks & Issues

Risks - There are currently 39 open risks. There are thirteen risks reporting a high rating

#1 & 7 Insufficient Budget
#20 Data Quality in the DHR is poor
#22 The Clinical Record does not provide ready access to information
#24 Difficulty accessing historical data
#29 Clinical Engagement
#38 Slow decision making
#41 Health service resources unavailable
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues - there are 7 high issues all I open the top one being End User Devices are required to ensure access to the Epic solution for different roles in different ways. With COVID-19 there have been supplier delivery issues so orders need to be placed with regard to these lead times.

Budget

The total budget for the DHR Program is now $328.803 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $64.273 Million Treasury Operational and $122.622 Million In Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to October 2022 are as follows - Capital $83.176 Million (Budget $84.702 Million) Opex $19.476 Million (Budget $22.689 Million). There is $31.756 Million Capital remaining and $44.796 Million Opex remaining. At the end of October 2022, the total forecast over-expenditure for Capital over the 8 years is $3.583 Million and a forecast underspend of Operational expenditure of $37.593 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast underspend for the whole of the DHR Program at present is $2.212 Million over the 8 years with including the BAU expenditure. Therefore, the budget will be reporting Green. Detailed quarterly reports will be provided to the Board in December 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Jan 2023).

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 18 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assurance review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post Implementation Review in April 2023.

Benefits

Abt Associates (in partnership with bdhai) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified. The metrics were approved by the DHR Program Board in October 2022 and base line data will be provided in

Scope

Scope refinements are being managed through Change Request processes. None have been raised in this period. There will be a Change Freeze period from 21 December 2022 to 4 January 2023.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The DHR Technical Project is reporting red for schedule. More casual resources are being employed to assist with Technical Dress Rehearsal processes to improve this issue.

Project Summary Dashboard

DHR Technical Project

RAG 🟡 **% Complete** 92%
Trending ➖

The project status is green as the solution is in production and operating. Over the initial Go-Live period there was one outage of 2 hours and 46 minutes on Sunday 13 November 2022. The root cause of this was red lifted on Wednesday 16 November 2022. There have been intermittent issues with the AETHER integration engine and a paper recommending interfaces are switched from AETHER to Rhapsody is circulating at the moment. This switch over would be completed by March 2023.

DHR Implementation Project

RAG 🟡 **% Complete** 98%
Trending ➖

The Digital Health Record (DHR) implementation Project is reporting an overall green status and is improving.

Cutover processes were completed in a timely manner for Go-Live. Data Abstraction was completed and has provided data for 6 weeks of appointments scheduled. The application workstreams are now managing the tickets logged across the health services to stabilise the system prior to optimisation requests being reviewed and prioritised in February 2023.

DHR Business Intelligence & Data Project

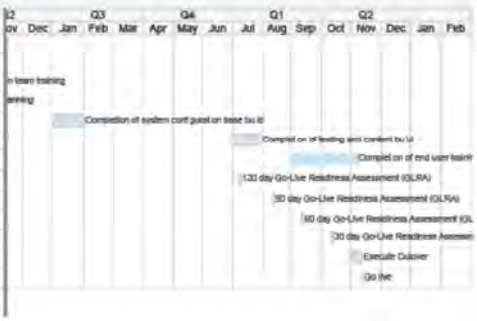
RAG 🟡 **% Complete** 75%
Trending ▲

This project is reporting amber and trending upwards. A request to extend the BI and Data Project has been lodged with the DHR Program Board for January 2023. The request is to extend the project until November 2023 and to enable it to be a separate project that will report into the ACT Health Digital Committee. Scope for reporting for

Key Program Activities

Key Program Activities

At Risk	Task Name	Start Date	End Date	Status
	Program authorised to commence	05/02/21	05/02/21	Complete
	Contract with vendor signed	01/01/19	01/01/19	Complete
	Completion of staffing and program team training	30/06/21	30/06/21	Complete
	Completion of detailed program planning	30/06/21	30/06/21	Complete
	Completion of system configuration base build	31/12/21	31/01/22	Complete
	Completion of testing and content build	30/06/22	29/07/22	Complete
	Completion of end user training	29/08/22	04/11/22	Complete
	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	Complete
	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Complete
	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Complete
	Execute Cutover	04/11/22	11/11/22	Complete
	Go live	12/11/22	12/11/22	Complete



Financial Performance

Whole of Life Budget & Expenditure

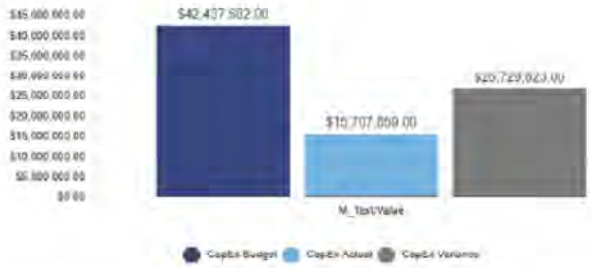
Current FY 2022/23

CapEx

Budget	$130,787,000.00
Actual	$83,176,030.00
Variance	$47,610,970.00

OpEx

Budget	$77,752,000.00
Actual	$19,478,280.00
Variance	$58,273,720.00



Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely			2		
Possible			2	1	
Unlikely					
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

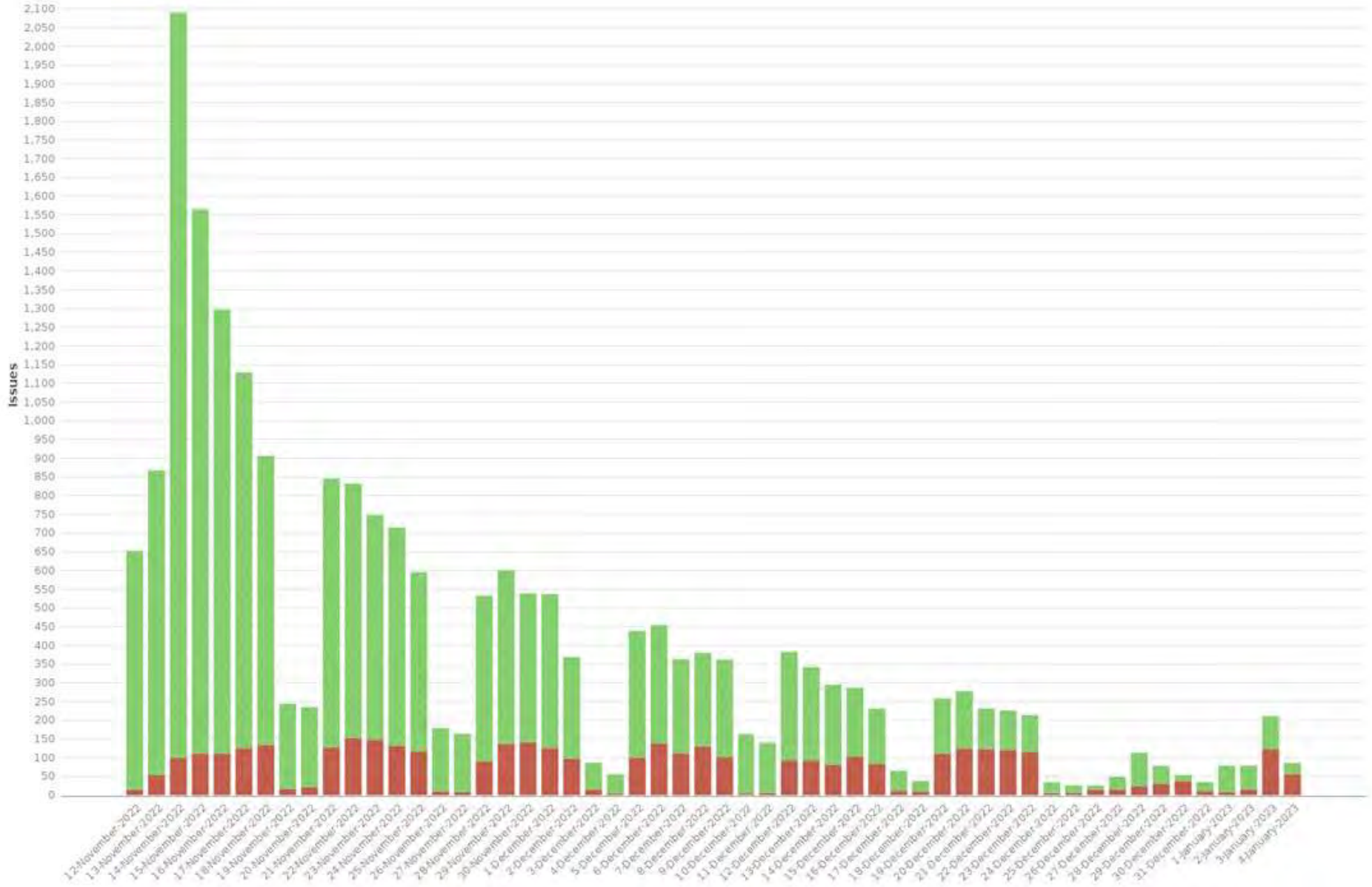
Primary	2	3	4	5	6
Issue Matrix					
Critical					
High					
Moderate				1	
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Program Risks

Title	Residual Rating	Description
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields. "
Difficulty accessing historical data	High	Dependencies to migrate existing data into Clinical Patient Folder and the Data Repository are not achieved.
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability.

Program Issues

Description	Residual Rating	Action to Be Taken
User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	This has significantly improved but will remain high until the providers can be tested, and the scope of provider creation is finalised. There are additional resources working on this and it is progressing well. A onboarding web form has been created and is going out to health services 12/05/2022 to validate data and ensure user logins are right during login labs that will occur directly after training sessions. Will close this action once login labs have occurred. 12/12/2022 Some ongoing issues with user templates are causing issues. Work is underway to clean up external provider records that are linked to provider numbers that are not current. This has focussed first on GPs and will then move to focus on other external providers.


Issues
2,100
2,050
2,000
1,950
1,900
1,850
1,800
1,750
1,700
1,650
1,600
1,550
1,500
1,450
1,400
1,350
1,300
1,250
1,200
1,150
1,100
1,050
1,000
950
900
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
12-November-2022
13-November-2022
14-November-2022
15-November-2022
16-November-2022
17-November-2022
18-November-2022
19-November-2022
20-November-2022
21-November-2022
22-November-2022
23-November-2022
24-November-2022
25-November-2022
26-November-2022
27-November-2022
28-November-2022
29-November-2022
30-November-2022
1-December-2022
2-December-2022
3-December-2022
4-December-2022
5-December-2022
6-December-2022
7-December-2022
8-December-2022
9-December-2022
10-December-2022
11-December-2022
12-December-2022
13-December-2022
14-December-2022
15-December-2022
16-December-2022
17-December-2022
18-December-2022
19-December-2022
20-December-2022
21-December-2022
22-December-2022
23-December-2022
24-December-2022
25-December-2022
26-December-2022
27-December-2022
28-December-2022
29-December-2022
30-December-2022
31-December-2022
1-January-2023
2-January-2023
3-January-2023
4-January-2023

ACT Health Directorate

To:	Minister for Health	**Tracking No.: MIN23/6**
CC:	Rebecca Cross, Director-General	
From:	Peter O'Halloran, Chief Information Officer and Executive Group Manager, Digital Solutions Division	
Subject:	Digital Health Record Program – Monthly Briefing February 2023	
Critical Date:	16/02/2023	
Critical Reason:	Briefing to be available for the Digital Health Record Update on Thursday, 16 February 2023	

Recommendation

That you:

1. Note the status of the Digital Health Record (DHR) rollout across ACT Health facilities;

Noted / Please Discuss

2. Note the ACT Health DHR Program Status report from January 2023 at Attachment A; and

Noted / Please Discuss

3. Note the Epic Status Report December 2022 at Attachment B.

Noted / Please Discuss

Rachel Stephen-Smith MLA ……..... …../…../…..

Minister's Office Feedback

Background

1. At a meeting held with ACT Health Directorate (ACTHD) on 21 January 2021, you requested a monthly briefing on the DHR Program to keep you up to date with the status of the Program. These meetings have been scheduled for the third Monday of every month and commenced on 24 May 2021.

Issues

2. The DHR Program is currently in Tranche 2 – Delivering the Capability. The DHR System was implemented on Saturday, 12 November 2022 at 5.30am.

3. The ACT Health DHR Program Status report from January 2023 is attached at Attachment A.

4. Epic's latest status report is the report from December 2022 at Attachment B. This report rated the implementation at a Watch status with a score of three out of five. Concern areas raised in this report are surrounding National Submissions, Pathology Report formatting and results transmission, interface configuration changes post Go-Live and the Business As Usual (BAU) Support staff transition.

5. The following achievements have been delivered in the last month:

    a. Daily Pathology meetings commenced Thursday, 12 January 2023 and ran through until Friday, 20 January 2023 to gain traction on the results transmittal and Pathology Report formatting issues. All outstanding Pathology Results have been re-triggered to send to the referring clinician and a process is in place daily to ensure any errors in transmission are rectified on the day. Pathology have reviewed these results and do not believe there has been any clinical implications with the delay in results being sent. A weekly meeting is now being held to assist with the Pathology Report formatting issues into the General Practitioner (GP) Practice Management Software (PMS) systems. Epic are working on a PDF fix that will be delivered by mid-February 2023 and are quoting for a longer-term fix to have results sent in an atomical format to enable cumulative results trending in the GP PMS systems.

    b. ACTHD ongoing Application Support team that will manage the DHR and related systems has been finalised. A team of 87 people will be responsible for performing special monthly updates, upgrades every six months, maintaining user access, fixing problems as they arise and working on optimisation requests to improve the workflow and add new functionality as required.

    c. The first Epic Upgrade will be implemented in May 2023. Planning for this Upgrade to the February 2023 release of the Epic system has commenced.

d. Planning for the first of the Epic Post Live Visits (PLVs) has commenced. These visits are where Epic staff members come on site and observe the workflows in areas and highlight any areas for improvement. The first three areas for the PLVs are Beacon (Oncology), Research and Willow (Pharmacy). These visits will occur 6-10 February 2023. All other areas will have PLVs in the week commencing 6 March 2023.

e. Training for new starters in the Health Services has commenced (Junior Medical Officers, interns, nursing intake and allied health graduates).

6. The DHR Program has been running a Top 10@10 meeting that started out daily and has now moved to weekly. The current issues being discussed are as follows:

Issue	Description	Status
Pathology Results to External Referrers	Issues – • Format of the Pathology reports and how they render in the different GP Practice Management Software (PMS) systems • Cumulative Reports solution in PDF and then atomic level data string to be completed	PMS licenses being procured for testing – retriggering updated tests to limited GPs to test format is better. PDF proposal being progressed, longer term solution being investigated
Business Intelligence and Data	Multiple issues – • ED Data • National Submissions – There are concerns around the data captured in production for National Submissions. The BI and Data team are working through the information but currently 211 of the 504 data elements are not populating correctly. The first National Submission is due 31 March 2023.	ED methodology changes documented for approval National Submissions – reviewing production data now for submissions.
PAS related issues	Referral routing work – Waiting for HealthLink to make changes to the Service Tree on 24/01/2023 to improve referral routing. It is expected up to 5 iterations of this Service Tree may be needed.	Referral routing work – First update will be done in HealthLink later today.
Governance	Discussion still occurring on governance It will be important to have Territory-wide governance over the broader DHR ecosystem (DHR and all other applications that support the health services)	Support Model group to look at this – proposal to focus this on health service areas (e.g. ED, Critical Care, Surgery etc) and then fit into existing health service committees is currently being worked through

7. At the last Ministerial Briefing on the DHR, concerns were raised around the use of the system in Maternity Services at Calvary. The DHR Program sent out some onsite support and worked with the leadership in these services at Calvary and have provided clarifications where required and extra education to assist.

8. The ACT Health DHR team are also supporting Calvary with the commissioning of Theatres after the fire that occurred in December 2022. The End User Device team have been working on reviewing all equipment and making insurance claims where equipment has been damaged. The Application Support team are available to change the configuration as theatres are coming back online. Support resources are also available to assist staff as needed.

9. The DHR Program is now in the Stabilisation period which will run until 24 February 2023. From 24 February 2023 to 24 March 2023 the DHR Program will transition to BAU support structures and will start prioritising Optimisation requests. The DHR Program will formally close on 24 March 2023.

Financial Implications

10. The DHR Program now has a total budget of $328.803 Million over nine years (including offsets and the Pathology system replacement Budget) with the ACTHD portion of the Supplementary Business Case added. The detailed review of the budget has been done and the overall position over the nine years is as follows:

	Actuals to October 2022 & Forecast expenditure to 2026/27	Difference to budget
Capital (Treasury funding – original Business Case plus New Initiative funding from 2022/23)	$135,778,671	-$4,991,671
Opex (Treasury funding – original Business Case plus New Initiative funding from 2022/23)	$39,639,469	$35,755,093
BAU	$151,173,260	-$28,551,217
Total	**$326,591,400**	**$2,212,205**

11. The Capital budget figures above does not include the return of the $7.515 million utilised for the delivery of a new Notifiable Disease Management Systems during COVID.

12. The above financial position is predicated on the assumptions that the offsets for staffing and ICT systems costs would be able to be fully achieved from 1 April 2023. There is concern that these offsets will not be able to be completely achieved. To assist with this an external financial audit will be performed to outline the budget position within the Digital Solutions Division and how this should be managed moving forward.

Consultation

<u>Internal</u>

13. Nil for the purpose of this briefing.

Cross Directorate

14. Over 500 subject matter experts were identified from across the health services to provide key clinical guidance to the Program team to ensure the program remains clinically led.

External

15. Keith McNeil, Chief Clinical Information Officer, Queensland Health, is the independent Chair of the Program Board and Darlene Cox, Executive Director, Health Care Consumers' Association ACT is a member of the Program Board.

16. External organisations such as Winnunga Nimmityjah Aboriginal Health and Community Services continue to be consulted through attendance at direction setting sessions and meetings with the Senior Director, DHR Implementation Project.

17. There are representatives from the following external organisations on the following Steering Committees for the Program:

Consumer Experience Steering Committee

a. Health Care Consumers' Association;
b. ACT Mental Health Consumer Network;
c. Carers ACT;
d. Meridian;
e. People with Disabilities ACT; and
f. A consumer representative from Calvary Public Hospital Bruce.

Union Engagement Advisory Committee

a. Australian Nursing and Midwifery Foundation;
b. Australian Salaried Medical Officers Federation;
c. Community and Public Sector Union;
d. Professionals Australia;
e. Health Services Union;
f. Visiting Medical Officers Association (ACT); and
g. Australian Medical Association (ACT).

Work Health and Safety

18. The DHR Program have not received any issues with Work Health and Safety post go-live but will monitor with the health services.

Benefits/Sensitivities

19. The following data has been pulled from the system from the first month of use of the system:

Benefit	Figures from 12 December through to 23 January 2023
Medication Alerts and Action Taken	**347** medications were replaced after receiving a warning to check the dose **5,198** medications were updated after receiving a warning that the drug contained an active or inactive ingredient that the patient is allergic to **3,704** medications were removed after receiving a warning of a duplicate order **9,104** therapy orders were removed after receiving a warning of a duplicate therapy
Results released to patients	**94.83%** of results are released to MyDHR within 1 day **84,329** results have been sent directly to patients MyDHR account within 1 day of the test being resulted between 15 November 2022 and 23 January 2023
Engagement with MyDHR	Patients submitted **5,652** history questionnaires in MyDHR to allow clinicians to provide better care Patients submitted **23,272** general questionnaires in MyDHR to allow clinicians to provide better care. This also pre-populates information in the patient's charts **11,926** patients have consented to share their details with their GP
Beaker Draws Saved	**15,101** patient draws were saved by adding on to an existing lab order
Increased communication amongst staff	**190,340** messages were sent via secure chat since go-live
Effectiveness of Rover via Barcode Medication Administration (BCMA)	Nurses administered **192,847** medications with Rover with **29.9%** of all medications have administered through Rover.

Communications, media, and engagement implications

20. Communication and media engagements occurred over the Go-Live period.

21. The Program team would like to continue to work with your office through the ACT Health Communications team to provide you with the opportunity to participate in media or community opportunities for the DHR now it is in production.

Signatory Name:	Peter McNiven, A/g Chief Information Officer and Executive Group Manager, Digital Solutions Division	Phone:	5124 9000
Action Officer:	Sandra Cook, Executive Group Manager DHR, Digital Solutions Division	Phone:	5124 9129

Attachments

Attachment	**Title**
Attachment A	ACT Health Digital Health Record Program Status Report to 6 January 2023
Attachment B	Epic Status Report December 2022

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 December 2022 to 6 January 2023

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending

Improving

Clinical Owner/s

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issues Health Status	Scope Health Status	Benefits Health Status
Amber	Green	Green	Green	Amber	Green	Amber

Program Delivery Team

Approver	Sandra Cook
EBM, Future Capability	Justine Spina
Technical Project	Timothy Panoho
Implementation Project	Philippa Kirkpatrick
BI & Data Project	Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130,787,000.00	$47,610,970.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$77,752,000.00	$58,273,720.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting an amber status. The DHR system was successfully implemented on Saturday 12 November 2022 at 5.30am. The focus of the DHR Implementation Project, DHR Technical Project and the DHR BI and Data Project has been on managing support tickets and working through issues as they arise. As of 6 January 2023, there have been 21,872 jobs logged for assistance with 17,874 of those jobs resolved and 530 jobs awaiting confirmation from the reporters that the job is resolved. The stabilisation period will continue until the 24 February 2023. The ACT Health ongoing support team recruitment to manage the DHR ecosystem has been completed with job offers made and all positions filled. These resources will transition into their new ongoing roles by the 24 March 2023.
The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Risks & Issues

Risks - There are currently 39 open risks. There are thirteen risks reporting a high rating

#1 & 7 Insufficient Budget
#20 Data Quality in the DHR is poor
#22 The C inical Record does not provide ready access to information
#24 Difficulty accessing historical data
#29 Clinical Engagement
#38 Slow decision making
#41 Health service resources unavailable
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues – there are 7 high issues still open the top one being End User Devices are required to ensure access to the Epic solution for different roles in different ways and post Go-Live this is still a large challenge with reports of not enough devices being available for optimal workflows. There are still hangover issues with supplier delivery issues post pandemic so lead times for extra equipment may impact efficient workflows.

Budget

The figures in this report are still report to October 2022 as the DSD Finance Manager has resigned and a replacement has not commenced yet. As soon as this replacement starts, actual figures for November and December 2022 will be added to the February 2023 report. The below figures are predicated on the assumptions of offsets being achieved and next month's finance report will deep dive into the likelihood of these offsets being able to be actualised. The total budget for the DHR Program is now $328.803 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $64.273 Million Treasury Operational and $122.622 Million in Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to October 2022 are as follows - Capital $83.176 Million (Budget $84.702 Million) Opex $19.478 Million (Budget $22.689 Million). There is $31.756 Million Capital remaining and $44.796 Million Opex remaining. At the end of October 2022, the total forecast over-expenditure for Capital over the 8 years is $3.583 Million and a forecast underspend of Operational expenditure of $37.593 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast underspend for the whole of life DHR Program at present is $2.212 Million over the 8 years with including the BAU expenditure. Therefore, the budget will be reporting Green. Detailed quarterly reports will be provided to the Board in December 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Jan 2023).

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 18 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assurance review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post Implementation Review in April 2023.

Benefits

Abt Associates (in partnership with bdna) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified. The metrics were approved by the DHR Program Board in October 2022 and baseline data will be provided in March 2023. Epic are flagging concern with the availability of base ine benefits data which has decreased the status of this area. The BI & Data team are working to deliver this data in the timeframes set.

Scope

Scope refinements are being managed through Change Request processes. None have been raised in this period.
There was a Change Freeze period from 21 December 2022 to 4 January 2023 for changes to the system.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The re-baselined schedule was achieved with Go-Live of the system occurring on 12 November 2022.

Project Summary Dashboard

DHR Technical Project

RAG: Amber | % Complete: 92%
Trending: Flat

The project status is green as the solution is in production and operating. The focus of the technical project is now on the transition of interfaces from the AETHER integration engine to Rhapsody to combat the intermittent issues with the AETHER integration engine. This was agreed to through a formal paper circulated amongst key stakeholders in CHS, Calvary and ACT Health. This switchover is planned to be completed by March 2023.

DHR Implementation Project

RAG: Amber | % Complete: 98%
Trending: Flat

The Digital Health Record (DHR) Implementation Project is reporting an overall green status and is improving.

Cutover processes were completed in a timely manner for Go-Live. Data Abstraction was completed and has provided data for 6 weeks of appointments scheduled. The application workstreams are now managing the tickets logged across the health services to stabilise the system prior to optimisation requests being reviewed and prioritised in February 2023.

DHR Business Intelligence & Data Project

RAG: Red | % Complete: 75%
Trending: Down

This project is reporting amber and trending downwards. A request to extend the BI and Data Project has been lodged with the DHR Program Board in the January 2023 meeting. The request is to extend the project until November 2023 and to enable it to be a separate project that will report into the peak ACT Health Digital Committee. Scope for reporting for Go-Live has been delivered but issues are being managed in ED data and other elements of National Reporting. The National Submission data is being careful analysed now prior to the first submission that will contain Epic and legacy system data combined.

Key Program Activities

Key Program Activities

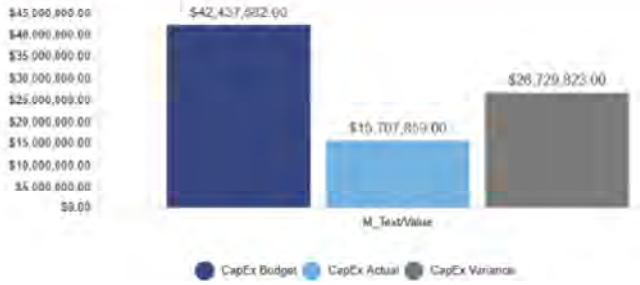
At Risk	Task Name	Start Date	End Date	Status
—	Program authorised to commence	08/02/21	08/02/21	Complete
—	Contract with vendor signed	01/01/19	01/01/19	Complete
—	Completion of staffing and program team training	30/06/21	30/06/21	Complete
—	Completion of detailed program planning	30/06/21	30/06/21	Complete
—	Completion of system configuration base build	31/12/21	31/01/22	Complete
—	Completion of testing and content build	30/06/22	29/07/22	Complete
—	Completion of end user training	29/08/22	04/11/22	Complete
—	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
—	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	Complete
—	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Complete
—	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Complete
—	Execute Cutover	04/11/22	11/11/22	Complete
—	Go live	12/11/22	12/11/22	Complete

Financial Performance

Whole of Life Budget & Expenditure

CapEx	
Budget	$130,787,000.00
Actual	$83,176,030.00
Variance	$47,610,970.00
OpEx	
Budget	$77,752,000.00
Actual	$19,478,280.00
Variance	$58,273,720.00

Current FY 2022/23



Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely			2		
Possible			2	1	
Unlikely					
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High					
Moderate				1	
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Program Risks

Title	Residual Rating	Description
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields."
Difficulty accessing historical data	High	Dependencies to migrate existing data into Clinical Patient Folder and the Data Repository are not achieved.
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability

Program Issues

Description	Residual Rating	Action to Be Taken
User provisioning is a deliverable of the technical project and is delayed. If users are not ava lable in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for later addressing etc.	High	This has significantly improved but w ll remain high until the providers can be tested, and the scope of provider creation is finalised. There are additional resources working on this and it is progressing well. A onboarding web form has been created and is going out to health services 12/09/2022 to validate data and ensure user logins are right during login labs that will occur directly after training sessions. Will close this action once login labs have occurred. 12/12/2022 Some ongoing issues with user templates are causing issues. Work is underway to clean up externa provider records that are linked to provider numbers that are not current. This has focussed first on GPs and will then move to focus on other external providers.

ACT Government | ACT Health

Digital Solutions Division Performance Report

December 2022

Issued 24 February 2023

Connecting Your Care

Contents

Cover photo –Digital Solutions Division staff working collectively to develop tailored training sessions for the staff across the ACT public health system using the Digital Health Record.

1. From the Chief Information Officer

The Digital Solutions Division (DSD) within ACT Health is responsible for the delivery of digital health capabilities across the ACT public health system which includes our colleagues in ACT Health, Calvary Public Hospital Bruce, Canberra Health Services and Tresillian Queen Elizabeth II Family Centre. DSD also provides a range of other services to differing sub-sets of the ACT public health system including security, records management, concierge and switchboard. Our services are as wide and varied as the ACT public health system.

2022 was a year of phenomenal change across the ACT public health system with the go-live of the Digital Health Record (DHR) on 12 November 2022. The successful go-live of the DHR was the culmination of over three solid years of effort across the ACT public health system and particularly within DSD. That this was delivered during the COVID-19 global health pandemic and at the same time that DSD established the Health Enclave speaks volumes to the professionalism and dedication of the whole DSD team.

The Health Enclave came into its own during 2022, with over 1,700 servers now commissioned and supporting the bulk of the ICT hosting for the ACT public health system. The move away from the WhOG hosting services operated by DDTS has delivered greatly enhanced hosting services to a level of security equivalent to PROTECTED at a reduced cost. This capability will serve the ACT public health system well for years to come and the high level of data security enabled will reduce the likelihood and consequence of a successful cyber attack. Canberrans will be well served by what is now the most secure hosting environment of any public health service in Australia that is fully compliant with the requirements imposed under the Security of Critical Infrastructure Act (Cwlth).

During 2022, the Digital Solutions Support (DSS) team moved to full 24/7 on-site presence, receiving over 75,000 support calls. As expected, the peak of calls received during November (13,142 calls) with the go-live of the DHR quickly dissipated with incoming call volumes reducing to 6,295 during December.

The partial leave freeze implemented due to the DHR program has now been lifted and during the first quarter of 2023, the DSD team will be focussed on the following:

- Taking a well-deserved break
- Bedding in the DHR and commencing the upgrade of the DHR
- Implementing the revised DSD organisational structure, including a substantial reduction in the headcount of the division and Epic training for many staff
- Reducing the active number of open tickets to under 1,000 and developing plans to cap this at 500 moving beyond quarter one, 2023.

Peter O'Halloran
Chief Information Officer and Executive Group Manager
Digital Solutions Division, ACT Health Directorate

+61 2 5124 9000 or HealthCIO@act.gov.au

2. Service Metrics

2.1. Service Metrics Summary

DSD operates a 24/7 support service (Digital Solutions Support or DSS) to support our colleagues in the ACT public health system. This team operate out of the Digital Solutions Operations Centre (DSOC) at 4 Bowes Street Phillip.

The DSS team operates as our level 1 support service across the Territory with staff, citizens, and external health professionals (from the ACT and interstate) able to access support by telephone, email, online portal and in person. The DSS team resolve many issues on first contact with issues that cannot be resolved in this manner handed off to our level 2/3 support teams (whether those teams be DSD, DDTS, NTT or the Calvary ICT team) in a manner that is seamless to the person seeking the support.

The volume of support can fluctuate significantly during the year based on the peaks and troughs of the ACT public health system (such as the on-boarding of new staff early in the calendar year).

As part of our client service revolution within DSD, we have established a series of performance goals or KPIs for our Technology Operations Branch team members that helps them to prioritise and support our colleagues across the system. These KPIs have been progressively introduced over the last year and will continue to evolve in the coming year.

Service	Time Goal
Request First Response	4 hours
Request Complete	24 hours
Password Reset Complete	2 hours
Urgent Request First Response	30 minutes
Urgent Request Complete	2 hours
Incident First Response	30 minutes
Incident Complete	4 hours

Where possible, we aim to include the last twelve months of performance to enable readers to understand our current month metrics in context. At times, we are unable to provide the full twelve months of data as the metrics may not have been collected in a manner that enables the analysis to occur or in other areas (such as digital records management) we may not have been providing the full service provision over 12 months. Further, where our metrics can be directly bench-marked against the whole of government DDTS provider, we also include their metrics to provide both context and to enable bench-marking to occur. DDTS metrics are sourced from the DDTS reports to the Quality and Measurement Advisory Committee (QMAC).

Following the implementation of the Digital Health Record, service levels returned to more normal pre-go live levels as expected. The volume of calls reduced by nearly half compared to the previous month which may have attributed to the improved the responsiveness by reducing the significantly increased volume.

2.2. Snapshot

2022 DECEMBER SNAPSHOT

In 2022 Digital Solutions Support received a total of 75,654 phone calls

6,295 Phone Calls Offered
To Digital Solutions Support

96 Successful Scheduled Changes

11,863 Requests Created
During December 2022

Requests Resolved **11,968**
During December 2022

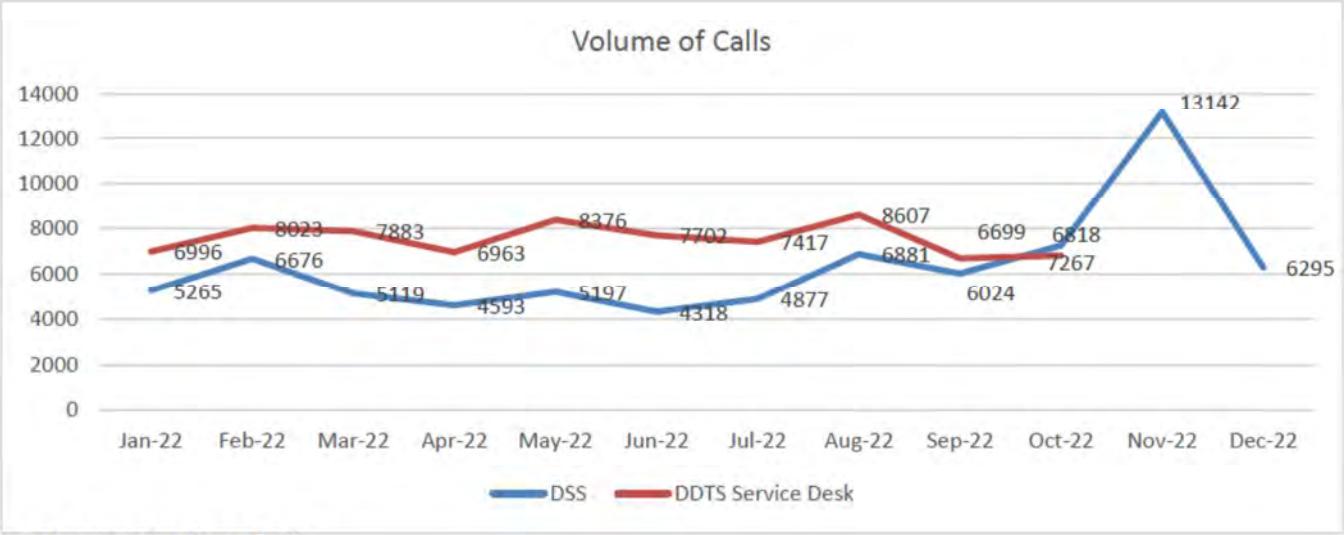
13
Major Incidents
Critical (P1) or High (P2)

26
Active Projects

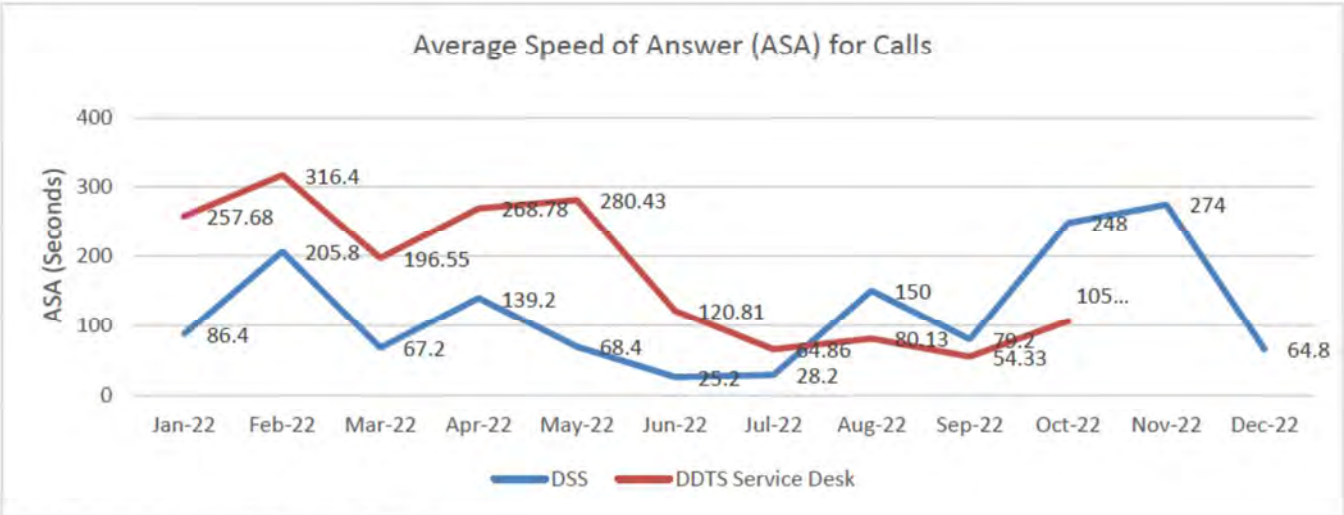
4.5
User Satisfaction
Out of 5

Monthly Request Summary

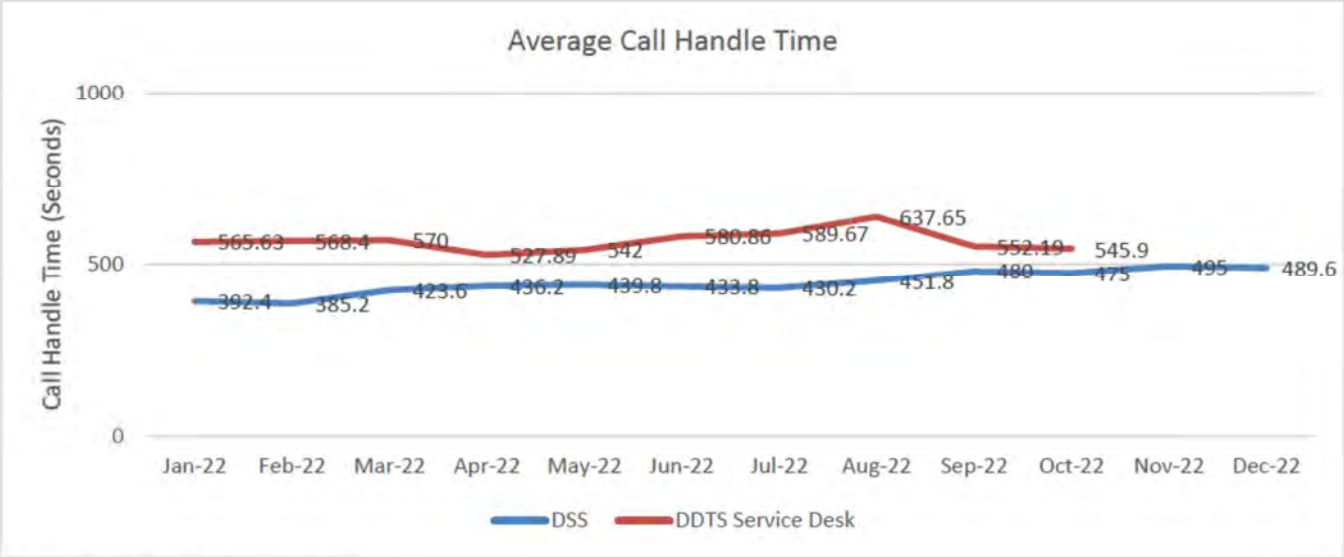
Metric	December 2022
Requests Created	11,863
Requests Resolved	11,968
Requests Open	2,969
Standard Requests Responded to within KPI Timeframe (4 hours)	83.4%
Standard Requests Resolved within KPI Timeframe (24 hours)	71.5%
Total Number of Urgent Requests	509
Urgent Requests Responded to within KPI Timeframe (30 minutes)	83.4%
Urgent Requests Resolved within KPI Timeframe (2 hours)	36.5%
Total Number of Password Reset Requests	1,277
Password Reset Requests Resolved within KPI Timeframe (2 hours)	73.3%



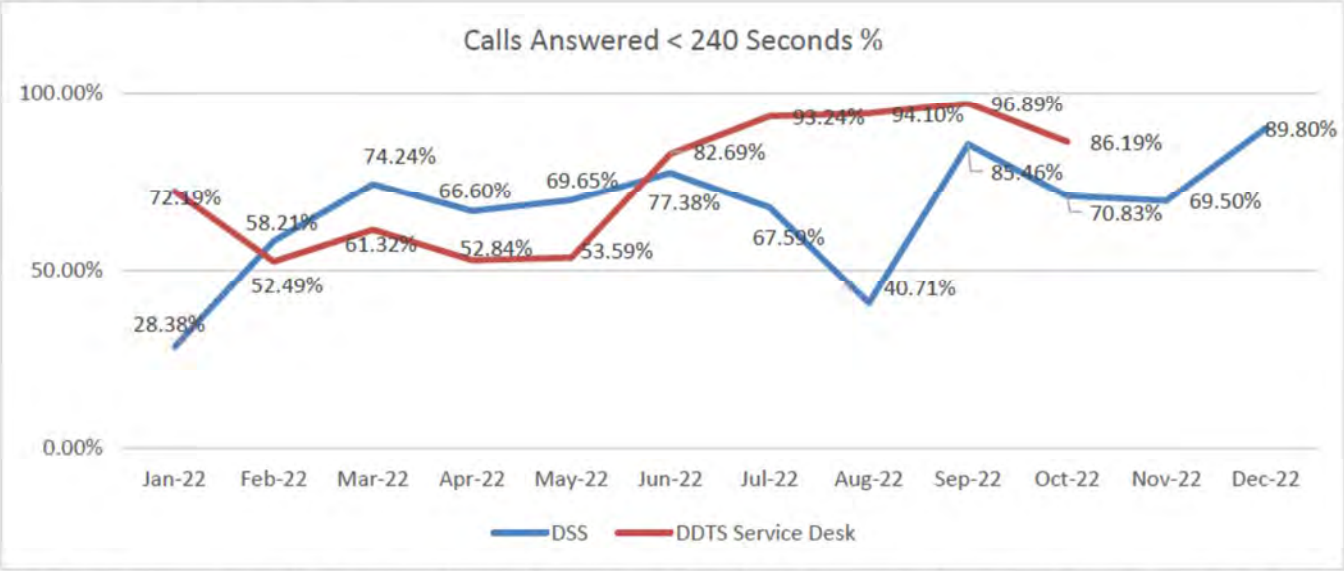
Graph 1 – Total volume of calls



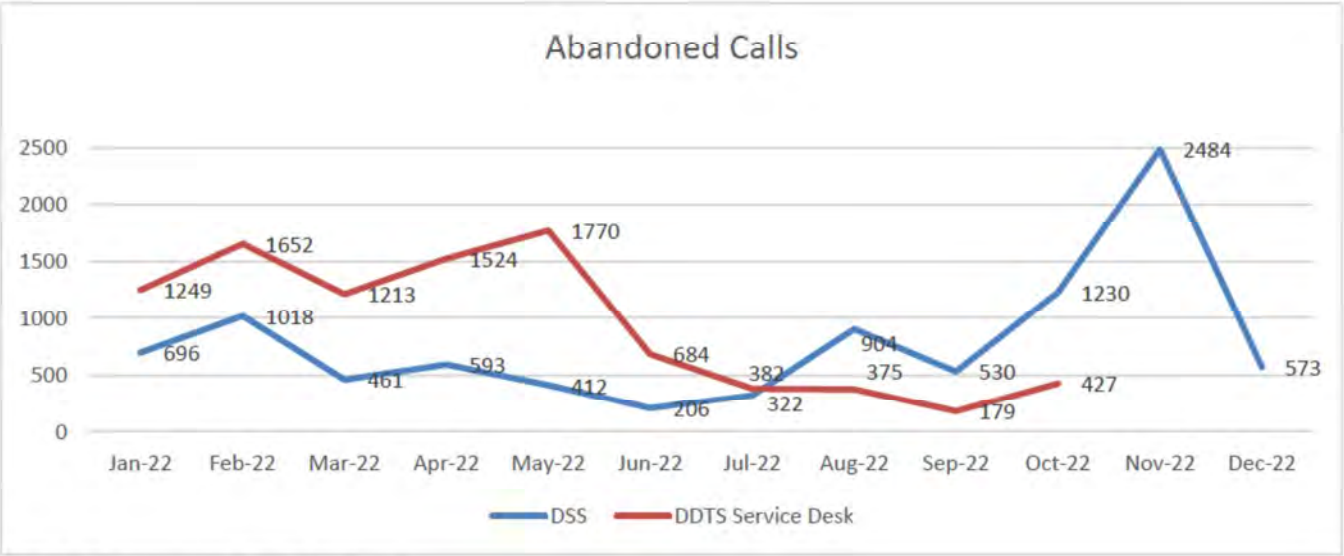
Graph 2 – Average speed of answer for calls



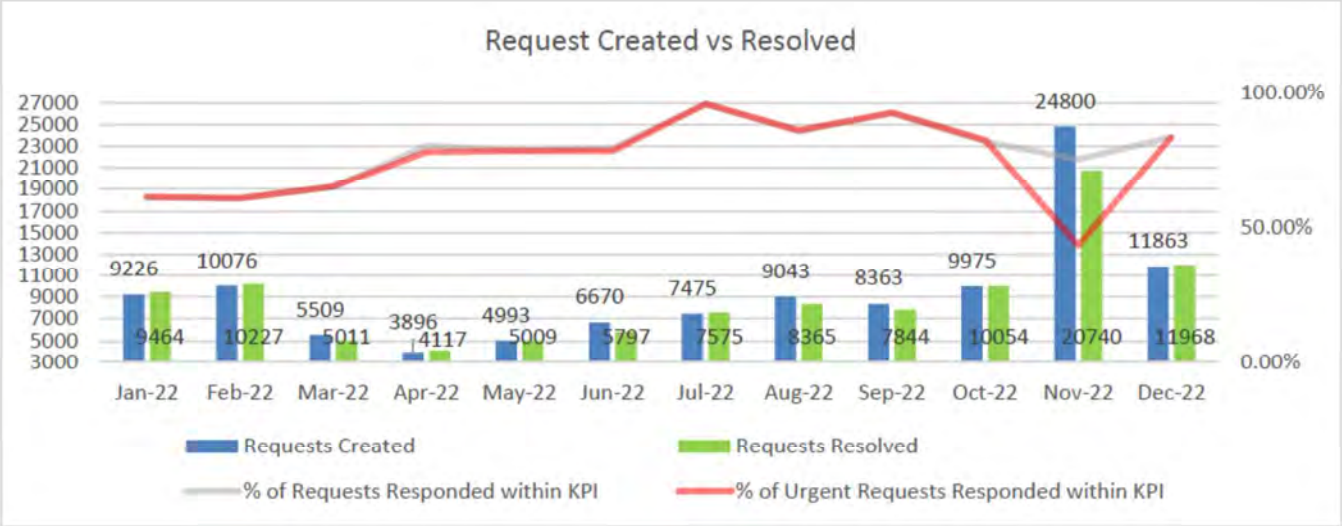
Graph 3 – Average Call Handle Time



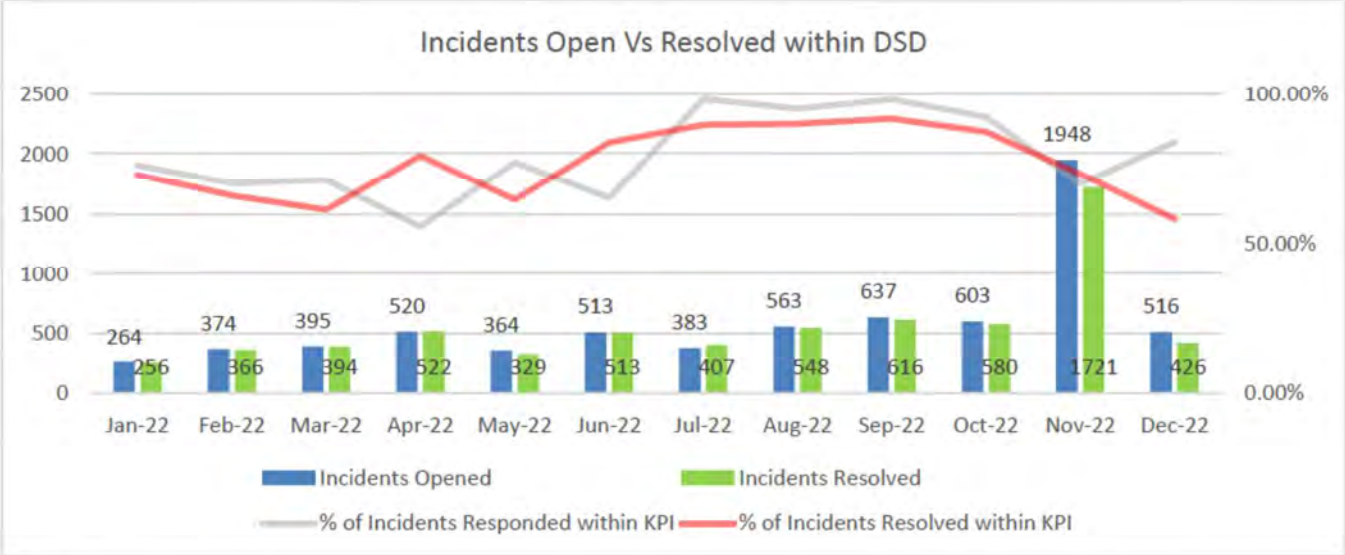
Graph 4 – Total percentage of calls answered within SLA. Please note DSD's SLA was previously set to <30 Seconds prior to September 2022.



Graph 5 – Percentage of calls abandoned



Graph 6 – Total number of requests open vs closed per month, including the KPI turn arounds on time to respond to standard and urgent requests.



Graph 7 - Total number of incidents created vs resolved per month, including the KPI turn arounds on time to respond to an incident and the resolution.

Graph 8 – Digital Solutions Division User Satisfaction rate out of 5 stars

2.3. Incident Management

An incident is defined as but not limited to an application system issue, fault, or unplanned downtime. DSD reports on all incidents where DSD is responsible for the service (ie excluding WhOG incidents managed and reported by DDTS).

Any issue may be categorised as an incident by either the user reporting the issue or by a DSD team member working on the issue.

Incidents are defined under four priority levels;

Priority 1 (Critical) – Total system dysfunction and/or shut down of operations, severely impacting government critical services
Priority 2 (High) – Disruption impacts effective delivery of business services of an entire site, which could impact other sites
Priority 3 (Medium) – Disruption to a number of services or programs within a site, possible flow on to other sites
Priority 4 (Low) – Some disruption manageable by altered operational routine in a local site, workarounds available

For this reporting period DSD recorded 516 new incidents raised with a total of 426 closed. There is still a reasonable volume of requested being incorrectly classified as incidents as a carryover from DHR go-live. There was significant spike on 23 December 2022, most of which related to a DHR outage. A total of 83.9% of incidents were responded to within the first 30 minutes which was an improvement of 13.9% on the previous month.

58.3% of incidents were resolved within four hours, which is down compared to the previous month of 73.3%.

From the 516 incidents open, 13 were classified as a high priority (priority 2), some of these are summarised in the table below.

The high number of incidents relating to integration are expected to decline dramatically during quarter 1 of 2023 with the decommissioning of the AETHER integration platform. Likewise, the issues experienced with the firewalls are already decreasing as the new Health Enclave services are bedded in.

Title	Incident Summary	Jira/SNOW #	Priority
Production - Node PAUCAPP020	One of the nodes used on the AETHER integration platform was unavailable, causing a 50% reduction in operational capacity. The incident self-resolved, there is no information in the logs to identify root cause or resolution.	DSD-281854 ICM23132286	P2
DHR RHAPSODY - Multiple environment affected	Multiple systems had not received messages from Epic and were found to be queuing in the Rhapsody integration engine. It had been found that a number of inbound and outbound ports on the firewall had disappeared from the configuration.	DSD-284841 SVR23136171	P2

	Rebuilding the firewall settings allowed the messages to flow to downstream systems.		
DHR RHAPSODY - CP.TCP.IO.334700 - Long Idle Time	There was an issue identified with Rhapsody which resulted in downstream systems not receiving messages. This was due to Rhapsody not acknowledging the application bridges post backup. The issue was resolved by the Interfaces team restarting the communication points in the bridges which allowed Rhapsody to acknowledge and accept messages.	DSD-287392	P2
MyMeal - NCPH Interface Messaging stopped	It had been reported that the Canberra Private Hospital was no longer receiving messages from the MyMeal interface, causing delays in patient meals. Incident was resolved by recreating the firewall rule the same, as it was to force the re-establishment of the connection.	DSD-285859 INC0883933	P2
Evolution – IS500 not loading results	Samples were not loading into Evolution. This was due to an error made by the vendor when configuring the analyser equations during a planned change, in turn, it forced subsequent results to sit in the validation queue. The change was rolled back, the service had returned to normal.	DSD-286288	P2
Evolution – Unable to access System	Users were unable to access the Evolution application via Citrix, when attempting to access a launch error was displayed which closed the session. On investigation it was identified that there was an IP conflict. Resolving that conflict and rebooting the VDisk resolved the issue.	DSD-292049 ICM23144052	P2
Riskman – Server error	Some areas of the Riskman application were not accessible. This was caused by the transaction log filling the drive, causing Riskman to be unable to write or save new data. Incident was resolved by the vendor creating a backup of the transaction log and shrinking the main log file to allow write space again.	DSD-287237 ICM23138906	P2
AETHER - DMZ Nodes down	3 nodes on the AETHER platform were down, the nodes were responsible for sending messages from Epic to Aria, CBord, Everlight and MerlinMap. A change in the configuration on the nodes resulted in the nodes becoming available again with messages flowing to downstream systems.	DSD-288212 ICM23139882	P2

AETHER - DMZ Nodes down	Similar to DSD-288212, another 3 nodes on the AETHER platform were down, the nodes were responsible for sending messages from Epic to Aria, CBord, Everlight and MerlinMap. A change in the configuration on the nodes resulted in the nodes becoming available again with messages flowing to downstream systems.	DSD-288855	P2
MyDHR - COVID records not displaying results properly	Incident that was raised as it was believed that COVID results were displaying incorrectly within MyDHR. Reports stated that MyDHR was displaying COVID results as a rating and not a binary Yes/No result. On investigation and contact with reporters we were unable to replicate or confirm the incident had occurred and the incident subsequently closed.	DSD-288475	P2
GemWeb - Reached Maximum retries	The Blood gas machines used in tandem with the GemWeb system was not sending results. The machines were unable to reach the GemWeb server. Issue self-resolved, resolution confirmed by NTT and customer.	DSD-289345 ICM23140986	P2
Agfa Xero Viewer – Unable to Launch	Users were unable to connect to the Agfa Xero Viewer to view Radiology Images. The outage was due to a failure with AGFA's storage solution. Replacing some of the hardware on the storage solution and restarting the controllers resolved the issue.	DSD-293916	P2
ACTGOV WIFI Calvary - Assets unable to connect to WiFi network	ACTGOV devices at Calvary hospital were not connecting to the network, impacted devices included Computer on Wheels, rovers and BCP laptops. It was found that the cause was a fire alarm at Calvary being triggered which automatically cuts power to the PABX room. Turning the power back on resolved the issue.	DSD-294357 INC0889757	P2

2.4. Change Management

All changes that occur within the ICT environment are documented in our IT Service Management tool (Jira) and undertake an established approval process. Changes are defined into four separate categories that are minor, major, significant and emergency. The category of the change request defines the approval process.

The definition of the changes recorded are:

Minor – Low risk, standard, repeatable, non-time critical and have a low risk/impact of failure

Significant – Moderate complexity with a moderate risk/impact of failure

Major – High consequence of failure, that are technically complex, represent a significant financial investment or are politically sensitive

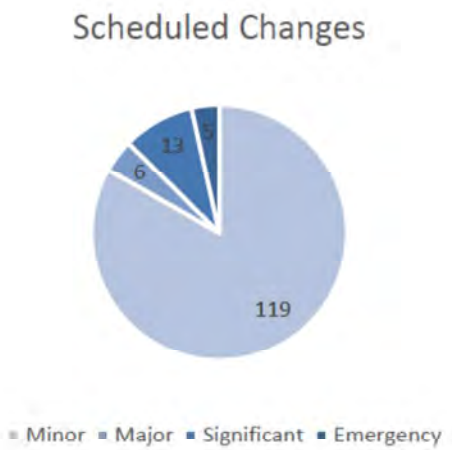
Emergency – Must be introduced as soon as possible to resolve an urgent incident address an unacceptable level of risk, or prevent disruption to critical business services

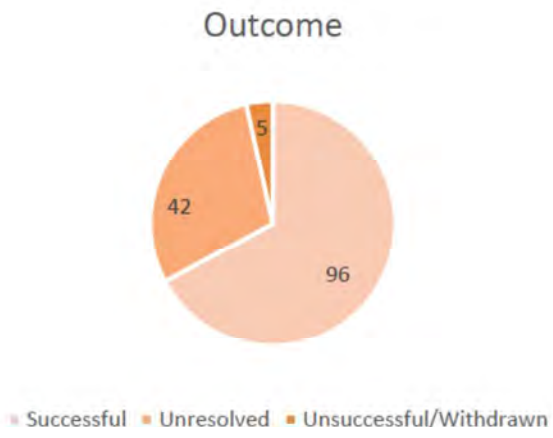
All Major and Significant changes must be considered through the Change Control Board (CCB) approval process prior to proceeding. The CCB met twice during December on the following dates:

- 7 December 2022
- 14 December 2022

A total of nine changes were endorsed at the above-mentioned meetings with an additional three out of session changes reviewed and endorsed by the board during the reporting period.

2.4.1. Scheduled Changes





There was a significant decrease in all categories this month which aligns with a return to business-as-usual activities following a busy November which featured the DHR go-live. Further there was a change freeze activated from 21 December 2022 through until 4 January 2023 which traditionally sees a reduction in changes created and implemented.

Major and Significant changes included the following:

- Standard monthly patching of servers and Citrix; and
- Updates to Nexus 360 and MerlinMap; and
- Implementation of the StatusPage solution; and
- A number of migration activities including the integration tools - AETHER to Rhapsody, Wireless Access Points and Clinical Portal data to Clinical Patient Folder; and
- Decommissioning of various legacy systems.

Emergency changes included of the following:

- Restart of Rhapsody integration solution; and
- A switch reboot at the University of Canberra Hospital; and
- Policy updates applied to the USB device redirection (to support more reliable connectivity o - connected peripherals to the DHR by users on Citrix); and
- Update to group policy to update remote desktop services to point to DHR servers,

There were five reported unsuccessful changes, two were noted as backed out, another two withdrawn and the final was implemented off a replicated change number.

Unsuccessful changes greater than 30 days

This table reflects changes that have been endorsed CCB and have yet to be successfully implemented.

CCB Approval Date	Planned Implementation Date	Change #	System Name	Description	Comment
03/06/2022	February 2023	DSD-207244	Kestral-PLS	Medicare upgrade master change request.	Postponed due to external resource availability
17/08/2022	20/01/2023	DSD-227446	NxClinical	NxClinical upgrade to version 6.2	Awaiting business to review BCP for NxClinical

2.5. Legacy Records Management (Paper Records)

DSD manages the physical (paper) administrative files for the ACT Health Directorate and Canberra Health Services. With ACT Health undertaking the majority of record keeping digitally now, new paper files are primarily created for Canberra Health Services (only the ACT Government Analytical Laboratory team are still permitted to create new paper files in ACT Health).

The focus of legacy records management continues to be on sentencing of files and preparation of files for destruction to enable ACT Health to divest itself of the warehouse housing these records by 2030. This is dependent on three key elements:

- Continued resourcing for sentencing and destruction of records;
- Continuation of the digitisation program for records to be retained past 2030; and
- CHS migrating to digital record management.

The low number of new paper files created during 2022 indicates that CHS staff may not be meeting their obligations under the Territory Records Act for administrative records. The issue of the low number of new file requests and the need for CHS to advise ACT Health of their decision in relation to proceeding to adopt digital records management have been raised with the relevant CHS officers.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Service	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22
Record transfer of a paper files to another officer	0	1	0	0	2	14	6	25	12	24	4	45
Paper File Retrieval Request	2	8	10	9	10	5	14	12	18	27	13	5
New Paper File Request	136	175	241	101	164	216	181	160	192	161	285	209
New File Part Request	0	8	4	3	2	17	4	17	19	7	15	9
Transfer Paper File to Records/Storage	1	23	10	6	3	15	7	19	5	6	8	16

2.6. Digital Records Management

ACT Health continues to migrate all administrative record keeping over to digital (primarily using the WhOG Objective solution) with only one business unit still remaining on paper (ACT Government Analytical Laboratory) and one group of functions (ministerial) remaining in HP Content Manager. Migration of documents from the network shared drive (Q) across to Objective were undertaken throughout the month by DSS and the Records Management team as capacity in the WhOG instance permitted.

The focus of the Digital Records Management team during quarter 1, 2023 is:

- Embedding Objective as the Digital Records Management solution for ACT Health;
- Migrating the ACT Government Analytical Laboratory across to Objective; and
- Implementing the Ministerial functions in Objective (noting the trial of this is now well underway).

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Metric	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22
General objective enquiry	4	4	10	5	35	50	44	43	60	44	37	67
Request Objective access + new user	6	9	11	3	31	42	51	37	31	16	14	19
Objective Training	1	0	4	4	20	119	149	26	35	14	10	7
Request Access/Restriction on a file or folder	1	0	7	1	7	14	24	19	19	19	25	9

3. Projects and Program

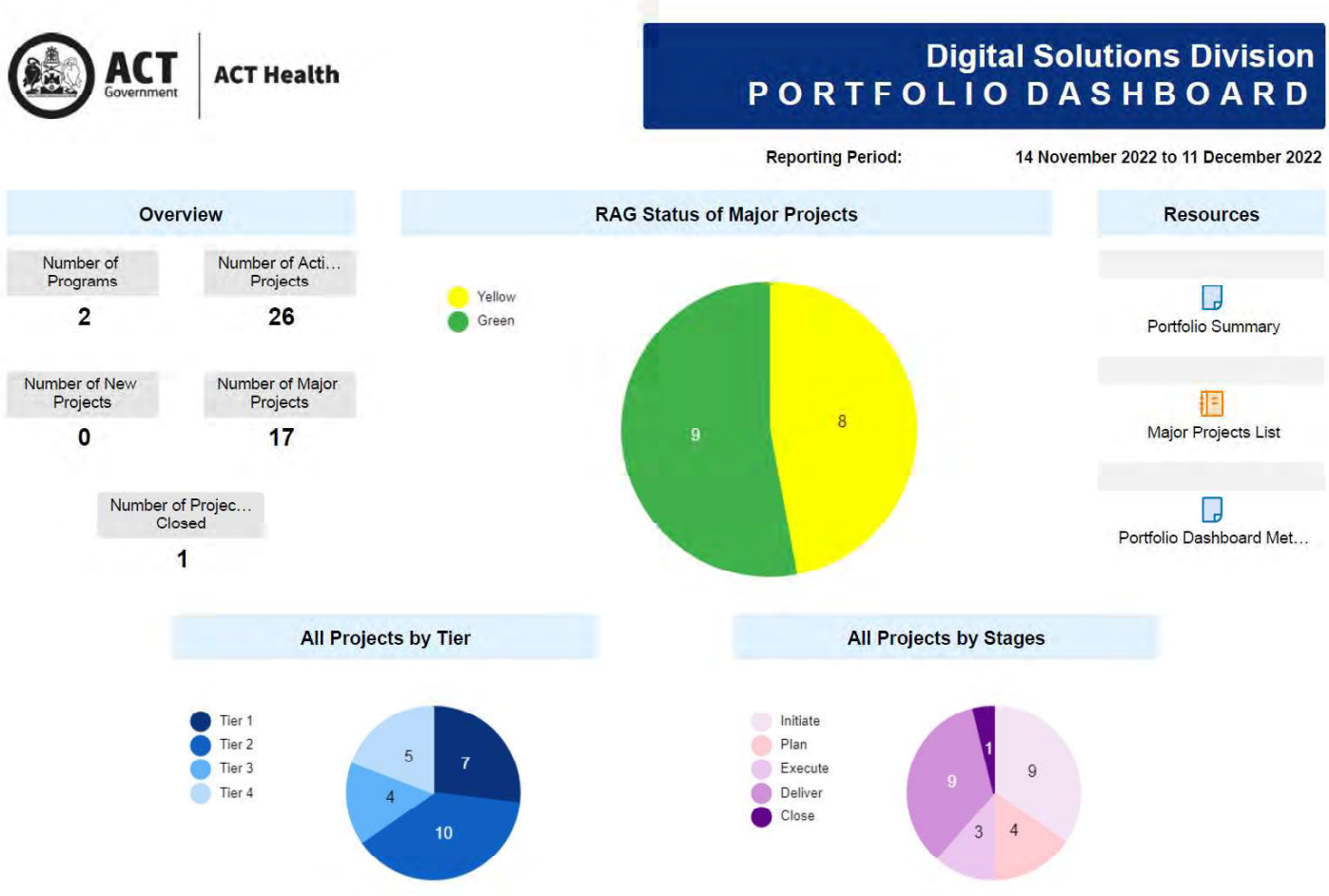
3.1. Summary Overview

The Digital Solutions Division (DSD) has a work program with 26 active projects in progress.
The Division tiers projects from 1 to 4 in accordance with the Portfolio Delivery Framework.
The Tier 1 projects are the most complex and Tier 4 are considered smaller and less complex.

Projects that have been classified as a Tier 1 or Tier 2 are required to report monthly to the Executive Sponsor and Chief Information Officer. The below reporting dashboards are derived from the reports submitted by Project Managers for the period ending 11 December 2022.

From the 17 major (Tier 1 and Tier 2) there are no projects tracking a red status. Previously the PIMS project was reporting a red status which has been rectified. Overall, the project status remains at Amber, noting that both Canberra Health Service and Calvary Public Hospital Bruce are now live with the PIMS instance of Merlin/MerlinMAP and the Digital Health Record integration has been live since 12 November 2022. The production environment was upgraded to v1.0.771 on 27 October 2022 however the solution continues to be a minimum viable product for both health services.

3.1. Digital Solutions Divisions Portfolio Dashboard



Major Program & Projects List

Major Program Report

Program ID	Program Name	RAG Status	Tier	Project Stage	Program Manager	Executive Sponsors
PG0001	Critical Services Building Program		Tier 1	Execute	Grant Clark	Colm Mooney
PG0002	Digital Health Record Program		Tier 1	Deliver	Sandra Cook	Rebecca Cross

Major Project Report

Project ID	Project Name	Project Health	Project Tier	Approval Stage or Tranche	Digital Health Strategy Theme	Executive Sponsor	Go-Live Tracking
PJ0002	Centenary Hospital for Women and Children Expansion Project		Tier 1	Execute	• Patient-centred • Health services enabled by contemporary technology	'Chris Tarbuck	30/11/23
PJ0004	CSB (Critical Services Building) Main Build		Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology	'Chief Minister	31/12/24
PJ0005	Digital Health Record Implementation Project		Tier 1	Deliver	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0006	Digital Health Record Technical Project		Tier 1	Deliver	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0007	Digital Health Record Business Intelligence and Data Project		Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0009	Notifiable Disease Management System (NDMS)		Tier 1	Deliver	• Patient Centred • Research, discovery and collaboration	'Kerryn Coleman	22/09/2022 Phase 2
PJ0010	Power Billing and Revenue Collection (PBRC) Upgrade: Phase Two - DHR Integration, Pathology & Dental Billing		Tier 1	Deliver	• Health services enabled by contemporary technology	'Paul Ogden	18/11/22
PJ0011	Birth of a Child		Tier 2	Deliver	• Patient-centred	'Peter O'Halloran	30/06/23
PJ0012	Clinical Patient Folder v4-2 Upgrade		Tier 2	Deliver	• Patient-centred	'Paul Ogden	01/10/2022
PJ0013	Pharmacy Inventory Management System		Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology	'Peter O'Halloran	20/06/2022 (CPHB) 26/09/2022 (CHS);
PJ0015	TCH Building 12 ICU Redevelopment		Tier 2	Close	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/03/22
PJ0016	TCH Building 12 Medical Imaging Refurbishment		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0017	TCH Building 19 Level 3 Pharmacy Refurbishment		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/07/23
PJ0018	TCH Building 20 L1 RadOnc Linac Replacement		Tier 2	Deliver	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/12/22
PJ0019	Weston Creek CHC Medical Imaging Expansion		Tier 2	Deliver	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0033	Calvary Public Hospital Bruce OneID Implementation and EACS Replacement		Tier 2	Initiate	• Health services enabled by contemporary technology	'Jarrad Nuss	30/06/23
PJ0036	BIS Upgrade Project		Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Julianne Siggins	09/11/22

Tier 3 & 4 Projects

Project Name	Executive Sponsor	Digital Health Strategy Theme	Approved Baseline Budget (Capex)	Approved Baseline Budget (Opex)	Approval Stage or Tranche
TechLauncher Clinical Trials Administration System	'Peter O'Halloran	• Research, discovery and collaboration	$0.00	$50,000.00	Execute
MyMeal System Upgrade to v15	'Peter McNiven	• Patient-centred • Health services enabled by contemporary technology	$0.00	$10,000.00	Execute
Food Safety Monitoring System	'Colm Mooney	• Health services enabled by contemporary technology	$25,000.00	$0.00	Deliver
Mainpac Expansion	'David Jones	• Health services enabled by contemporary technology	$254,375.00	$38,958.75	Initiate
Electric Vehicle Charging ICT Standard	'Colm Mooney	• Health services enabled by contemporary technology	$20,000.00		Initiate
Medical Imaging Additional Nurse Call Equipment	'Sean Fenotti	• Health services enabled by contemporary technology	$22,000.00		Initiate
DALI System Upgrade	'Chris Tarbuck	• Health services enabled by contemporary technology	$50,000.00		Initiate
TCH B3 L1 Rheumatology & Dermatology Consultation Room Upgrades	'Chris Tarbuck	• Health services enabled by contemporary technology		$4,200.00	Initiate
1 Moore Street Security Upgrade	'Scott Harding	• Health services enabled by contemporary technology		$5,000.00	Initiate

Red Synopsis Report

Synopsis Status	Project ID	Project Name	Project Tier	Approval Stage or Tranche	Comments

Closed Projects

Project ID	Project	Project Overview
PJ0028	UCH Carpark Credit Card Payment	Integration of a pay parking system within the University of Canberra Hospital Carpark. Works will include Design/Planning and Provisioning of ICT Supporting Infrastructure, Critical Systems and Operational Commissioning.

New Projects

Project ID	Project Title	Project Overview

Major Project Risks Heat map

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain	1		4		
Likely	1	8	11	7	
Possible	2	7	23	19	
Unlikely	1	28	27	10	
Rare	3	7	4	1	1
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Major Project Issues Heat map

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High		1	7	17	
Moderate	2	3	11	7	
Low	2	1	4		
Planning	1	1	1		
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Major Projects Critical Risks/Issues Report

Project Name	Risk/Issue	Title	Residual Rating	Description

3.2. Major Projects (Tier 1 & 2) to be delivered by the end of 2022

Project Name	Tier	Scope and Status Update	Executive Sponsor
Digital Health Record • Implementation • Technical • Business Intelligence and Data Projects	1	Digital Health Record (DHR) will provide a person-centred view of clinical information at the point of care across public health facilities across the ACT and will significantly reduce the number of systems that staff need to access. DHR Implementation Project will deliver configuration, testing, implementation and training of all end users of the Digital Health Record. DHR Technical Project will deliver the technology components to support the migration of ACT Health systems, DHR and Related Systems environments, interfaces, end user devices, medical devices and foundational technology solutions. DHR Business Intelligence and Data project will engage expertise from Business Intelligence teams to deliver data and reporting capabilities.	Rebecca Cross
Notifiable Disease Management System (NDMS) (Phase 2)	1	NDMS Phase 1 - Implementation of Sunquest WorldCare and integration with RedCap used for public declarations and daily monitoring of people in quarantine was implemented in November 2021. Phase 2 – Implementation of 73 other notifiable diseases into Sunquest WorldCare, HL7 messaging and integration with ACTPAS. Implementation scheduled by the end of September 2022.	Kerryn Coleman
Clinical Patient Folder (CPF) 4.5 Upgrade	2	CPF and its data is being migrated to the NTT environment. The implementation of the upgrade to version 4.5 is being tested. The upgrade to version 4.7 is being built to include the DHR Interfaces. Once the vendor has completed their system testing it will be built in the NTT non-prod for testing before the environment is turned into production. The aim is to have all the work completed by the end of Oct 2022.	Paul Ogden
Pharmacy Inventory Management System (PIMS) project	2	The PIMS project will implement one consolidated PIMS across Canberra Health Services sites which will result in a more streamlined integration with the DHR. PIMS went live at Calvary Public Hospital Bruce and scheduled implementation at Canberra Hospital is for October 2022.	Peter O'Halloran
Power Billing and Revenue Collection Upgrade – Phase 2 DHR integration, Pathology and Dental Billing	1	The core upgrade phase of the project was delivered in December 2021. The project will deliver Phase Two which includes the DHR Integration of all DHR Modules, Pathology and Oral Health Services billing by 12 November 2022.	Paul Ogden

4. Digital Health Record (DHR)

4.1. Digital Health Record Program Report

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 November 2022 to 6 December 2022

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending

▲ Improving

Clinical Owner/s

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issu... Health Status	Scope Health Status	Benefits Health Status
🟡	🟢	🟢	🟢	🟡	🟢	🟢

Program Delivery Team

Approver	Sandra Cook
EBM, Future Capability	Justine Spina
Technical Project	Timothy Panoho
Implementation Project	Philippa Kirkpatrick
BI & Data Project	Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130,787,000.00	$47,610,970.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$77,752,000.00	$58,273,720.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting an amber status. The DHR system was successfully implemented on Saturday 12 November 2022 at 5.30am. The focus of the DHR Implementation Project, DHR Technical Project and the DHR BI and Data Project has been on managing support tickets and working through issues as they arise. As of 6 December 2022, there were 4,380 P4 issues, 98 P3 issues and 63 P2 issues with no P1 issues raised. The teams are working through the ticket volumes and even though there had been a reduction in resourcing available to help with this as the Hypercare period was winding down, the teams are managing to close almost the same volume of tickets opened on a daily basis.
The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Risks & Issues

Risks - There are currently 39 open risks. There are thirteen risks reporting a high rating:

#1 & 7 Insufficient Budget
#20 Data Quality in the DHR is poor
#22 The Clinical Record does not provide ready access to information
#24 Difficulty accessing historical data
#29 Clinical Engagement
#38 Slow decision making
#41 Health service resources unavailable
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues – there are 7 high issues still open the top one being:
End User Devices are required to ensure access to the Epic solution for different roles in different ways. With COVID-19 there have been supplier delivery issues so orders need to be placed with regard to these lead times.

Budget

The total budget for the DHR Program is now $328.803 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $64.273 Million Treasury Operational and $122.622 Million in Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to October 2022 are as follows - Capital $83.176 Million (Budget $84.702 Million) Opex $19.478 Million (Budget $22.689 Million). There is $31.756 Million Capital remaining and $44.796 Million Opex remaining. At the end of October 2022, the total forecast over-expenditure for Capital over the 8 years is $3.583 Million and a forecast underspend of Operational expenditure of $37.593 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast underspend for the whole of life DHR Program at present is $2.212 Million over the 8 years with including the BAU expenditure. Therefore, the budget will be reporting Green. Detailed quarterly reports will be provided to the Board in December 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Jan 2023).

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 18 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assuran... review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post Implementation Review in April 2023.

Benefits

Abt Associates (in partnership with bdna) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified. The metrics were approved by the DHR Program Board in October 2022 and baseline data will be provided in

Scope

Scope refinements are being managed through Change Request processes. None have been raised in this period. There will be a Change Freeze period from 21 December 2022 to 4 January 2023.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The DHR Technical Project is reporting red for schedule. More casual resources are being employed to assist with Technical Dress Rehearsal processes to improve this issue.

Project Summary Dashboard

DHR Technical Project

RAG

% Complete 92%

Trending

The project status is green as the solution is in production and operating. Over the initial Go-Live period there was one outage of 2 hours and 46 minutes on Sunday 13 November 2022. The root cause of this was rectified on Wednesday 16 November 2022. There have been intermittent issues with the AETHER integration engine and a paper recommending interfaces are switched from AETHER to Rhapsody is circulating at the moment. This switch over would be completed by March 2023.

DHR Implementation Project

RAG

% Complete 98%

Trending

The Digital Health Record (DHR) Implementation Project is reporting an overall green status and is improving.

Cutover processes were completed in a timely manner for Go-Live. Data Abstraction was completed and has provided data for 6 weeks of appointments scheduled. The application workstreams are now managing the tickets logged across the health services to stabilise the system prior to optimisation requests being reviewed and prioritised in February 2023.

DHR Business Intelligence & Data Project

RAG

% Complete 75%

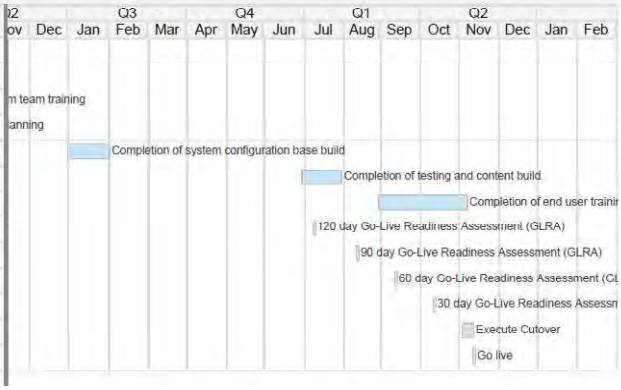
Trending

This project is reporting amber and trending upwards. A request to extend the BI and Data Project has been lodged with the DHR Program Board for January 2023. The request is to extend the project until November 2023 and to enable it to be a separate project that will report into the ACT Health Digital Committee. Scope for reporting for

Key Program Activities

Key Program Activities

At Risk	Task Name	Start Date	End Date	Status
	Program authorised to commence	08/02/21	08/02/21	Complete
	Contract with vendor signed	01/01/19	01/01/19	Complete
	Completion of staffing and program team training	30/06/21	30/06/21	Complete
	Completion of detailed program planning	30/06/21	30/06/21	Complete
	Completion of system configuration base build	31/12/21	31/01/22	Complete
	Completion of testing and content build	30/06/22	29/07/22	Complete
	Completion of end user training	29/08/22	04/11/22	Complete
	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	Complete
	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Complete
	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Complete
	Execute Cutover	04/11/22	11/11/22	Complete
	Go live	12/11/22	12/11/22	Complete



Financial Performance

Whole of Life Budget & Expenditure

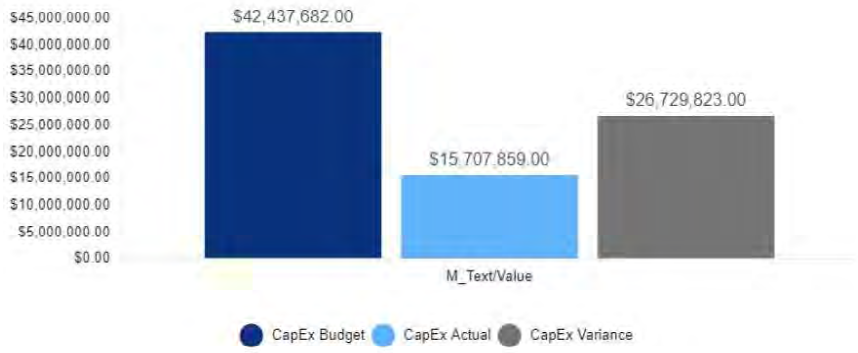
CapEx

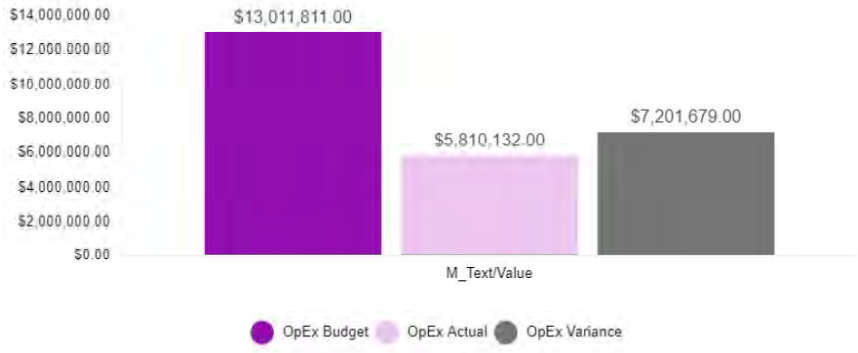
Budget	$130,787,000.00
Actual	$83,176,030.00
Variance	$47,610,970.00

OpEx

Budget	$77,752,000.00
Actual	$19,478,280.00
Variance	$58,273,720.00

Current FY 2022/23





Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely			2		
Possible			2	1	
Unlikely					
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High					
Moderate				1	
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Program Risks

Title	Residual Rating	Description
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields. "
Difficulty accessing historical data	High	Dependencies to migrate existing data into Clinical Patient Folder and the Data Repository are not achieved.
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability.

Program Issues

Description	Residual Rating	Action to Be Taken
User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	This has significantly improved but will remain high until the providers can be tested, and the scope of provider creation is finalised. There are additional resources working on this and it is progressing well. A onboarding web form has been created and is going out to health services 12/08/2022 to validate data and ensure user logins are right during login labs that will occur directly after training sessions. Will close this action once login labs have occurred. 12/12/2022 Some ongoing issues with user templates are causing issues. Work is underway to clean up external provider records that are linked to provider numbers that are not current. This has focussed first on GPs and will then move to focus on other external providers.

4.2. Digital Health Record Implementation Report

ACT Health

Digital Health Record Implementation Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: As at 9 December 2022

Project Overview

The Digital Health Record Implementation Project will deliver the configuration, testing, implementation, and training of all end users of the Digital Health Record.

Trending

Stable

Project Governance

Project ID	PJ0005
P3M ID	PROJ10112
Approval Stage	Deliver
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Philippa Kirkpatrick
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issu... Health Status	Scope Health Status	Benefits Health Status
●	●	●	●	●	●	●

Project Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
02/08/21	02/08/21	$74,598,945.00	$23,497,640.00
Actual Start Date	Baseline Start Date	Baseline (Capex)	Variance (Capex)
30/12/22	30/12/22	$32,613,453.00	$27,375,821.00
Actual End Date	Baseline End Date	Baseline (Opex)	Variance (Opex)

Project Status Commentary

Project Status

The Digital Health Record (DHR) Implementation Project is reporting an overall amber status.

The system is live and all planned areas are now using the DHR. Areas experiencing the greatest issues are the patient administration area (particularly in referral management) as well as pathology.

Schedule

The DHR went live according to schedule. The hypercare period is now finished. The team are focussed on resolution of issues from tickets. Early in 2023 the focus will move to focus on transition to BAU arrangements.

Scope

The DHR went live with all modules planned, other than applications on bring-your-own devices (Haiku, Canto and Limerick).

An optimisation register has been developed to capture requests for changes that are not go-live critical. An Optimisation Framework is under development that will guide the management of optimisation activities including the prioritisation of work on optimisation requests.

Budget

The project budget remains to be forecasting a budget surplus. This may be reallocated to the program if it is not required.

The capital forecast is a deficit of $641,000 due to overtime work by the team to achieve go-live according to schedule. The operational forecast is $24 million under budget. However, this is the project budget which includes funding to support the BAU team as well as the pathology system. Neither of these expenses are included in the project budget and therefore, this amount is deceptive.

Risks & Issues

Many risks were closed out with the implementation of the project as they related to achieving go-live on schedule, budget and with staff trained. There remains one high risk, about attracting and retaining the right staff. Recruitment for the business as usual team is underway. However, there remains a risk of turnover as some team members are returning to their previous roles or taking new positions.

There are 5 issues designated as high (decrease of 9 since the last report). Two of the high issues are with regard to referral management and external access to pathology reports. Updates on these are tracked regularly at the Top 10 meetings.

Quality

Quality and assurance activities are being managed at the program level and is reported in the program status report.

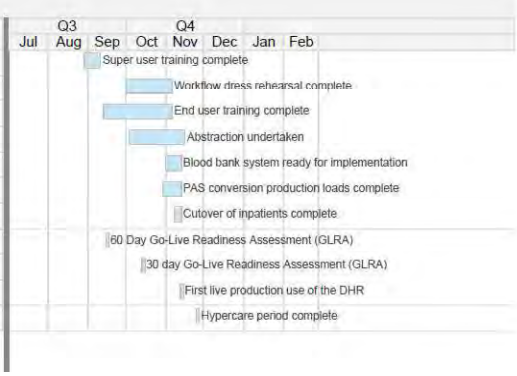
Benefits

The project benefits are being managed at the program level and is reported in the program status report.

Key Project Activities

Key Project Activities - Implementation

Task Name	Status	At Risk	Start Date	End Date
Super user training complete	Complete		29/08/22	09/09/22
Workflow dress rehearsal complete	Complete		01/10/22	04/11/22
End user training complete	Complete		13/09/22	04/11/22
Abstraction undertaken	Complete		03/10/22	14/11/22
Blood bank system ready for implementation	Complete		01/11/22	11/11/22
PAS conversion production loads complete	Complete		29/10/22	11/11/22
Cutover of inpatients complete	Complete		07/11/22	11/11/22
60 Day Go-Live Readiness Assessment (GLRA)	Complete		15/09/22	15/09/22
30 day Go-Live Readiness Assessment (GLRA)	Complete		13/10/22	13/10/22
First live production use of the DHR	Complete		12/11/22	12/11/22
Hypercare period complete	Complete		25/11/22	25/11/22

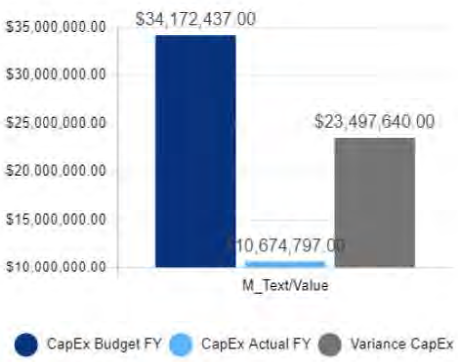


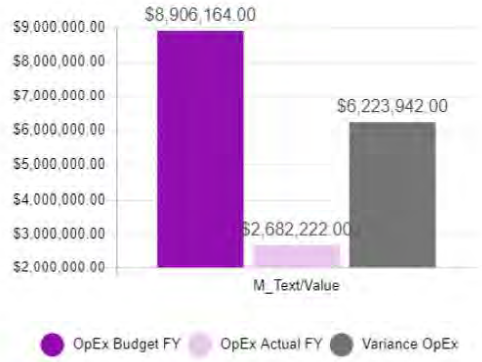
Financial Performance

Whole of Life Budget & Expenditure

CapEx	
Budget	$74,598,945.00
Actuals	$51,101,305.00
Variance	$23,497,640.00
OpEx	
Budget	$32,613,453.00
Actuals	$5,237,632.00
Variance	$27,375,821.00

Current FY 2022/23





Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		1	1	1	
Possible		1	5		
Unlikely		6	1		
Rare					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Issue Matrix

Primary	2	3	4	5	6
Critical					
High			1	2	
Moderate	1	1	4	2	
Low		1			
Planning					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Project Risks

ID#	Title	Source	Residual Rating	Existing Risk Controls
DHRIMP52	Health services policies or procedures may not align with the configuration of the DHR.	Changes in workflows need to be reflected in changes in policy. The health services may not be resourced to undertake all required policy updates.	High	Health services leads are planning this work. A register of known policy changes has been developed

Project Issues

ID#	Title	Description	Residual Rating	Action to Be Taken
DHRIMP-I23	Dependent projects	User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	Hakan Gultekin and Tim Panoho are leading this activity. Collection and analysis of data is progressing. Weekly reports on progress are provided to the Board. 16/3/2022 This is improving. It is now progressing and an initial upload of providers underway. 26/5/2022 Sonya Floyer has been engaged to support this work. 1/8/2022 Sonya to implement app to collect this data. 15/10/22 Data is being collected via a webform. However updated provider information will not be uploaded until late October. 9/12/2022 Work continues on the clean up of providers in the system. The greatest impact is now with external providers, including providers with records associated with inactive provider numbers. This is resulting in users selecting an inactive provider and results not being received.
DHRIMP-I24	People	Some staff have reported burnout or stress at rates that are not healthy.	High	This is a limited number of staff but has resulted in turnover. Managers are monitoring any staff where this has been reported, and for those that have remained with the team, there have been improvements. However, with high workloads and schedule delays, this issue may remain. Therapy dogs were organised. All staff were encouraged to take at least two weeks off over the Christmas period. 16/3/2022 Last week was meeting free week which was well received. Another time period when we will encourage leave is being identified (possibly last two weeks of July - one week per team member at their own choice) 26/5/2022 Additional boost request going in to support the team over go-live. 1/8/2022 Retention of some Boost over go-live has been approved. There is still some turnover in the team with two team members resigning in the past few weeks. Action is for ongoing monitoring by managers and escalation as required. 15/10/22 This continues and around 5 staff have left recently. Managers continue to support their teams and assist with prioritisation. The team is focussed on go-live critical activities. 9/12/2022 This continues although is reducing for some teams since go-live. Other teams with large ticket numbers are still feeling stress.
DHRIMP-192	Workflow	CPF integration has critical defects	High	15/10/22 Monitor resolution of critical defects. CIO escalating with Infomedix frequently. 9/12/22 The DHR went live with CPF integration. Ongoing issues are reported with the ability to open document level links.
	Workflow	Difficulties with referral management	High	9/12/2022 Both education, engagement and configuration corrections are underway.
	Workflow	Pathology results not all being received by GPs	High	9/12/2022 Investigations are underway. Planning also underway to retrigger results.

4.3. Digital Health Record Business Intelligence and Data Project Report

ACT Government | ACT Health

Digital Health Record Business Intelligence and Data Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme
- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 14 Nov2022 - 11 Dec 2022

Project Overview

The DHR Business Intelligence and Data project brings together existing resources from across the health system business intelligence teams and engages expertise to deliver the technical and enabling capabilities, with the existing DHR project resources under a single project structure to ensure successful delivery of data and reporting capabilities.

Trending
▲ Improving

Project Governance

Project ID	PJ0007
Approval Stage	Plan
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Sean Winefield
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issu... Health Status	Benefits Health Status	Quality Heal... Status	Scope Health Status
🟡	🟡	🟢	🔴	⚫	⚫	🟡

Project Baseline

Current Schedule	Baseline Schedule	Baseline Budget	Budget Variance
01/03/22 Actual Start Date	01/03/22 Baseline Start Date	$1,496,215.00 Capex	$1,172,769.00 Capex
23/04/23 Actual End Date	23/04/23 Baseline End Date	$1,161,948.00 Opex	-$152,134.00 Opex

Project Status Commentary

Project Status

- There is a continuing focus on data mapping and validation against production data
- Report validations and remediation in Production are underway now that metrics are populating with real data
- Development of reports requested prior to Go Live are being prioritised based on operational need
- New requests and issues raised during the Hypercare period are being actioned and prioritised by the team
- Release 1 completed 25 November 2022 - First run of core business entities
- Release 2 due 23 December 2022
- Mid term data access and development approach agreed with Calvary -- Hybrid approach required due to Calvary requirements differing from anticipated usage patterns from initial design options paper (AKA options 1/2/3)
- Calvary and CHS enabled access to PRD Clarity data daily snapshots via ACT Health data lake
- EPIC resources assisting in remediation of raw data validation scripts
- Data Analytics Branch provided with data access to validate data scripts
- 5 legacy systems decommissioned with data migrated to data capability legacy data hold

Schedule

- Test build of national submission elements is complete. Testing is finalised for elements that have been mapped.
- Review and validation of methodologies target completion Feb 2023
- Validation of all reports in Epic – Jan 2023
- Tables to support National Submissions - February 2023

Risks & Issues

- Production data does not match anticipated outputs for reporting due to lack of documentation of workflows
- Issues with collection of data due to workflows not enforcing required data capture
- Roles and responsibilities are not defined across the three Health agencies and this is impacting the ability to improve governance processes

Scope

BI Summary of Work have identified all tasks that must be delivered by Go-Live

Budget

Budget is being management at the program level
The new project team is focused bringing the project out of critical and will refine the budget expenditure over the coming weeks to provide more detailed information by next month's status report.

Quality

Quality and assurance is being managed at the program level and is reported in the program status report.

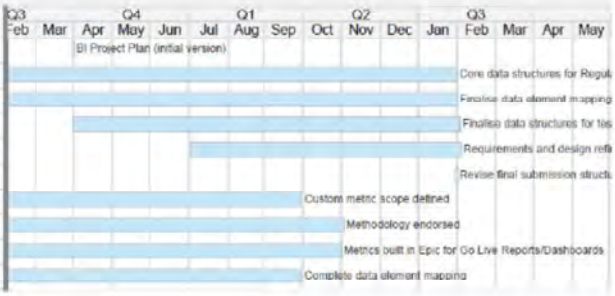
Benefits

Benefits are being managed at the program level and is reported in the program status report.

Key Project Milestones

Key Milestones Report - Digital Health Record Busi

At Risk	Health	Task Name	Start Date	Status
		BI Project Plan (initial version)	30/03/22	Complete
		Core data structures for Regulatory Submissions completed	01/01/22	In progress
		Finalise data element mapping	01/01/22	In progress
		Finalise data structures for testing	01/04/22	Not started
		Requirements and design refined for final submission structures	01/07/22	Not started
		Revise final submission structures	31/01/23	Not started
		Custom metric scope defined	01/01/22	Complete
		Methodology endorsed	01/01/22	Complete
		Metrics built in Epic for Go Live Reports/Dashboards	01/01/22	Complete
		Complete data element mapping	01/01/22	Complete



Financial Performance

Whole of Life Budget & Expenditure

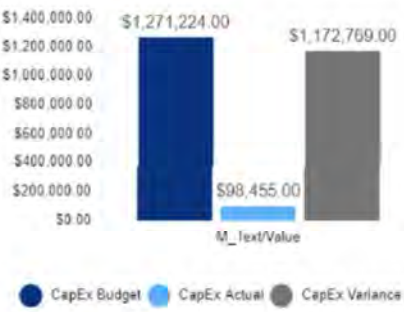
CapEx

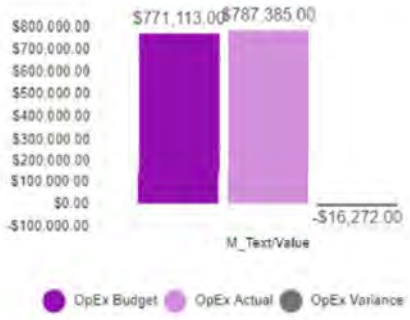
Budget	$1,496,215.00
Actual	$323,446.00
Variance	$1,172,769.00

OpEx

Budget	$1,161,948.00
Actual	$1,314,082.00
Variance	-$152,134.00

Current FY 2022/23





Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain			4		
Likely		1	5	1	
Possible		1		9	
Unlikely		10	4	4	
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High				1	
Moderate			4	1	
Low			3		
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Risks

Title	Residual Rating	Action to Be Taken
National Reporting	High	Testing of data elements required for submissions. Close collaboration and communication with submission team. There are well-established processes for resubmission of data.
Critical Data Elements	High	We are working with app team and executives on mitigations, which include addressing through training Meetings will be scheduled week starting 5 September to discuss mitigation.
Limited Resources	High	Keep app workstream managers in the loop Escalate to senior management and executives as required
Lack of organisational readiness for such a significant change.	High	Treatments include the health services recruiting additional staff to support the change management Robust end user training Data governance/literacy
Clients receive the wrong reports and use them incorrectly.	High	Efforts underway to identify users, job roles to ensure they are assigned to the appropriate user group and tiers Recruitment of additional staff to support change management Robust end user training Data governance/literacy
The Territory may have problems with national reporting and submissions during the transition period from existing systems to the Digital Health Record	High	Map data fields from the DHR into the ACT data repository. There are well-established processes for resubmission of data. Sending brief to Minister and letter to DG and funding bodies about potential impact to submission timeline.
Inability to meet national submission requirements.	High	Testing of data elements required for submission Close collaboration and communication with submission team There are well established processes for re-submission of data
Loss of historical data - Audit data in chronicles is truncated regularly and if Clarity ETLs miss data it may be impossible to retrieve.	High	Regularly review all the specifications. Keep abreast of any new reporting requirements and/or standards Identify all relevant stakeholders for the BID project Extensive consultation regarding deliverable required by stakeholders Regular meetings with all stakeholders POTENTIAL: increase log audit retention in Chronicles, however, will affect cost and performance
Data migration is incomplete - Data is notified for migration prior to Go-Live	High	DHR Data conversion team is assessing the Legacy Systems migration strategy DHR and Epic are developing a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) ration strategy DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe Testing process is planned and coordinated with key stakeholders
Data is lost, corrupted or mapped incorrectly through migration progress	High	Legacy data is currently being migrated from decommissioning systems. This data is landed in the new Data Health Enclave (PAUCLDRSQL207) server. Validation of data is dependent on the availability of an SME in the particular system area.
Accidental release of confidential data -	High	Training in data governance and best practices Build secure data handling network zones
Software as implemented does not meet our mandatory reporting needs	High	Working with vendor to identify mandatory reporting concepts to ensure inclusion prior to Go-Live
Data Access & Security	High	Draft key procedures required for Go-Live and training Communicating dependencies and timelines to DAB for required policies Clear approval process
Waiting Times for ACT Consumer App	High	Work with Epic on what solutions will meet requirements Escalate decision if required before the next GLRA
Lack of dedicated resourcing	High	
Strategy for reporting historical data	High	Currently assessing certain systems which will require reporting user interfaces. Systems like CHARM have been identified to require reporting for research, patient workflows, etc. That will require extraction from the data warehouse.
Difficulty accessing historical data	High	a) Monitoring progress of the data migration into the data repository. b) Training staff in the data repository team early so that their work aligns with the future state after implementation of the Digital Health Record. c) Monitor the implementation of document level context switching in CPF. d) DHR Data conversion team and IDM team are assessing the Legacy Systems migration strategy with the intent that legacy system information will be migrated to either Clinical Patient Folder and/or the Data Repository and be the source for historic information. e) DHR and Epic have developed a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) and have this approved by the program governance. f) DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe g) DHR conversions team have developed business requirements for each system that will be converted upfront with the vendor agreed components h) Developing a proof of concept for a legacy data viewer for data that is unable to migrate to Epic"
Loss of Legacy system metadata	High	Currently being assessed at a system by system basis. Some systems already have metadata available in their logs which have been extracted from the SQL database. Some documentation are already have been stored in Confluence and Objective. These are being documented at there System Handover Document to DSS.

Project Issues

Title	Residual Rating	Action to Be Taken
Recruitment and onboarding staff	High	Making sure recruitment paperwork is submitted in a timely manner Training is available and staff supported Training materials and documentation developed, including induction
Difficulty accessing historical data	High	DHR Data conversion team and IDM team are assessing the Legacy Systems migration strategy with the intent that legacy system information will be migrated to either Clinical Patient Folder and/or the Data Repository and be the source for historic information. DHR and Epic have developed a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) and have this approved by the program governance. DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe DHR conversions team have developed business requirements for each system that will be converted upfront with the vendor agreed components Developing a proof of concept for a legacy data viewer for data that is unable to migrate to Epic

5. Cyber Security

5.1. Cyber Incidents

Details of security related incidents, investigations and requests for information are not shared broadly across directorates due to privacy reasons, however statistics for ACT Health and Canberra Health Services are below.

The statistics in the cyber security section are supplied by DDTS quarterly.

During the most recent reporting period for DDTS (October 2022 – December 2022), neither DDTS nor DSD (including our vendors including NTT) have recorded any successful cyber attacks on our systems and infrastructure.

Investigations and Requests for information

Date	Reference	Investigation/RFI	Directorate	Status
06/12/2022	SEC-IST-22-192	E-discovery: Email	ACT Health	Closed - Fully Resolved
06/12/2022	SEC-IST-22-191	E-discovery: Email	ACT Health	Closed - Fully Resolved
07/11/2022	SEC-IST-22-179	E-discovery: Email	ACT Health	Closed - Fully Resolved

Incidents (2)

Date	Reference	Incident Type	Directorate	Status
13/12/2022	SEC-IST-22-194	Account Compromise	ACT Health	Closed - Fully Resolved
25/10/2022	SEC-IST-22-168	Phishing	ACT Health	Closed - Fully Resolved

5.2. Operational Security Updates

5.2.1. Essential 8 maturity level

ACT Health has undertaken considerable work to establish the Health Enclave, which has enabled us to meet all the Essential 8 elements for hosting. The current maturity levels vary between level zero and three, however, ACT Health is on target to achieve a minimum of maturity level two across all the Essential 8 elements for hosting by mid 2023.

At a Whole of Government level, DDTS have a plan to reach maturity level one (the base level) over the coming years (subject to a successful outcome of their request for additional funding). Until DDTS reach a similar level of maturity in this space to that in the Health Enclave, this will continue to pose the single largest security risk to our services and infrastructure.

5.2.2. Privileged Account Management

DSD is in the process of implementing Beyond Trust's Privileged Account Management (PAM) solution within the Health Enclave. The benefits of this solution include the management of privileged accounts, vendor session monitoring/recording and password vault capabilities. The PAM solution is now live with multiple systems now being access this way. The cyber team is working with the Tech team and system administrators to continue onboarding systems and removing individual administrator accounts for system administrators.

5.2.3. Network and device visibility

DSD have had ForeScout eyeSight and Medigate implemented for several months now. These tools have been beneficial to provide visibility over the various ACT Health networks such as Pathology, Medical Imaging, Devices, Security and Radiation oncology. The security team work proactively with DDTS and CHS to remediate any vulnerabilities that may arise. Forescout and Medigate have been impacted by the network modernisation project at CHS, which has resulted in the loss of some data feeds. The Cyber team is working with the DDTS network team to restore connectivity so that network visibility is established.

5.2.4. Enabling port security on network switches (802.1X)

DDTS are implementing port level security (802.1X) across the ACTGOV network. 802.1X will improve the security posture of the ACTGOV network by preventing unauthorised devices from being connected. DSD have worked with DDTS to update all ACTHD network switches to 802.1x and are actively working with CHS to enable port security across CHS as part of the DDTS network modernisation project in 2022. Resource constraints within DDTS and hospital capacity issues within CHS are limiting the progress of this essential work, however plans are in place to accelerate this work in early 2023.

5.2.5. Network Monitoring and Segmentation

DSD has formed a working group with DDTS Security and DDTS Networks to explore network segmentation for health systems. This working group explores the current state of ACT Health's networks, limitations of current technologies used across ACTGOV and future requirements. This work will continue with the inclusion of the CHS CIO with the aim to implement improved network segmentation along with the network modernisation program. This work hasn't progressed as a broader project, however, it is being addressed as new systems are being brought online or migrated to the Health Enclave.

5.2.6. Personnel Security

We continue to engage the Australian Government Security Vetting Agency (AGSVA) through the Justice and Community Safety Directorate to assess various staff within DSD to a Negative Vetting Level 1 (NV1).

The staff that are being vetted are positions of trust and include staff that have elevated/admin access to multiple critical systems, can access and extract large amounts of sensitive data, have access to the data centres (which require an NV1 clearance) and other activities related to protective security functions.

There are approximately 340 staff that are fully vetted and roughly 25 staff that are in the process of being vetted.

5.3. Unsupported Operating Systems

5.3.1. Windows 7 Eradication

DSD and DDTS are collectively working towards reducing the Windows 7 devices across the ACT public health system.

The below table provides an overview on the Windows 7 devices across the Government network in December 2022 excluding 22 kiosks in directorates outside Health which are being remediated in a separate DDTS project.

We are on track to remove all Windows 7 systems from the ACT public health system by the end of February 2023.

Directorate	Oct 21	Jan 22	April 22	July 22	Oct 22	Dec 22
Health/CHS	312	165	58	57	47	29
Other	211	112	73	48	39	22
Total	523	279	131	105	86	51

5.3.2. Legacy Servers

DSD have been working actively to migrate/decommission the Windows Server 2008. There are currently 27 systems, which are actively being address as a priority.

The follow table identified the legacy Windows Server 2008 operating system servers hosting Directorate business systems as at the end of December 2022. The count includes shared infrastructure servers used to host multiple Directorate systems such as IIS web servers and SQL servers.

Directorate	Server May 22 Count	Server July 22 Count	Server Dec 22 Count
Health	124	112	98
Other	174	151	151
Total	298	263	249

5.4. System Security Plans

Our Security Hub is actively working with relevant stakeholders, including DDTS Security, system administrators, vendors, and Business System Owners (BSO) to ensure business systems have up-to-date System Security Plans (previously known as Security Risk Management Plans). System Security Plans are being updated and/or developed as systems are being implemented, upgraded or migrated to the Health Enclave. System Security Plans for systems that will be decommissioned when DHR goes live will not be updated.

The below table is a snapshot from December 2022 outlining the status of the security plans across the ACT Government.

Directorate	Current	Expired	No Plan	Under Review	Not Required	Total
Health	13	23	14	30	15	95
Other	50	37	16	54	34	181
Total	63	60	30	84	49	276

The Security Hub are actively working to address the outstanding System Security Plans as can be evidenced from the table above where 30 are currently under review by either DDTS or DSD.

TRIM Reference No. DGC23/91

SUBJECT:	External reporting from Digital Health Record

From:	Michael Culhane, Executive Group Manager, Policy, Partnerships and Programs Division. Peter O'Halloran, Chief Information Officer and Executive Group Manager, Digital Solutions Division.

Recommendations

That you:

Note the information in this Minute	**NOTED**/ ~~PLEASE DISCUSS~~
Approve the talking points for Digital Health Record's impact on data availability for reporting	**APPROVED**/ ~~NOT APPROVED/~~ ~~PLEASE DISCUSS~~
Agree that DHR data is not included in the Quarter 2 national submissions to the Commonwealth agencies due in March 2023.	**AGREED**/ ~~NOT AGREED/~~ ~~PLEASE DISCUSS~~

RM Cross

…….

Rebecca Cross
Director-General
ACT Health Directorate

27 February 2023

Purpose

To seek your approval of the talking points provided below regarding the Digital Health Record's (DHR) impact on availability of data for reporting.

Background

Since the implementation of the DHR in early November 2022, the data and analytics teams have been working to analyse and accurately collate data for external reporting. The impact of this is health services data is currently not available for external reporting purposes. Talking points have been prepared to ensure consistent messaging is provided from all agencies. The focus of this work has been on ensuring ACT Health services are able to deliver external activity data that is accurate and supports the community, decision makers and commonwealth bodies.

Talking points were discussed with the Deputy CEO of CHS and it was agreed approvals should be sought from the CEO Canberra Health Services (CHS) and Director-General ACT Health Directorate.

The Calvary Public Hospital, Bruce (CPHB) team were provided with the talking points and have provided input to this minute.

The Talking points regarding delays in reporting due to DHR implementation are:

- With the implementation of the Digital Health Record (DHR) in early November 2022, activities in the delivery of health service data have not been completed and consequently health services are currently withholding any external reporting until quality is available.
- As would be expected, the initial focus for analytics resources has been on internal reporting to support safe clinical care. The Business Intelligence and Data teams from ACTHD, CHS and CPHB are working together to rectify the issues that underpin our current inability to accurately collate data for external reporting.
- With the wealth of new data provided by the new clinical record it is essential the analytics teams take the time needed to become confident in the understanding and interpretation of any activity data provided.
- ACTHD has previously communicated with the relevant Commonwealth agencies about possible delays in data for national submissions. There will be further discussions with these agencies in the next couple of weeks to ensure any reputational or funding risk to the ACT is minimised.
- For the reasons noted above, ACT public health services will withhold any external reporting for an interim period. This will ensure our public hospital data provides trustworthy information and evidence to support the health and welfare of all ACT residents.

National submissions for the July-December 2022 period are due to the National Health

Funding Body and Independent Health and Aged Care Pricing Authority in March 2023 and we are seeking your approval to include only pre-DHR data from 01 July 2022 to 11 November 2022 in these submissions.

Once the data quality issues are resolved, it is expected the DHR data will be in the submissions due in July 2023.

Consultation

Leadership teams from CHS, CPHB, and ACTHD were consulted in the preparation of this brief.

Media

Have relevant communications material to support this brief been attached (communications plan, draft media release, talking points etc)? ☐ Yes ☐ No ☑ N/A

Has the Communications Branch been consulted? ☐ Yes ☐ No ☑ N/A

Financial

At this stage the financial impact is unknown. You will be briefed separately should there be any financial impact after the national submissions are provided in July 2023.

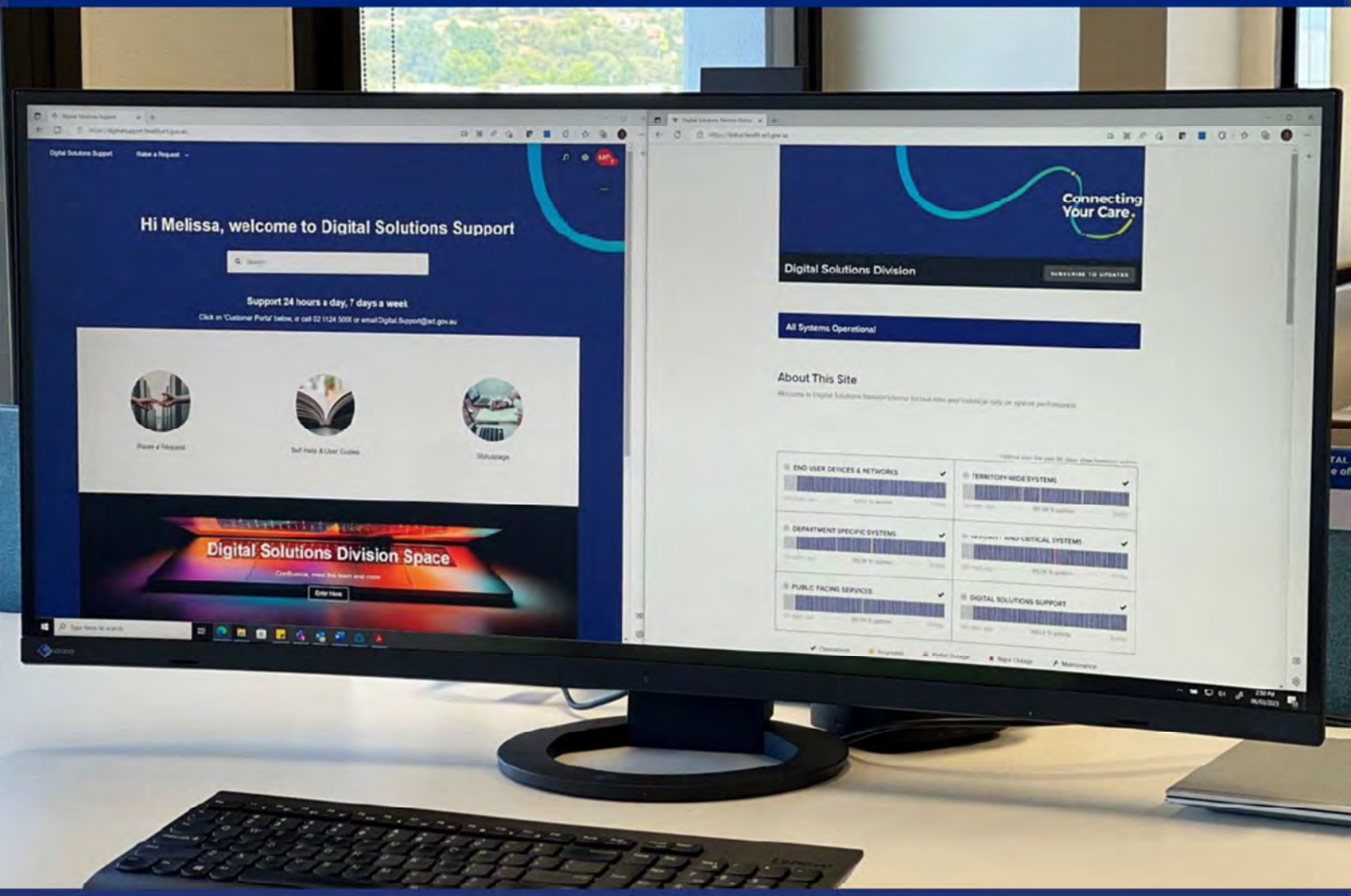
Signed off by:	*Michael Culhane & Peter O'Halloran*	Phone:	49923
Title:	*Executive Group Manager & Chief Information Officer*		
Branch/Division	*Policy, Partnerships and Programs Division and Digital Solutions Division*		
Date:	09 February 2023		
Action Officer:	Marcus Nicol & Justine Spina, Executive Branch Managers	Phone:	49040
Unit:	Data Analytics Branch & Digital Solutions Division		

ACT Government | ACT Health

Digital Solutions Division Performance Report

January 2023

Issued 09 March 2023



Connecting Your Care

Contents

Cover photo – Towards the end of last year, the Digital Solutions Division launched two new web pages to better support our clients to provide a more transparent approach. The first page pictured left is an uplifted customer portal where support requests can be raised, we are also working on building our self help guide and end user documentation to provide the most up to date information. The second page on the right is a real time display for any disruptions or outages to Health ICT services.

Page 1: Digital Solutions Support (act.gov.au)
Page 2: Digital Solutions Division Status (act.gov.au)

1. From the Chief Information Officer

The Digital Solutions Division (DSD) within ACT Health is responsible for the delivery of digital health capabilities across the ACT public health system which includes our colleagues in ACT Health, Calvary Public Hospital Bruce, Canberra Health Services and Tresillian Queen Elizabeth II Family Centre. DSD also provides a range of other services to differing sub-sets of the ACT public health system including security, records management, concierge and switchboard. Our services are as wide and varied as the ACT public health system.

The focus for the month of January 2023 was on stabilising our systems, continuing to work on issues raised from the implementation of the Digital Health Record (DHR). There was also significant work in training the large intakes of staff across the public health system, particularly the JMO's, Registrars, nursing graduates and allied health graduates.

The Division has also commenced transitioning staff into the new Divisional reporting structures to support systems and infrastructure ongoing. It has been wonderful to see how enthusiastic staff are to be trained in new systems and processes

Over the next year, DSD has several important deliverables. Some of the more notable deliverables include:

- Upgrades for the Digital Health Record
- Supporting the preparations for operational commissioning of the Critical Services Building at the Canberra Hospital campus
- Data and reporting deliverables with our new systems
- Decommissioning of the systems replaced by the Digital Health Record
- Substantial cyber and protective security enhancements
- Completion of the migration to digital records management across ACT Health
- Ongoing evolution of our client service revolution to improve our service offering to the ACT public health system

Sandra Cook
A/g Chief Information Officer and Executive Group Manager
Digital Solutions Division, ACT Health Directorate

+61 2 5124 9000 or HealthCIO@act.gov.au

2. Service Metrics

2.1. Service Metrics Summary

DSD operates a 24/7 support service (Digital Solutions Support or DSS) to support our colleagues in the ACT public health system. This team operate out of the Digital Solutions Operations Centre (DSOC) at 4 Bowes Street Phillip.

The DSS team operates as our level 1 support service across the Territory with staff, citizens, and external health professionals (from the ACT and interstate) able to access support by telephone, email, online portal and in person. The DSS team resolve many issues on first contact with issues that cannot be resolved in this manner handed off to our level 2/3 support teams (whether those teams be DSD, DDTS, NTT or the Calvary ICT team) in a manner that is seamless to the person seeking the support.

The volume of support can fluctuate significantly during the year based on the peaks and troughs of the ACT public health system (such as the on-boarding of new staff early in the calendar year).

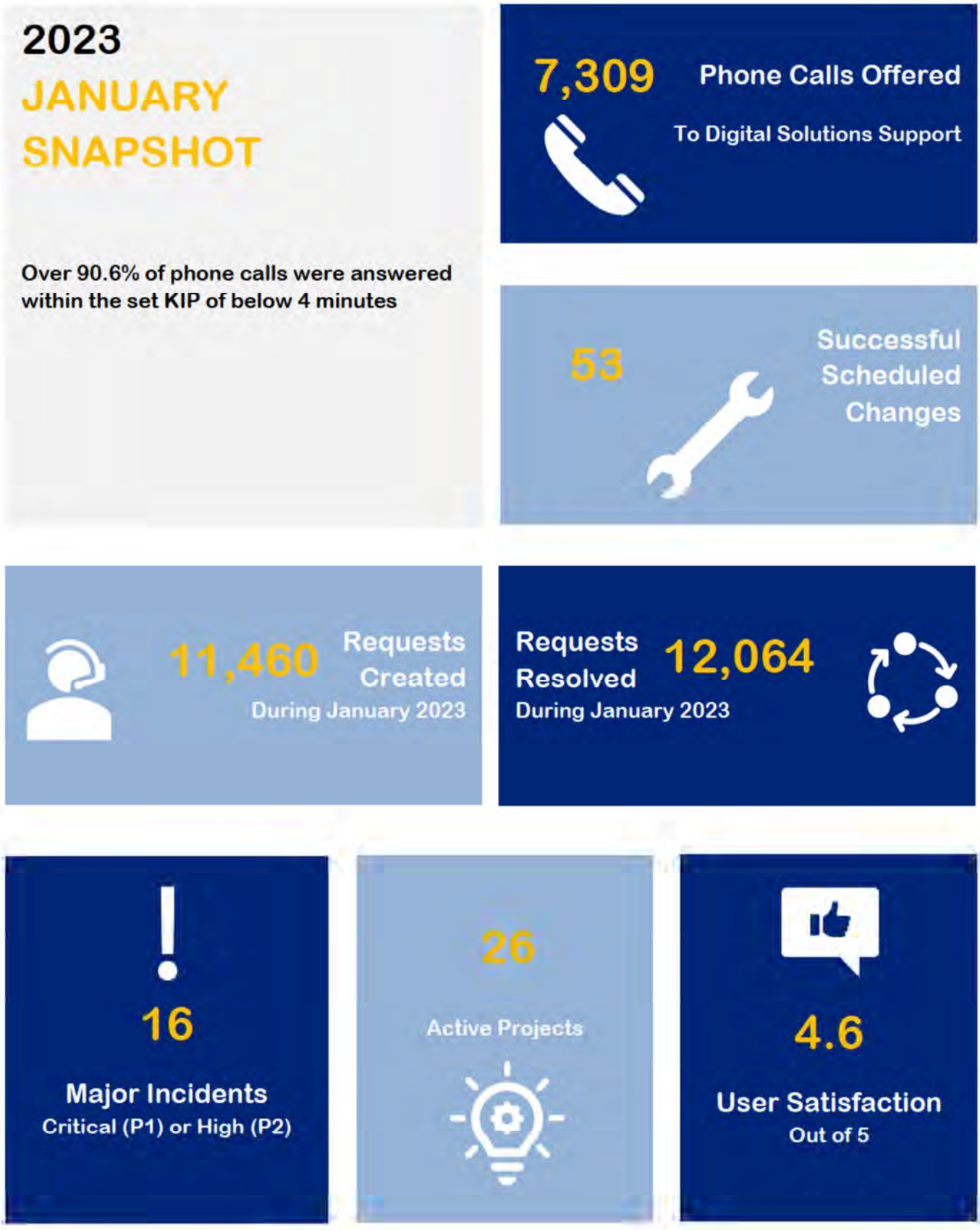
As part of our client service revolution within DSD, we have established a series of performance goals or KPIs for our Technology Operations Branch team members that helps them to prioritise and support our colleagues across the system. These KPIs have been progressively introduced over the last year and will continue to evolve in the coming year.

Service	Time Goal
Request First Response	4 hours
Request Complete	24 hours
Password Reset Complete	2 hours
Urgent Request First Response	30 minutes
Urgent Request Complete	2 hours
Incident First Response	30 minutes
Incident Complete	4 hours

Where possible, we aim to include the last twelve months of performance to enable readers to understand our current month metrics in context. At times, we are unable to provide the full twelve months of data as the metrics may not have been collected in a manner that enables the analysis to occur or in other areas (such as digital records management) we may not have been providing the full service provision over 12 months. Further, where our metrics can be directly bench-marked against the whole of government DDTS provider, we also include their metrics to provide both context and to enable bench-marking to occur. DDTS metrics are sourced from the DDTS reports to the Quality and Measurement Advisory Committee (QMAC).

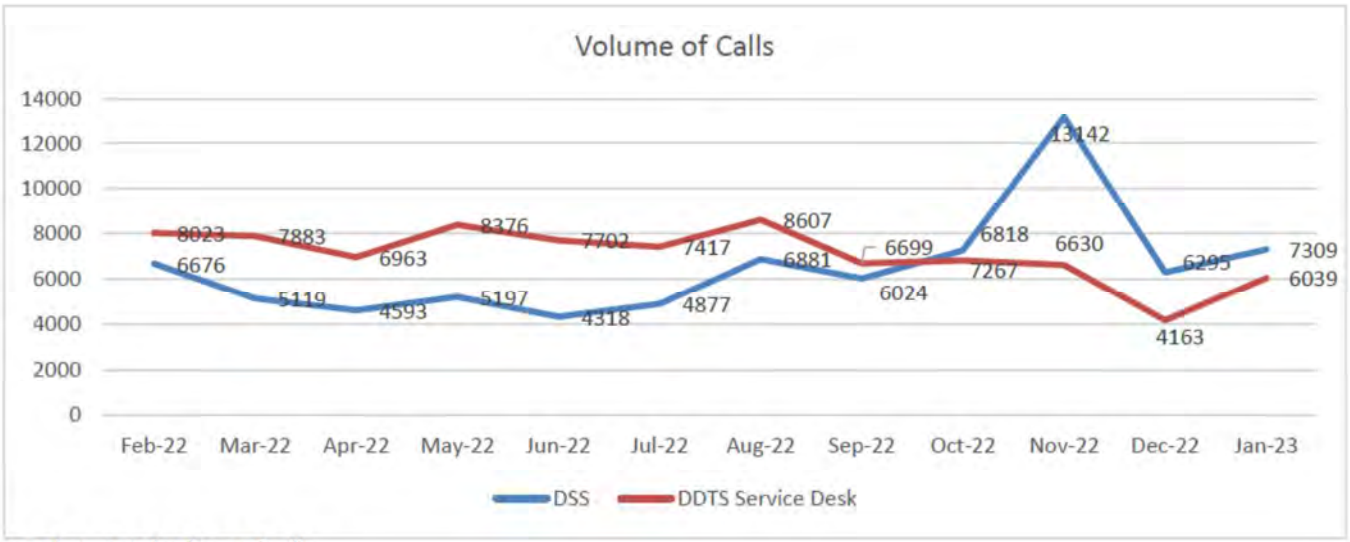
Levels of support requests and phone calls are remaining steady compared to the previous month although the response rates in meeting the set KIP's is returning to a positive position. There has also been a noticeable stabilisation with the number of incidents raised and yet again a more positive result against the KIP compared to previous month.

2.2. Snapshot

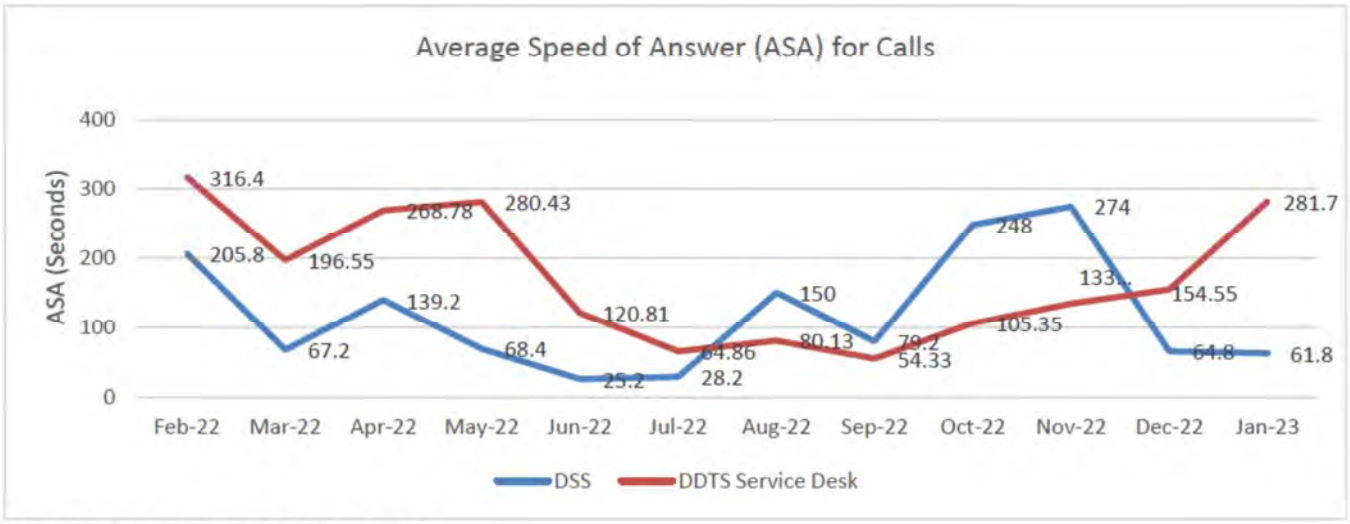

2023
JANUARY
SNAPSHOT
Over 90.6% of phone calls were answered within the set KIP of below 4 minutes
7,309
Phone Calls Offered
To Digital Solutions Support
53
Successful Scheduled Changes
11,460
Requests Created
During January 2023
Requests Resolved
12,064
During January 2023
16
Major Incidents
Critical (P1) or High (P2)
26
Active Projects
4.6
User Satisfaction
Out of 5

Monthly Request Summary

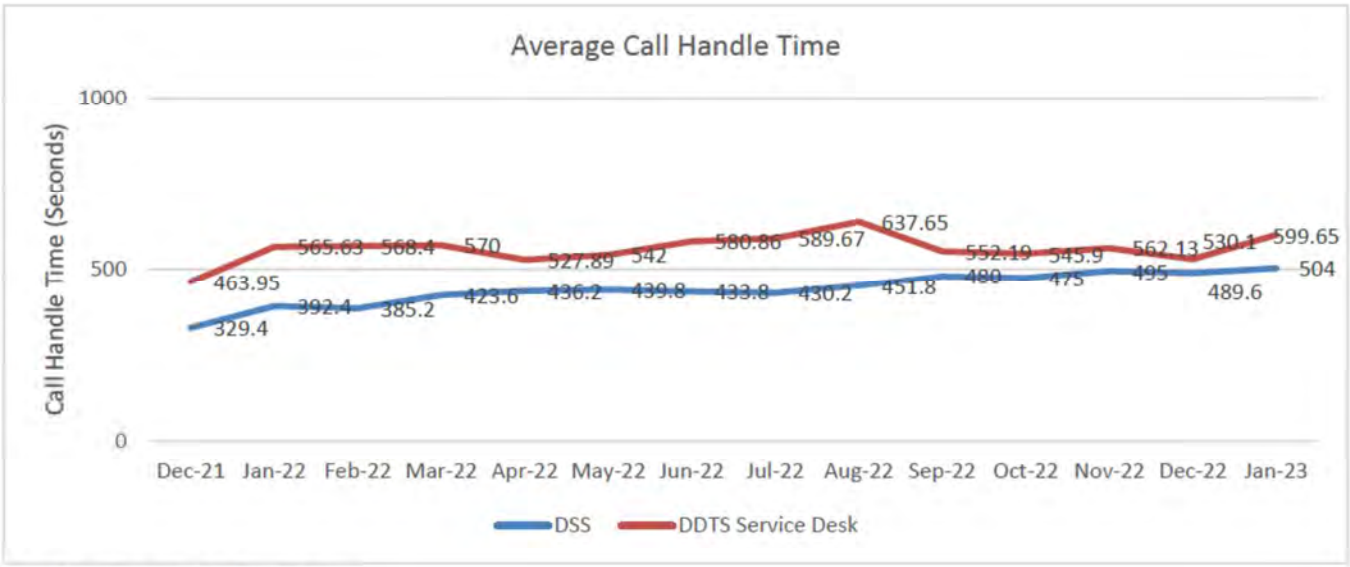
Metric	January 2023
Requests Created	11460
Requests Resolved	12064
Requests Open	2987
Standard Requests Responded to within KPI Timeframe (4 hours)	80.4%
Standard Requests Resolved within KPI Timeframe (24 hours)	80.6%
Total Number of Urgent Requests	473
Urgent Requests Responded to within KPI Timeframe (30 minutes)	80.4%
Urgent Requests Resolved within KPI Timeframe (2 hours)	49.6%
Total Number of Password Reset Requests	1717
Password Reset Requests Resolved within KPI Timeframe (2 hours)	78.7%



Graph 1 – Total volume of calls

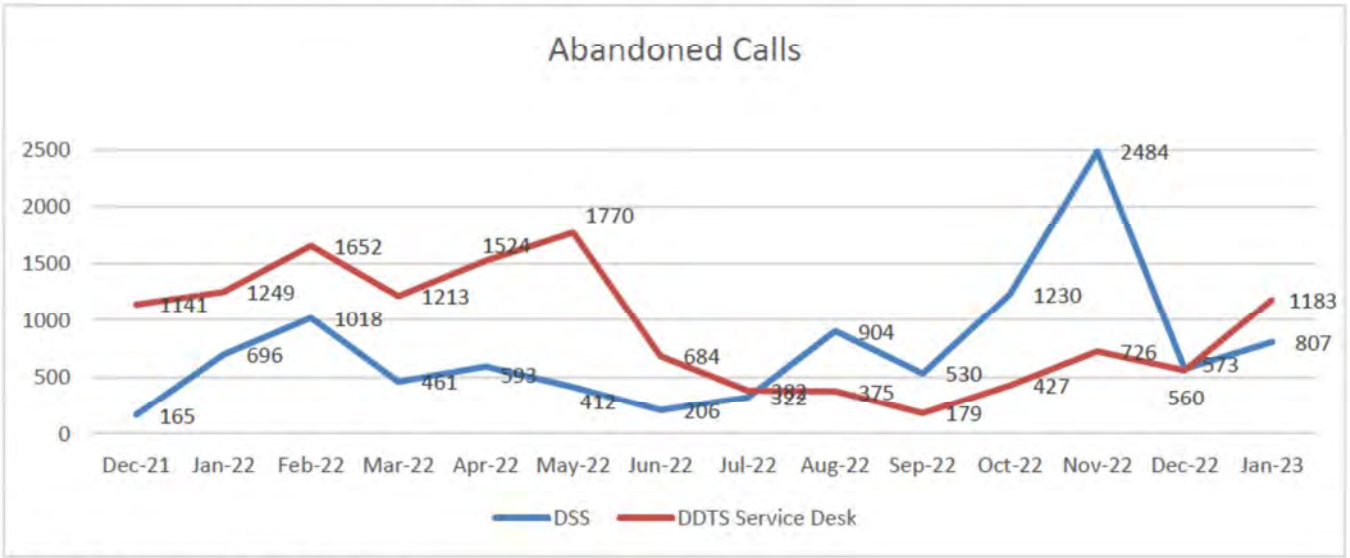


Graph 2 – Average speed of answer for calls

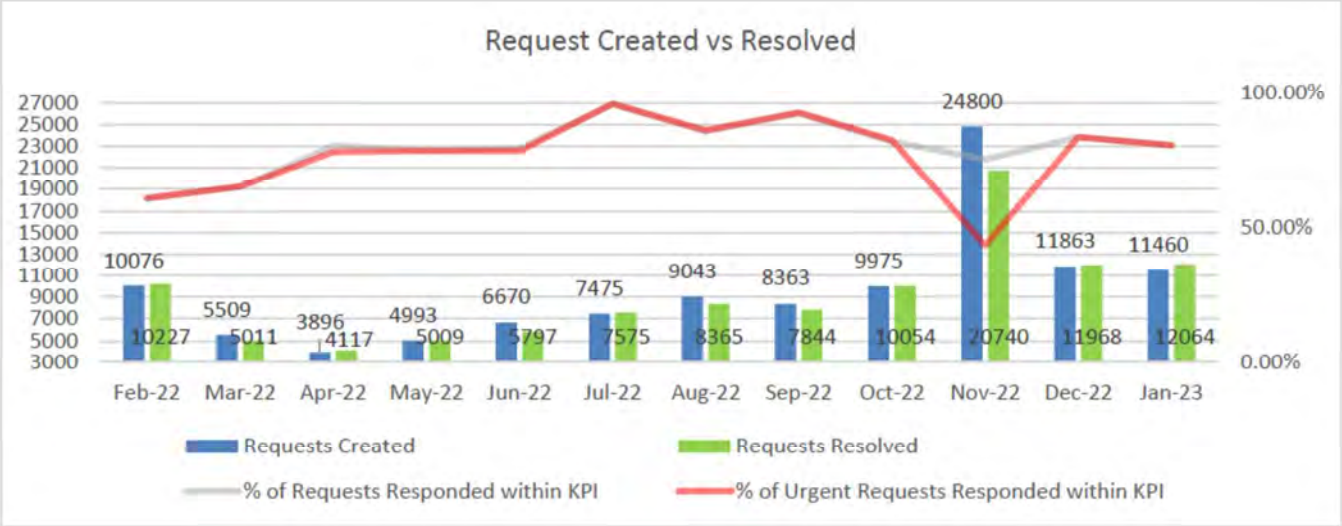


Graph 3 – Average Call Handle Time

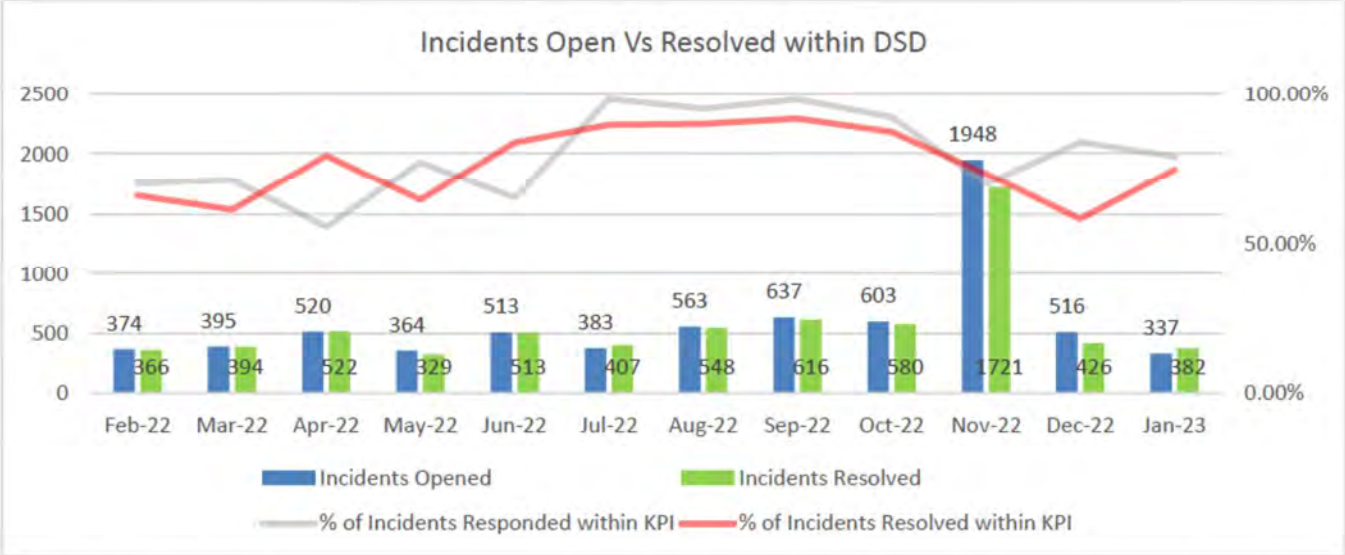
Graph 4 – Total percentage of calls answered within SLA. Please note DSD's SLA was previously set to <30 Seconds prior to September 2022. DDTS data has been temporarily removed due to the inconsistency between QMAC Reports.



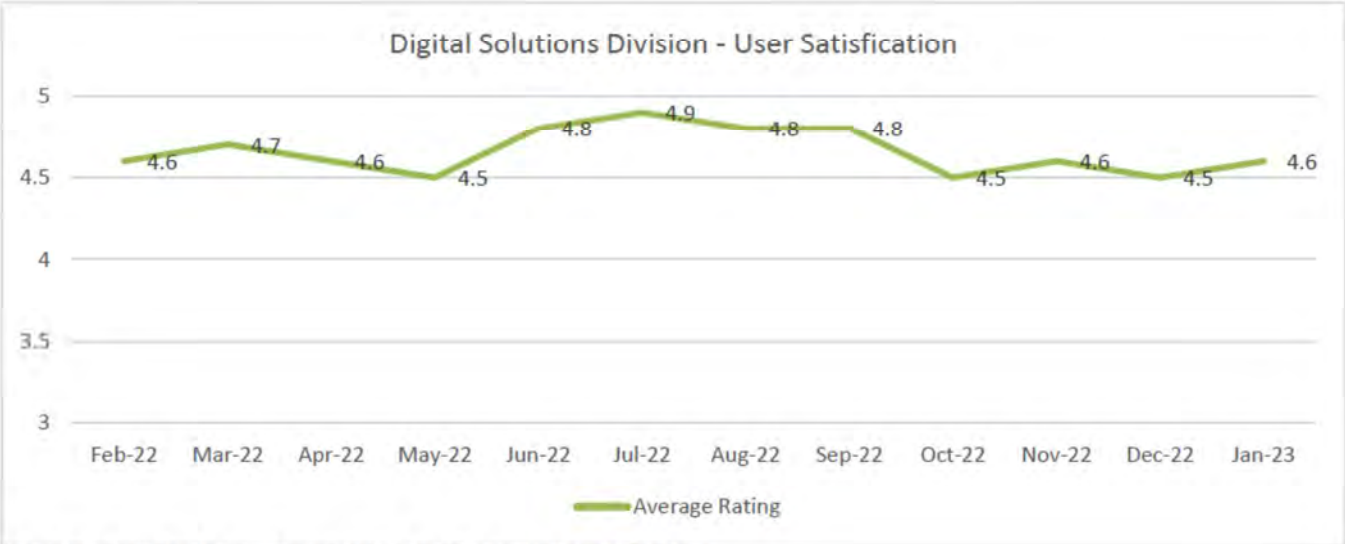
Graph 5 – Percentage of calls abandoned



Graph 6 – Total number of requests open vs closed per month, including the KPI turn arounds on time to respond to standard and urgent requests.



Graph 7 - Total number of incidents created vs resolved per month, including the KPI turn arounds on time to respond to an incident and the resolution.



Graph 8 – Digital Solutions Division User Satisfaction rate out of 5 stars

2.3. Incident Management

An incident is defined as but not limited to an application system issue, fault, or unplanned downtime. DSD reports on all incidents where DSD is responsible for the service (ie excluding WhOG incidents managed and reported by DDTS).

Any issue may be categorised as an incident by either the user reporting the issue or by a DSD team member working on the issue.

Incidents are defined under four priority levels;

Priority 1 (Critical) – Total system dysfunction and/or shut down of operations, severely impacting government critical services
Priority 2 (High) – Disruption impacts effective delivery of business services of an entire site, which could impact other sites
Priority 3 (Medium) – Disruption to a number of services or programs within a site, possible flow on to other sites
Priority 4 (Low) – Some disruption manageable by altered operational routine in a local site, workarounds available

For this reporting period DSD recorded 337 new incidents raised with a total of 386 closed, this is a significant drop from previous month which may be reflective of more accuracy with the raising of the incident type. Many Incidents were resolved on one day due to a resolution being implemented for a remote desktop licensing issue.

79.2% of incidents were responded to within the first 30 minutes and 74.7% of incidents were resolved within four hours. This is a significant improvement from the prior month where there was only a total of 58.3%.

From the 337 incidents recorded, 15 were classified as a high priority incident (priority 2), while one was classified as a major incident (priority 1).

Title	Incident Summary	Jira/SNOW #	Priority
Unavailability of MyDHR	Both the web application and mobile applications for MyDHR were temporarily unavailable for all users. For a period of an hour the application was refusing all traffic into the system. The issue self-resolved and a review into a permanent fix is underway by resources within DSD.	DSD-302493	P1
Resizing of the disk space on an AETHER production node	One of the production nodes disk space had reached a critical state of fullness. This incident had been raised in an emergency to acquire more disk space before the server had stopped writing to file. In hindsight this P2 incident should have been raised as an emergency change.	DSD-294853 SVR23143684	P2

CPF - Messaging was not connecting	Messaging was found to not be flowing from CPF through Rhapsody. While the root cause had not been found, restarting the listener on the CPF application server had resolved the issue. Recommendations suggest the Interfaces team reviewing root cause.	DSD-294925 ICM23148176	P2
DHR Rhapsody - Messages not being received by CPF	An outage very similar to the CPF messaging issue raised above. The resolution notes were the same, and recommendations repeat the need to review the root cause with the DHR Interfaces team.	DSD-297134	P2
AETHER - Messages not passing through to ARIA	Messaging from the Aria integration engine was not flowing through to Rhapsody. Upon investigation it was found that the Aria integration engine had failed, resulting in the halting of messaging across both Aria and it's related medical devices. The Vendor resolved the issue by restarting the integration engine service. No recommendations were provided by the vendor.	DSD-296223	P2
Code Yellow: Nurse call annunciator outage in TCH B11	Annunciators in Building 11 were not displaying active calls from the Nursecall system. Over door lights and the chimes were still operational during this time. Vendor was engaged and the annunciator server had been restarted which resolved the issue.	DSD-296224	P2
AETHER - Production Server Unresponsive	A proactive alert had been received that advised that two worker nodes had stopped responding. These alerts at the time were being treated with urgency as they had the potential to affect messaging from applications to DHR. Restarting the nodes resolved the issue. As AETHER is being depreciated, there were no recommendations for this issue.	DSD-298981 ICM23152409	P2
T-DOC - Unable to access Server	DSD were alerted that users of the T-Doc solution were unable to access it. After some investigation it had been found that the server that housed T-Doc had been accidently marked and actioned for decommissioning. Incident had been resolved by reverting the decommission.	DSD-300588 INC0894516	P2

	T-Doc's servers were then put on an exemption list until DSD and CHS are ready.		
Capsule - Philips IBE Vitals not slaving	Data to and from Philips IBE were not feeding to Capsule during this incident. It is believed that this issue was due to the Fyshwick DNS Servers being temporarily unavailable during the outage occurrence. The Windows cluster had automatically repaired which allowed the Philips vendor to restart the Philips and rhapsody services.	DSD-301287 ICM23155233	P2
CPF - Currently in Read-Only mode	Initially raised as issues with the ABBYY system, the issue quickly degraded and caused CPF to revert to its Read-Only state. With the assistance of the vendor, it was found that the Common Internet File System (CIFS) settings were causing the host server to not reboot. Incident was resolved by updating the CIFS settings and rebooting the server.	DSD-301637 SVR23155525	P2
Capsule - Dialysis Machine data not slaving	Capsule was unable to slave the Dialysis machines to the system, resulting in data not being able to flow through to DHR and other systems. Through investigation it had been found that the host server was running slow, causing Capsule to freeze (and subsequently stop slaving machines). A restart of the server resolved the issue.	DSD-302933 ICM23157183	P2
DHR beaker - Alinity 2 not connecting to DHR	Pathology staff were unable to launch the AMS client via Citrix. Additionally, Alinity machines at Calvary were not sending results into Epic. After some investigation it had been found that some of the internal services on the AMS server had failed. The vendor restarted them, and staff were able to use the system again.	DSD-303061 DSD-303074 ICM23157314	P2
Epiphany - DHR not receiving ECGs	The Epiphany system was unable to send ECG data into DHR. It had been found that this was a result of a configuration issue between both Epiphany and NTT's Virtual IP setup. Updating these resolved the issue however there is now a 2-minute delay which is currently being investigated and managed by the DSD Interfaces Team.	DSD-303912	P2

Philips IBE - Messaging not transferring from IBE to downstream	Messaging from Philips IBE machines were not flowing through Rhapsody. Upon investigation it appeared there was a failure with Rhapsody that caused some comms points to stop. New information from Microsoft found that when the Rhapsody storage was configured for IBE it had not been checked to attempt a restart on its own. Further investigation on a permanent fix ongoing.	DSD-304374 ICM23159174	P2
CPF- Outage - Unable to launch page	Users were unable to access CPF during the outage. When trying to access it they would get a generic “unable to access site” message. It had been found that Microsoft had a planned change worldwide in which they accidentally applied to all WAN devices instead of 1, which resulted in this outage. Investigations could not find any other affected service at the time.	DSD-304741	P2
UCH- Nurse call bell not working in all 5 wards	Incident had been raised for awareness and in preparation for potential DSD assistance. University of Canberra Hospital (UCH) had lost the ability to use Nurse Call in all 5 wards that use it. UCH’s building management had taken ownership of the work and received vendor support in resolving the issue.	DSD-304934	P2

2.4. Change Management

All changes that occur within the ICT environment are documented in our IT Service Management tool (Jira) and undertake an established approval process. Changes are defined into four separate categories that are minor, major, significant and emergency. The category of the change request defines the approval process.

The definition of the changes recorded are:

Minor – Low risk, standard, repeatable, non-time critical and have a low risk/impact of failure

Significant – Moderate complexity with a moderate risk/impact of failure

Major – High consequence of failure, that are technically complex, represent a significant financial investment or are politically sensitive

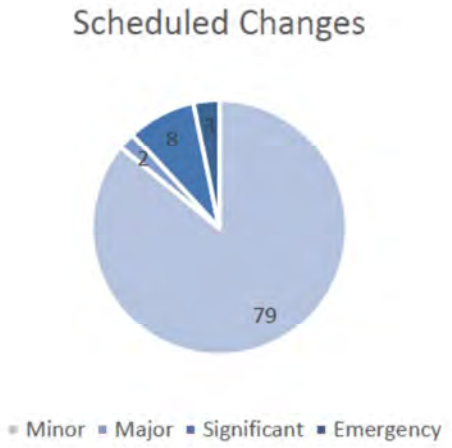
Emergency – Must be introduced as soon as possible to resolve an urgent incident address an unacceptable level of risk, or prevent disruption to critical business services

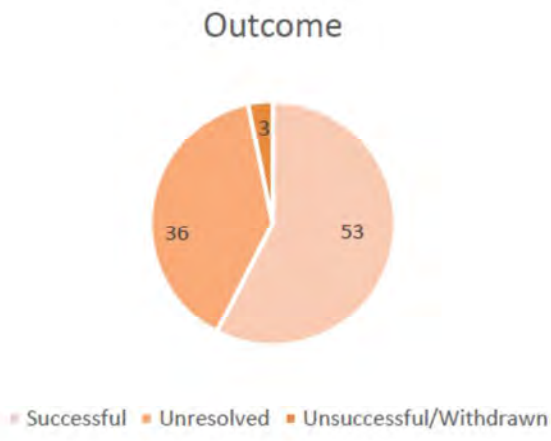
All Major and Significant changes must be considered through the Change Control Board (CCB) approval process prior to proceeding. The CCB met twice during December on the following dates:

- 18 January 2023
- 25 January 2023

A total of six changes were endorsed at the above-mentioned meetings with an additional four out of session changes reviewed and endorsed by the board during the reporting period.

2.4.1. Scheduled Changes





There was a decrease in all categories this month which is likely due to a reduced workforce during the January period.

Major and Significant changes included the following:

- Cardiology migration from DDTS to NTT; and
- Removal of weak and unsupported SSH algorithms from Citrix ADC appliances; and
- NTT, ISECG and IBE Production Patching.
-

Emergency changes included of the following:

- Xero Viewer server reboot; and
- ACT Health App – Check In API release 1.24.1; and
- Script Full Backups and Transition Log Backups.

There were three reported unsuccessful changes, all three were marked as withdrawn.

Unsuccessful changes greater than 30 days

This table reflects changes that have been endorsed CCB and have yet to be successfully implemented.

CCB Approval Date	Planned Implementation Date	Change #	System Name	Description	Comment
17/08/2022	TBC	DSD-227446	NxClinical	NxClinical upgrade to version 6.2 Issue with TST environment, vendor to reinstall and implementation date updated to TBC.	Scheduled
07/09/2022	ongoing	DSD-233775	CHS Infrastructure	Network Modernisation Program – Upgrade of the Cisco 3750 Floor Distribution Network Switches to Cisco 9300 Series Switches	Scheduled – work ongoing as planned
07/11/2022	TBC	DSD-253484	Respiro	Respiro production implementation for usage with DHR and Breezesuite	In Progress
16/11/2022	TBC	DSD-253490	Nexus360	Nexus360 production implementation (upgrade) and DHR integration	In Progress – (Resolving testing issues with connectivity)
14/12/2022	TBC	DSD-289058	AETHER RHAPSODY (DHR)	Migration from AETHER to Rhapsody	In Progress

2.5. Legacy Records Management (Paper Records)

DSD manages the physical (paper) administrative files for the ACT Health Directorate and Canberra Health Services. With ACT Health undertaking the majority of record keeping digitally now, new paper files are primarily created for Canberra Health Services (only the ACT Government Analytical Laboratory team are still permitted to create new paper files in ACT Health).

The legacy records management is currently undertaken by a team based at the DSD warehouse in Hume where 205,872 files are currently stored in records boxes on box shelving. A file census was completed in early 2022 where 99.32% of files marked as located in the warehouse were sighted and recorded during the census. This was the first census undertaken in over a decade and followed significant consolidation (such as the closure of the Mitchell warehouse, Mitchell office and file rooms in building 5 and 6 at Canberra Hospital) and warehouse rearrangement at Hume over the last four years. The team are now actively searching for the outstanding files.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Service	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23
Record transfer of a paper files to another officer	1	0	0	2	14	6	25	12	24	4	45	16
Paper File Retrieval Request	8	10	9	10	5	14	12	18	27	13	5	10
New Paper File Request	175	241	101	164	216	181	160	192	161	285	209	149
New File Part Request	8	4	3	2	17	4	17	19	7	15	9	10
Transfer Paper File to Records/Storage	23	10	6	3	15	7	19	5	6	8	16	14

2.6. Digital Records Management

ACT Health continues to migrate all administrative record keeping over to digital (primarily using the WhOG Objective solution) with only one business unit still remaining on paper (ACT Government Analytical Laboratory) and one group of functions (ministerial) remaining in HP Content Manager. Migration of documents from the network shared drive (Q) across to Objective were undertaken throughout the month by DSS and the Records Management team as capacity in the WhOG instance permitted.

During July, drafting of the re-written ACT Health Records Management Policy and Records Management Procedures was completed and consultation on these documents was opened to all ACT Health staff. At the request of Canberra Health Services, these documents (and the ACT Health Records Management Program approved in March 2022) do not apply to Canberra Health Services who have undertaken to develop their own records management program, policy and procedures.

Canberra Health Services are undertaking all record keeping functions on paper at present and have not commenced the migration to digital records management. The decision on when and how to commence this migration rests with Canberra Health Services.

Under the Calvary Network Agreement, record keeping responsibilities vest in the Little Company of Mary and ACT Health does not undertake any administrative records management functions for Calvary Public Hospital Bruce.

Metric	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	Sep 22	Oct 22	Nov 22	Dec 22	Jan 23
General objective enquiry	4	10	5	35	50	44	43	60	44	37	67	33
Request Objective access + new user	9	11	3	31	42	51	37	31	16	14	19	64
Objective Training	0	4	4	20	119	149	26	35	14	10	7	9
Request Access/Restriction on a file or folder	0	7	1	7	14	24	19	19	19	25	9	19

3. Projects and Program

3.1. Summary Overview

The Digital Solutions Division (DSD) has a work program with 26 active projects in progress.
The Division tiers projects from 1 to 4 in accordance with the Portfolio Delivery Framework.
The Tier 1 projects are the most complex and Tier 4 are considered smaller and less complex.

Projects that have been classified as a Tier 1 or Tier 2 are required to report monthly to the Executive Sponsor and Chief Information Officer. The below reporting dashboards are derived from the reports submitted by Project Managers for the period ending 15 January 2023.

From the 17 major (Tier 1 and Tier 2) there is one project tracking red which is the Digital Health Record Business intelligence and Data Project. This is due to schedule delays and risks/issues with unplanned complex transformations.

During this reporting period there were no new projects established or closed.

3.1. Digital Solutions Divisions Portfolio Dashboard

ACT Government | ACT Health

Digital Solutions Division
PORTFOLIO DASHBOARD

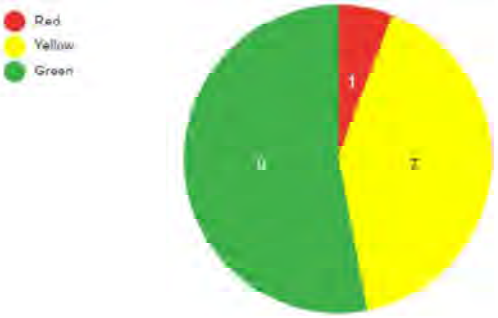
Reporting Period: 12 December 2022 to 15 January 2023

Overview

Number of Programs	Number of Active Projects
2	26
Number of New Projects	**Number of Major Projects**
0	17

Number of Projects Closed
0

RAG Status of Major Projects



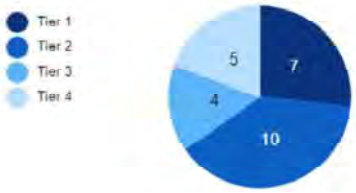
Resources

Portfolio Summary

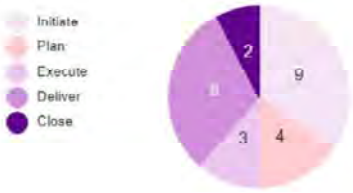
Major Projects List

Portfolio Dashboard Met...

All Projects by Tier



All Projects by Stages



Major Program & Projects List

Major Program Report

Program ID	Program Name	RAG Status	Tier	Project Stage	Program Manager	Executive Sponsors
PG0001	Critical Services Building Program		Tier 1	Execute	Grant Clark	Colm Mooney
PG0002	Digital Health Record Program		Tier 1	Deliver	Sandra Cook	Rebecca Cross

Major Project Report

Project ID	Project Name	Project Health	Project Tier	Approval Stage or Tranche	Digital Health Strategy Theme	Executive Sponsor	Go-Live Tracking
PJ0002	Centenary Hospital for Women and Children Expansion Project		Tier 1	Execute	• Patient-centred • Health services enabled by contemporary technology	'Chris Tarbuck	30/11/23
PJ0004	CSB (Critical Services Building) Main Build		Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology	'Chief Minister	31/12/24
PJ0005	Digital Health Record Implementation Project		Tier 1	Deliver	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0006	Digital Health Record Technical Project		Tier 1	Deliver	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22
PJ0007	Digital Health Record Business Intelligence and Data Project		Tier 1	Plan	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Rebecca Cross	12/11/22

PJ0009	Notifiable Disease Management System (NDMS)		Tier 1	Deliver	• Patient Centred • Research, discovery and collaboration	'Kerryn Coleman	22/09/2022 Phase 2
PJ0010	Power Billing and Revenue Collection (PBRC) Upgrade: Phase Two - DHR Integration, Pathology & Dental Billing		Tier 1	Deliver	• Health services enabled by contemporary technology	'Paul Ogden	18/11/22
PJ0011	Birth of a Child		Tier 2	Deliver	• Patient-centred	'Peter O'Halloran	30/06/23
PJ0012	Clinical Patient Folder v4.2 Upgrade		Tier 2	Close	• Patient-centred	'Paul Ogden	01/10/2022
PJ0013	Pharmacy Inventory Management System		Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology	'Peter O'Halloran	20/06/2022 (CPHB) 26/09/2022 (CHS);
PJ0015	TCH Building 12 ICU Redevelopment		Tier 2	Close	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/03/22
PJ0016	TCH Building 12 Medical Imaging Refurbishment		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0017	TCH Building 19 Level 3 Pharmacy Refurbishment		Tier 2	Plan	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/07/23
PJ0018	TCH Building 20 L1 RadOnc Linac Replacement		Tier 2	Deliver	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	31/12/22
PJ0019	Weston Creek CHC Medical Imaging Expansion		Tier 2	Deliver	• Patient-centred • Health services enabled by contemporary technology	'Colm Mooney	30/11/22
PJ0033	Calvary Public Hospital Bruce OneID Implementation and EACS Replacement		Tier 2	Initiate	• Health services enabled by contemporary technology	'Jarrad Nuss	30/08/23
PJ0036	BIS Upgrade Project		Tier 2	Initiate	• Patient-centred • Health services enabled by contemporary technology • Research, discovery and collaboration	'Julianne Siggins	09/11/22

Tier 3 & 4 Projects

Project ID	Project Name	Executive Sponsor	Digital Health Strategy Theme	Approved Baseline Budget (Capex)	Approved Baseline Budget (Opex)	Approval Stage or Tranche
PJ0031	TechLauncher Clinical Trials Administration System	'Peter O'Halloran	• Research, discovery and collaboration	$0.00	$50,000.00	Execute
PJ0032	MyMeal System Upgrade to v15	'Peter McNiven	• Patient-centred • Health services enabled by contemporary technology	$0.00	$10,000.00	Execute
PJ0034	Food Safety Monitoring System	'Colm Mooney	• Health services enabled by contemporary technology	$25,000.00	$0.00	Deliver
PJ0035	Mainpac Expansion	'David Jones	• Health services enabled by contemporary technology	$254,375.00	$38,956.75	Initiate
PJ0037	Electric Vehicle Charging ICT Standard	'Colm Mooney	• Health services enabled by contemporary technology	$20,000.00		Initiate
PJ0039	Medical Imaging Additional Nurse Call Equipment	'Sean Fenotti	• Health services enabled by contemporary technology	$22,000.00		Initiate
PJ0040	DALI System Upgrade	'Chris Tarbuck	• Health services enabled by contemporary technology	$50,000.00		Initiate
PJ0042	TCH B3 L1 Rheumatology & Dermatology Consultation Room Upgrades	'Chris Tarbuck	• Health services enabled by contemporary technology		$4,200.00	Initiate
PJ0043	1 Moore Street Security Upgrade	'Scott Harding	• Health services enabled by contemporary technology		$5,000.00	Initiate

Red Synopsis Report

Synopsis Status	Project ID	Project Name	Project Tier	Approval Stage or Tranche	Comments
	PJ0007	Digital Health Record Business Intelligence and Data Project	Tier 1	Plan	DHR BID project is reporting red for Schedule and Risks/Issues due to delays with unplanned complex transformations. This is required to extract core activity data to meet national reporting requirements and is placing deliverable dates at risk. An updated PID with a revised schedule is with the DHR Program Board for consideration.

Closed Projects

Project ID	Project	Project Overview

New Projects

Project ID	Project Title	Project Overview

Major Project Risks Heat map

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain	1		4		
Likely	1	8	11	7	
Possible	2	6	26	19	
Unlikely		27	25	10	
Rare	3	6	3	1	1
	Insignificant	Minor	Moderate	Major	Catastrophic

Major Project Issues Heat map

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High		1	7	17	
Moderate	2	2	11	7	
Low	2	1	4		
Planning	1	1			
	Insignificant	Minor	Moderate	Major	Catastrophic

Major Projects Critical Risks/Issues Report

Project Name	Risk/Issue	Title	Residual Rating	Description

3.2. Major Projects (Tier 1 & 2) to be delivered by the end of 2022

Project Name	Tier	Scope and Status Update	Executive Sponsor
Digital Health Record • Implementation • Technical • Business Intelligence and Data Projects	1	The Digital Health Record (DHR) has been implemented into production as of this reporting period. The implementation project was tracking at 98% complete with the technical project tracking closely behind at 92%. The DHR program is expected to be formally closed in the first quarter of 2023.	Rebecca Cross
Notifiable Disease Management System (NDMS) (Phase 2)	1	Phase 1 and 2 of the NDMS project have been delivered although the reporting including nightly transmissions to NINDSS is still in development.	Kerryn Coleman
Clinical Patient Folder (CPF) 4.5 Upgrade	2	All major objective for this project has been met and this project is in the closure phase. A closure report was prepared in December for submission to the Executive.	Paul Ogden
Pharmacy Inventory Management System (PIMS) project	2	Both CHS and CPHB are live with PIMS as a minimum viable product. The program board met on 22 December 2022 and agreed to pause the project until the board next meet on 30/01/2023 to discuss phase 2 due to efforts being reprioritise for the DHR Program.	Peter O'Halloran
Power Billing and Revenue Collection Upgrade – Phase 2 DHR integration, Pathology and Dental Billing	1	The PBRC DHR go-live was complete and PBRC-IE billing is now working in business and usual. The project SME's are working with both Epic and PBRC vendors to remediate outstanding issues. Final project closure activities will be completed in January 2023.	Paul Ogden

4. Digital Health Record (DHR)

4.1. Digital Health Record Program Report

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 December 2022 to 6 January 2023

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending

Stable

Clinical Owner/s

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issues Health Status	Scope Health Status	Benefits Health Status
Amber	Green	Green	Green	Amber	Green	Amber

Program Delivery Team

Approver	Sandra Cook
EBM, Future Capability	Justine Spina
Technical Project	Timothy Panoho
Implementation Project	Philippa Kirkpatrick
BI & Data Project	Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130,787,000.00	$47,610,970.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$77,752,000.00	$58,273,720.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting an amber status. The DHR system was successfully implemented on Saturday 12 November 2022 at 5.30am. The focus of the DHR Implementation Project, DHR Technical Project and the DHR BI and Data Project has been on managing support tickets and working through issues as they arise. As of 6 January 2023, there have been 21,872 jobs logged for assistance with 17,874 of those jobs resolved and 530 jobs awaiting confirmation from the reporters that the job is resolved. The stabilisation period will continue until the 24 February 2023. The ACT Health ongoing support team recruitment to manage the DHR ecosystem has been completed with job offers made and all positions filled. These resources will transition into their new ongoing roles by the 24 March 2023.
The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Risks & Issues

Risks - There are currently 39 open risks. There are thirteen risks reporting a high rating:

#1 & 7 Insufficient Budget
#20 Data Quality in the DHR is poor
#22 The Clinical Record does not provide ready access to information
#24 Difficulty accessing historical data
#29 Clinical Engagement
#38 Slow decision making
#41 Health service resources unavailable
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues – there are 7 high issues still open the top one being:
End User Devices are required to ensure access to the Epic solution for different roles in different ways and post Go-Live this is still a large challenge with reports of not enough devices being available for optimal workflows. There are still hangover issues with supplier delivery issues post pandemic so lead times for extra equipment may impact efficient workflows.

Budget

The figures in this report are still report to October 2022 as the DSD Finance Manager has resigned and a replacement has not commenced yet. As soon as this replacement starts, actual figures for November and December 2022 will be added to the February 2023 report. The below figures are predicated on the assumptions of offsets being achieved and next month's finance report will deep dive into the likelihood of these offsets being able to be actualised. The total budget for the DHR Program is now $328.803 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $64.273 Million Treasury Operational and $122.622 Million in Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to October 2022 are as follows - Capital $83.176 Million (Budget $84.702 Million) Opex $19.478 Million (Budget $22.689 Million). There is $31.756 Million Capital remaining and $44.796 Million Opex remaining. At the end of October 2022, the total forecast over-expenditure for Capital over the 8 years is $3.583 Million and a forecast underspend of Operational expenditure of $37.593 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast underspend for the whole of life DHR Program at present is $2.212 Million over the 8 years with including the BAU expenditure. Therefore, the budget will be reporting Green. Detailed quarterly reports will be provided to the Board in December 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Jan 2023).

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 18 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assurance review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post Implementation Review in April 2023.

Benefits

Abt Associates (in partnership with bdna) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified. The metrics were approved by the DHR Program Board in October 2022 and baseline data will be provided in March 2023. Epic are flagging concern with the availability of baseline benefits data which has decreased the status of this area. The BI & Data team are working to deliver this data in the timeframes set.

Scope

Scope refinements are being managed through Change Request processes. None have been raised in this period.
There was a Change Freeze period from 21 December 2022 to 4 January 2023 for changes to the system.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The re-baselined schedule was achieved with Go-Live of the system occurring on 12 November 2022.

Project Summary Dashboard

DHR Technical Project

RAG **% Complete** 92%

Trending

The project status is green as the solution is in production and operating. The focus of the technical project is now on the transition of interfaces from the AETHER integration engine to Rhapsody to combat the intermittent issues with the AETHER integration engine. This was agreed to through a formal paper circulated amongst key stakeholders in CHS, Calvary and ACT Health. This switchover is planned to be completed by March 2023.

DHR Implementation Project

RAG  **% Complete** 98%

Trending

The Digital Health Record (DHR) Implementation Project is reporting an overall green status and is improving.

Cutover processes were completed in a timely manner for Go-Live. Data Abstraction was completed and has provided data for 6 weeks of appointments scheduled. The application workstreams are now managing the tickets logged across the health services to stabilise the system prior to optimisation requests being reviewed and prioritised in February 2023.

DHR Business Intelligence & Data Project

RAG  **% Complete** 75%

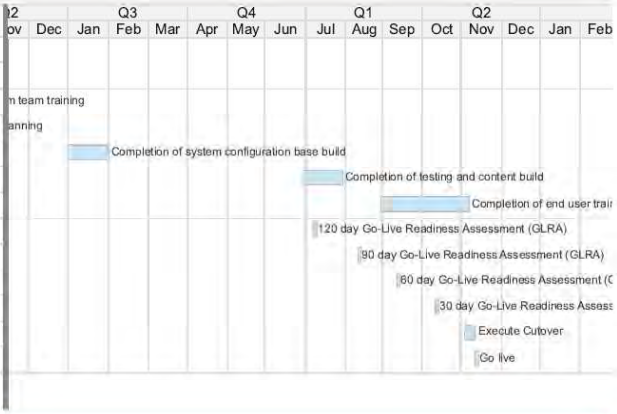
Trending

This project is reporting amber and trending downwards. A request to extend the BI and Data Project has been lodged with the DHR Program Board in the January 2023 meeting. The request is to extend the project until November 2023 and to enable it to be a separate project that will report into the peak ACT Health Digital Committee. Scope for reporting for Go-Live has been delivered but issues are being managed in ED data and other elements of National Reporting. The National Submission data is being careful analysed now prior to the first submission that will contain Epic and legacy system data combined.

Key Program Activities

Key Program Activities

At Risk	Task Name	Start Date	End Date	Status
	Program authorised to commence	08/02/21	08/02/21	Complete
	Contract with vendor signed	01/01/19	01/01/19	Complete
	Completion of staffing and program team training	30/06/21	30/06/21	Complete
	Completion of detailed program planning	30/06/21	30/06/21	Complete
	Completion of system configuration base build	31/12/21	31/01/22	Complete
	Completion of testing and content build	30/06/22	29/07/22	Complete
	Completion of end user training	29/08/22	04/11/22	Complete
	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	Complete
	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Complete
	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Complete
	Execute Cutover	04/11/22	11/11/22	Complete
	Go live	12/11/22	12/11/22	Complete



Financial Performance

Whole of Life Budget & Expenditure

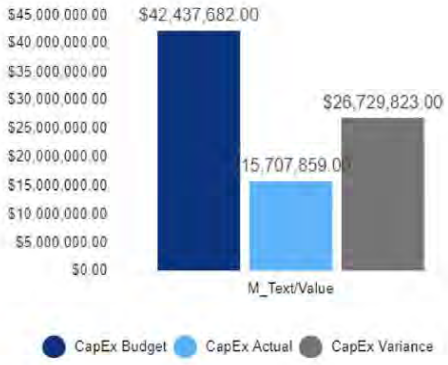
CapEx

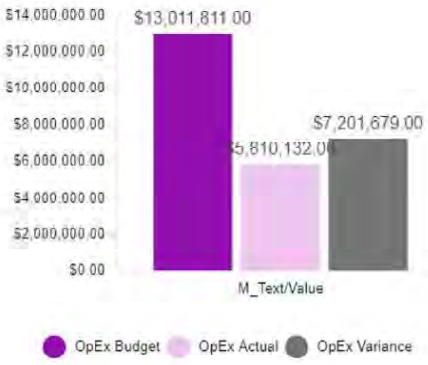
Budget	$130,787,000.00
Actual	$83,176,030.00
Variance	$47,610,970.00

OpEx

Budget	$77,752,000.00
Actual	$19,478,280.00
Variance	$58,273,720.00

Current FY 2022/23





Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely			2		
Possible			2	1	
Unlikely					
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High					
Moderate				1	
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Program Risks

Title	Residual Rating	Description
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields. "
Difficulty accessing historical data	High	Dependencies to migrate existing data into Clinical Patient Folder and the Data Repository are not achieved.
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability.

Program Issues

Description	Residual Rating	Action to Be Taken
User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	This has significantly improved but will remain high until the providers can be tested, and the scope of provider creation is finalised. There are additional resources working on this and it is progressing well. A onboarding web form has been created and is going out to health services 12/08/2022 to validate data and ensure user logins ar right during login labs that will occur directly after training sessions. Will close this action once login labs have occurred. 12/12/2022 Some ongoing issues with user templates are causing issues. Work is underway to clean up externa provider records that are linked to provider numbers that are not current. This has focussed first on GPs and will then move to focus on other external providers.

4.2. Digital Health Record Implementation Report

ACT Government | ACT Health

Digital Health Record Implementation Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 December 2022 to 6 January 2023

Project Overview

The Digital Health Record Implementation Project will deliver the configuration, testing, implementation, and training of all end users of the Digital Health Record.

Trending

Stable

Project Governance

Project ID	PJ0005
P3M ID	PROJ10112
Approval Stage	Deliver
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Philippa Kirkpatrick
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issues Health Status	Scope Health Status	Benefits Health Status

Project Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
02/08/21	02/08/21	$74,598,945.00	$23,497,640.00
Actual Start Date	Baseline Start Date	Baseline (Capex)	Variance (Capex)
30/12/22	30/12/22	$32,613,453.00	$27,375,821.00
Actual End Date	Baseline End Date	Baseline (Opex)	Variance (Opex)

Project Status Commentary

Project Status

The Digital Health Record (DHR) Implementation Project is reporting an overall amber status.

The system is live and all planned areas are now using the DHR. Areas experiencing the greatest issues are the patient administration area (particularly in referral management) as well as pathology.

Scope

The DHR went live with all modules planned, other than applications on bring-your-own devices (Haiku, Canto and Limerick).

An optimisation register has been developed to capture requests for changes that are not go-live critical. An Optimisation Framework is under development that will guide the management of optimisation activities including the prioritisation of work on optimisation requests.

Risks & Issues

Many risks were closed out with the implementation of the project as they related to achieving go-live on schedule, budget and with staff trained. There remains one high risk, about attracting and retaining the right staff. Recruitment for the business as usual team is underway. However, there remains a risk of turnover as some team members are returning to their previous roles or taking new positions.

There are 5 issues designated as high (decrease of 9 since the last report). Two of the high issues are with regard to referral management and external access to pathology reports. Updates on these are tracked regularly at the Top 10 meetings.

Schedule

The DHR went live according to schedule. The hypercare period is now finished. The team are focussed on resolution of issues from tickets. Early in 2023 the focus will move to focus on transition to BAU arrangements.

Budget

The budget figures for this report are the same as last month as the key Finance Resource in DSD left the organisation and a replacement has not started yet so actuals for November 2022 were not available at the time of reporting. This will be caught up next month. The project budget remains to be forecasting a budget surplus. This may be reallocated to the program if it is not required.

The capital forecast is a deficit of $641,000 due to overtime work by the team to achieve go-live according to schedule. The operational forecast is $24 million under budget. However, this is the project budget which includes funding to support the BAU team as well as the pathology system. Neither of these expenses are included in the project budget and therefore, this amount is deceptive.

Quality

Quality and assurance activities are being managed at the program level and is reported in the program status report.

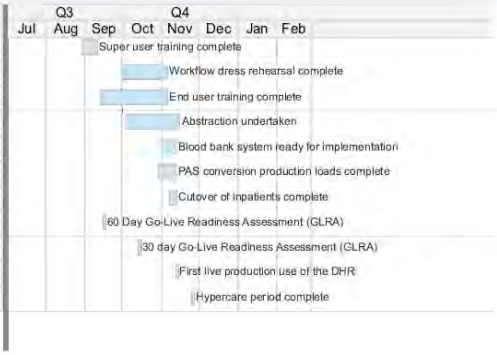
Benefits

The project benefits are being managed at the program level and is reported in the program status report.

Key Project Activities

Key Project Activities - Implementation

Task Name	Status	At Risk	Start Date	End Date
Super user training complete	Complete		29/08/22	09/09/22
Workflow dress rehearsal complete	Complete		01/10/22	04/11/22
End user training complete	Complete		13/09/22	04/11/22
Abstraction undertaken	Complete		03/10/22	14/11/22
Blood bank system ready for implementation	Complete		01/11/22	11/11/22
PAS conversion production loads complete	Complete		29/10/22	11/11/22
Cutover of inpatients complete	Complete		07/11/22	11/11/22
60 Day Go-Live Readiness Assessment (GLRA)	Complete		15/09/22	15/09/22
30 day Go-Live Readiness Assessment (GLRA)	Complete		13/10/22	13/10/22
First live production use of the DHR	Complete		12/11/22	12/11/22
Hypercare period complete	Complete		25/11/22	25/11/22



Financial Performance

Whole of Life Budget & Expenditure

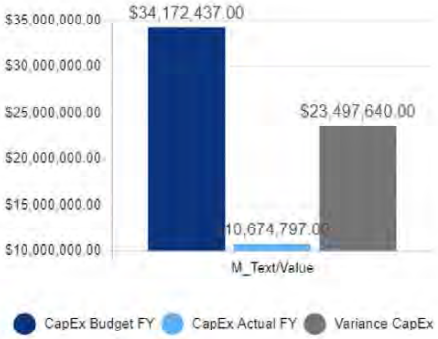
CapEx

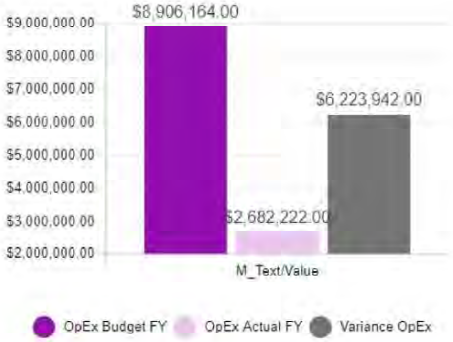
Budget	$74,598,945.00
Actuals	$51,101,305.00
Variance	$23,497,640.00

OpEx

Budget	$32,613,453.00
Actuals	$5,237,632.00
Variance	$27,375,821.00

Current FY 2022/23





Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		1	1	1	
Possible		1	5		
Unlikely		6	1		
Rare					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Issue Matrix

Primary	2	3	4	5	6
Critical					
High			1	2	
Moderate	1	1	4	2	
Low		1			
Planning					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Project Risks

ID#	Title	Source	Residual Rating	Existing Risk Controls
DHRIMP52	Health services policies or procedures may not align with the configuration of the DHR.	Changes in workflows need to be reflected in changes in policy. The health services may not be resourced to undertake all required policy updates.	High	Health services leads are planning this work. A register of known policy changes has been developed.

Project Issues

ID#	Title	Description	Residual Rating	Action to Be Taken
DHRIMP-I23	Dependent projects	User provisioning is a deliverable of the technical project and is delayed. If users are not available in the system, the implementation team cannot progress testing as per the schedule. Also, if all providers are not added, this will create problems for letter addressing etc	High	Hakan Gultekin and Tim Panoho are leading this activity. Collection and analysis of data is progressing. Weekly reports on progress are provided to the Board. 16/3/2022 This is improving. It is now progressing and an initial upload of providers underway. 26/5/2022 Sonya Floyer has been engaged to support this work. 1/8/2022 Sonya to implement app to collect this data. 15/10/22 Data is being collected via a webform. However updated provider information will not be uploaded until late October. 9/12/2022 Work continues on the clean up of providers in the system. The greatest impact is now with external providers, including providers with records associated with inactive provider numbers. This is resulting in users selecting an inactive provider and results not being received.
DHRIMP-I24	People	Some staff have reported burnout or stress at rates that are not healthy.	High	This is a limited number of staff but has resulted in turnover. Managers are monitoring any staff where this has been reported, and for those that have remained with the team, there have been improvements. However, with high workloads and schedule delays, this issue may remain. Therapy dogs were organised. All staff were encouraged to take at least two weeks off over the Christmas period. 16/3/2022 Last week was meeting free week which was well received. Another time period when we will encourage leave is being identified (possibly last two weeks of July - one week per team member at their own choice) 26/5/2022 Additional boost request going in to support the team over go-live. 1/8/2022 Retention of some Boost over go-live has been approved. There is still some turnover in the team with two team members resigning in the past few weeks. Action is for ongoing monitoring by managers and escalation as required. 15/10/22 This continues and around 5 staff have left recently. Managers continue to suppor their teams and assist with prioritisation. The team is focussed on go-live critical activities. 9/12/2022 This continues although is reducing for some teams since go-live. Other teams with large ticket numbers are still feeling stress.
DHRIMP-192	Workflow	CPF integration has critical defects	High	15/10/22 Monitor resolution of critical defects. CIO escalating with Infomedix frequently. 9/12/22 The DHR went live with CPF integration. Ongoing issues are reported with the ability to open document level links.
	Workflow	Difficulties with referral management	High	9/12/2022 Both education, engagement and configuration corrections are underway.
	Workflow	Pathology results not all being received by GPs	High	9/12/2022 Investigations are underway. Planning also underway to retrigger results.

4.3. Digital Health Record Business Intelligence and Data Project Report

ACT Government | ACT Health

Digital Health Record Business Intelligence and Data Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 11 Dec 22- 13 Jan 2023

Project Overview

The DHR Business Intelligence and Data project brings together existing resources from across the health system business intelligence teams and engages expertise to deliver the technical and enabling capabilities, with the existing DHR project resources under a single project structure to ensure successful delivery of data and reporting capabilities.

Trending

▼ Declining

Project Governance

Project ID	PJ0007
Approval Stage	Plan
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Sean Winefield
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issues Health Status	Benefits Health Status	Quality Health Status	Scope Health Status
🔴	🔴	🟢	🔴	⚫	⚫	🟡

Project Baseline

Current Schedule	Baseline Schedule	Baseline Budget	Budget Variance
01/03/22 Actual Start Date	01/03/22 Baseline Start Date	$1,496,215.00 Capex	$1,172,769.00 Capex
23/04/23 Actual End Date	23/04/23 Baseline End Date	$1,161,948.00 Opex	-$152,134.00 Opex

Project Status Commentary

Project Status

- Report validations and remediation in Production are underway now that metrics are populating with real data, this is having a major impact on submissions
- Development of new reports continue to be prioritised based on operational need
- Data Capability (Badger) release 2 has been completed 23 Dec including core ED data
- Mid term data access and development approach agreed with Calvary -- Hybrid approach required due to Calvary requirements differing from anticipated usage patterns from initial design options paper (AKA options 1/2/3)
- Calvary and CHS enabled access to PRD Clarity data daily snapshots via ACT Health data lake
- EPIC resources assisting in remediation of raw data validation scripts
- Data Analytics Branch provided with data access to validate data scripts
- 5 legacy systems decommissioned with data migrated to data capability legacy data hold
- There is a continuing focus on data mapping and validation against production data
- ED Real -time data delivery issues now impacting the consumer app team continues to work on both a resolution and a workaround to deliver the agreed methodology using 80 percentiles
- BI has kicked off the planned training sessions for end users in slicer dicer and other reporting tools, the session will continue till early March

Schedule

- Complex transformations required to extract core activity data is placing all delivery dates at risk
- Test build of national submission elements is complete. Testing is finalised for elements that have been mapped.
- Review and validation of methodologies target completion Feb 2023
- Validation of all reports in Epic – Jan 2023 will not be complete
- Tables to support National Submissions - February 2023

Risks & Issues

- Production data does not match anticipated outputs for reporting due to lack of documentation of workflows
- Roles and responsibilities are not defined across the three Health agencies and this is impacting the ability to improve governance processes
- Unplanned complex transformations required to extract core activity data to meet nation reporting requirements placing submissions at risk.

Scope

Scoping ongoing deliverables

Budget

Budget is being management at the program level
The new project team is focused bringing the project out of critical and will refine the budget expenditure over the coming weeks to provide more detailed information by next month's status report.

Quality

Quality and assurance is being managed at the program level and is reported in the program status report.

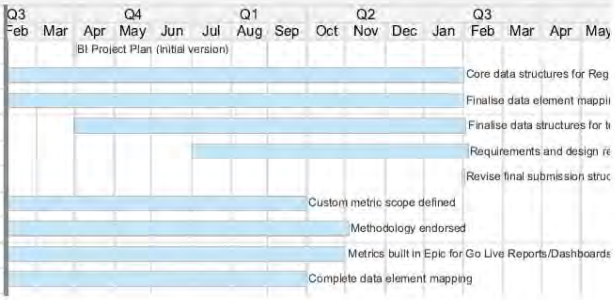
Benefits

Benefits are being managed at the program level and is reported in the program status report.

Key Project Milestones

Key Milestones Report - Digital Health Record Busi

At Risk	Health	Task Name	Start Date	Status
		BI Project Plan (initial version)	30/03/22	Complete
		Core data structures for Regulatory Submissions completed	01/01/22	In progress
		Finalise data element mapping	01/01/22	In progress
		Finalise data structures for testing	01/04/22	Not started
		Requirements and design refined for final submission structures	01/07/22	Not started
		Revise final submission structures	31/01/23	Not started
		Custom metric scope defined	01/01/22	Complete
		Methodology endorsed	01/01/22	Complete
		Metrics built in Epic for Go Live Reports/Dashboards	01/01/22	Complete
		Complete data element mapping	01/01/22	Complete



Financial Performance

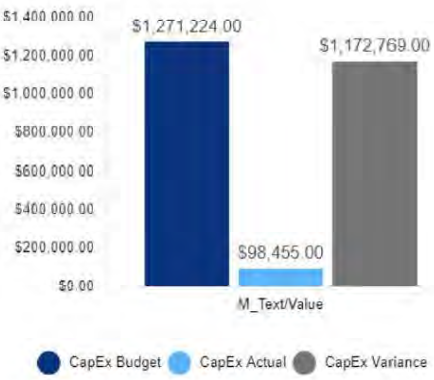
Whole of Life Budget & Expenditure — **Current FY 2022/23**

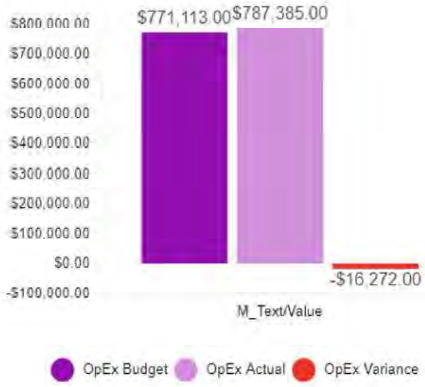
CapEx

Budget	$1,496,215.00
Actual	$323,446.00
Variance	$1,172,769.00

OpEx

Budget	$1,161,948.00
Actual	$1,314,082.00
Variance	-$152,134.00





Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain			4		
Likely		1	5	1	
Possible		1		9	
Unlikely		10	4	4	
Rare					
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High				1	
Moderate			4	1	
Low			3		
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Risks

Title	Residual Rating	Action to Be Taken
National Reporting	High	Testing of data elements required for submissions. Close collaboration and communication with submission team. There are well-established processes for resubmission of data.
Critical Data Elements	High	We are working with app team and executives on mitigations, which include addressing through training Meetings will be scheduled week starting 5 September to discuss mitigation.
Limited Resources	High	Keep app workstream managers in the loop Escalate to senior management and executives as required
Lack of organisational readiness for such a significant change.	High	Treatments include the health services recruiting additional staff to support the change management Robust end user training Data governance/literacy
Clients receive the wrong reports and use them incorrectly.	High	Efforts underway to identify users, job roles to ensure they are assigned to the appropriate user group and tiers Recruitment of additional staff to support change management Robust end user training Data governance/literacy
The Territory may have problems with national reporting and submissions during the transition period from existing systems to the Digital Health Record	High	Map data fields from the DHR into the ACT data repository. There are well-established processes for resubmission of data. Sending brief to Minister and letter to DG and funding bodies about potential impact to submission timeline.
Inability to meet national submission requirements.	High	Testing of data elements required for submission Close collaboration and communication with submission team There are well established processes for re-submission of data
Loss of historical data - Audit data in chronicles is truncated regularly and if Clarity ETLs miss data it may be impossible to retrieve.	High	Regularly review all the specifications. Keep abreast of any new reporting requirements and/or standards Identify all relevant stakeholders for the BID project Extensive consultation regarding deliverable required by stakeholders Regular meetings with all stakeholders POTENTIAL: increase log audit retention in Chronicles, however, will affect cost and performance
Data migration is incomplete - Data is notified for migration prior to Go-Live	High	DHR Data conversion team is assessing the Legacy Systems migration strategy DHR and Epic are developing a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) ration strategy DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe Testing process is planned and coordinated with key stakeholders
Data is lost, corrupted or mapped incorrectly through migration progress	High	Legacy data is currently being migrated from decommissioning systems. This data is landed in the new Data Health Enclave (PAUCLDRSQL207) server. Validation of data is dependent on the availability of an SME in the particular system area.
Accidental release of confidential data -	High	Training in data governance and best practices Build secure data handling network zones
Software as implemented does not meet our mandatory reporting needs	High	Working with vendor to identify mandatory reporting concepts to ensure inclusion prior to Go-Live
Data Access & Security	High	Draft key procedures required for Go-Live and training Communicating dependencies and timelines to DAB for required policies Clear approval process
Waiting Times for ACT Consumer App	High	Work with Epic on what solutions will meet requirements Escalate decision if required before the next GLRA
Lack of dedicated resourcing	High	
Strategy for reporting historical data	High	Currently assessing certain systems which will require reporting user interfaces. Systems like CHARM have been identified to require reporting for research, patient workflows, etc. That will require extraction from the data warehouse.
Difficulty accessing historical data	High	a) Monitoring progress of the data migration into the data repository. b) Training staff in the data repository team early so that their work aligns with the future state after implementation of the Digital Health Record. c) Monitor the implementation of document level context switching in CPF. d) DHR Data conversion team and IDM team are assessing the Legacy Systems migration strategy with the intent that legacy system information will be migrated to either Clinical Patient Folder and/or the Data Repository and be the source for historic information. e) DHR and Epic have developed a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) and have this approved by the program governance. f) DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe g) DHR conversions team have developed business requirements for each system that will be converted upfront with the vendor agreed components h) Developing a proof of concept for a legacy data viewer for data that is unable to migrate to Epic"
Loss of Legacy system metadata	High	Currently being assessed at a system by system basis. Some systems already have metadata available in their logs which have been extracted from the SQL database. Some documentation are already have been stored in Confluence and Objective. These are being documented at there System Handover Document to DSS.

Project Issues

Title	Residual Rating	Action to Be Taken
Recruitment and onboarding staff	High	Making sure recruitment paperwork is submitted in a timely manner Training is available and staff supported Training materials and documentation developed, including induction
Difficulty accessing historical data	High	DHR Data conversion team and IDM team are assessing the Legacy Systems migration strategy with the intent that legacy system information will be migrated to either Clinical Patient Folder and/or the Data Repository and be the source for historic information. DHR and Epic have developed a Data Conversions Strategy (Project Charter) for the migration of key data elements into the DHR (data seeding) and have this approved by the program governance. DHR and DSD keep contracts for legacy systems in a reduced state to ensure that data can be converted in a reasonable timeframe DHR conversions team have developed business requirements for each system that will be converted upfront with the vendor agreed components Developing a proof of concept for a legacy data viewer for data that is unable to migrate to Epic

4.4. Digital Health Record Business Technical Project

ACT Government | ACT Health

Digital Health Record Technical Project

Digital Solutions Division
PROJECT STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 December 2022 to 6 January 2023

Project Overview

The Project will deliver technology components to support the migration of ACT Health systems, DHR and Related Systems environments, interfaces, end user devices, medical devices, and foundational technology solutions.

Trending

▼ Declining

Project Governance

Project ID	PJ0006
Approval Stage	Deliver
Tier	Tier 1
Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Project Delivery Team

Project Manager	Tim Panoho
Approver	Sandra Cook

Project Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Risks & Issues Health Status	Benefits Health Status	Quality Health Status	Scope Health Status
🟡	🟢	🟡	🟢	⚫	🟢	🟡

Project Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
11/05/21 Actual Start Date	01/08/21 Baseline Start Date	$18,715,578.00 Baseline (Capex)	$5,089,097.00 Capex
07/03/23 Actual End Date	30/12/22 Baseline End Date	$17,697,823.00 Baseline (Opex)	$12,337,013.00 Opex

Project Status Commentary

Project Status

As per the previous status report the project has shifted into operation and BAU processes. From the period of December through to the 20th of January support for the DHR from a technical perspective has had minimal disruption to service, however the following priority issues still remain:

- Migration to the NTT environment. There are still a small body of work to fully move some systems off DDTS. This includes Synapse, BIS, etc. There are ongoing packages of work to move the systems across into NTT.
- The paper to move all integrations to go through Rhapsody instead of AETHER has been agreed by the health service stakeholders at the Technical Steering Committee level. The plan is to complete these integration moves by end March 2023.
- Planning for the first system upgrade will commence the first week of February 2023. The February 2023 version of Epic will be implemented in production by the end May/ early June 2023.
- Business Continuity Processes are currently being finalised in the following days that will allow more structure and avaiability across the health services.
- Pathology services have significant issues with the loss of data through to GPs. There is a dedicated pathology team that are addressing the issues with pathology sent and received with development of Epic to address some of these issues in early February.
- Breastscreening project to replace the currently solution is currently underway and is still on track to be delivered by the end of month.

Schedule

The DHR went live according to schedule. The hypercare period is now finished and the team are focussed on migrating urgent systems and will move to a focus on transition to BAU arrangements in 2023.

Budget

To address the Capital overspent on this project, we have requested an operational funding reprofile to capital that has been accepted and actioned by Finance. For this year, $8.415 million in DHR recurrent funding will be moved to DHR capital funding.

Scope

The scope of the technical team was to deliver all the infrastructure and application components for running the Epic application. This was delivered with processes now in place to support patching and special updates for ongoing future scheduled outages. The team delivered end user devices to all areas for CHS and Calvary and there is ongoing changes and improvements that will continue on through BA. The EUD team are now transitioning into DSS support. Medical devices are also continuing to support the biomedical services to ensure that there is ongoing monitoring and management of medical devices that have been delivered to BAU. The Security and User Provisioning team are managing the queues for support and maintaining end user access. There will be a project next year to improve the end to end provisioning of users to align with the CHS and Calvary onboarding projects. Interfaces are continuing with integration support with an outstanding action to migrate interfaces from the AETHER platform due to the lack of sufficient monitoring functionality.

Risks & Issues

Please refer to the risks and issues summary report below.

Benefits

Benefits are being managed at the program level and is reported in the DHR Program status report.

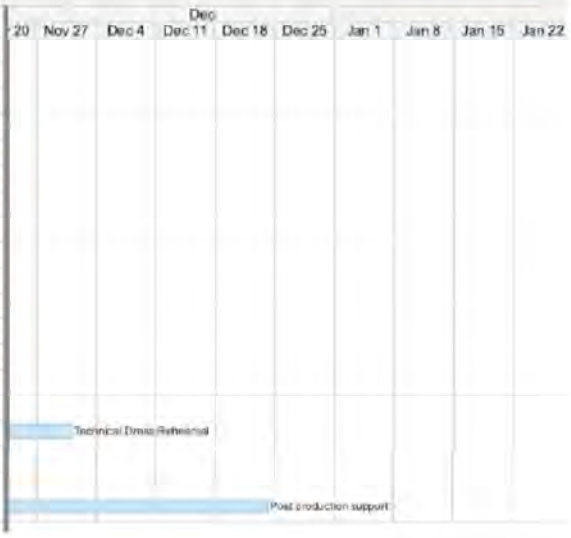
Quality

A Quality and Assurance plan are being managed at the program level and is reported in the DHR Program status report.

Key Project Activities

Key Project Activities - Technical

Health	Task Name	Start Date	End Date	Status	Milestones
	Interfaces: PRD DHR Integrated related systems connected	31/08/22	31/08/22	In progress	
	September 2022 Upgrade	29/08/22	05/09/22	Complete	
	Imprivata PRD Completed	29/08/22	29/08/22	Complete	
	External Access Available: Public facing	12/08/22	12/08/22	Complete	
	Security Assurance: Pentest completed	26/08/22	26/08/22	Complete	
	PHI: First Patient Load into PRD	09/09/22	09/09/22	Complete	
	PHI: Kestral Data Load	12/09/22	12/09/22	Complete	
	Environment: Rhapsody PRD Environment ready	12/09/22	12/09/22	Complete	
	Active Directory Synch in place	20/08/22	20/08/22	Complete	
	PRD Downstream Systems Ready	25/07/22	30/09/22	Complete	
	Medical Devices: All systems live in PRD.	14/10/22	14/10/22	Complete	
	Business Continuity Tested	0 days	07/09/22	Complete	
	Login Testing (Labs) Start PRD	14/10/22	14/10/22	Complete	
	Abstraction (FULL)	14/10/22	14/10/22	Complete	
	PAS: Appointment / Scheduling Tasks	14/10/22	14/10/22	Complete	
	Technical Dress Rehearsal	01/08/22	30/11/22	In progress	
	Milestone: Production Environment Completed	29/08/22	29/08/22	Complete	
	Go Live	12/11/22	12/11/22	Complete	
	Post production support	07/11/22	23/12/22	In progress	



Financial Performance

Whole of Life Budget & Expenditure

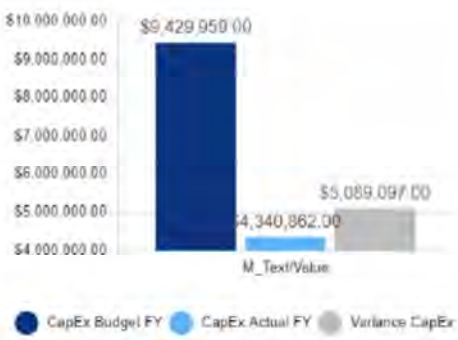
CapEx

Budget	$18,715,578.00
Actuals	$13,626,481.00
Variance	$5,089,097.00

OpEx

Budget	$17,697,823.00
Actuals	$5,360,810.00
Variance	$12,337,013.00

Current FY 2022/23



Project Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely		2			
Possible			7		
Unlikely					
Rare	1				
	Insignificant	Minor	Moderate	Major	Catastrophic

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High					
Moderate					
Low					
Planning					
	Insignificant	Minor	Moderate	Major	Catastrophic

Risks

Title	Description	Residual Rating	Action to Be Taken

Project Issues

Title	Description	Residual Rating	Action to Be Taken

5. Cyber Security

5.1. Cyber Incidents

Details of security related incidents, investigations and requests for information are not shared broadly across directorates due to privacy reasons, however statistics for ACT Health and Canberra Health Services are below.

The statistics in the cyber security section are supplied by DDTS quarterly therefor there is no new data available to update this month's DSD performance report.

For this reporting period DSD (including our vendors including NTT) have no recorded successful cyber attacks on our system and infrastructure.

Investigations and Requests for information

Date	Reference	Investigation/RFI	Directorate	Status
06/12/2022	SEC-IST-22-192	E-discovery: Email	HD	Closed - Fully Resolved
06/12/2022	SEC-IST-22-191	E-discovery: Email	HD	Closed - Fully Resolved
07/11/2022	SEC-IST-22-179	E-discovery: Email	HD	Closed - Fully Resolved

Incidents (2)

Date	Reference	Incident Type	Directorate	Status
13/12/2022	SEC-IST-22-194	Account Compromise	HD	Closed - Fully Resolved
25/10/2022	SEC-IST-22-168	Phishing	HD	Closed - Fully Resolved

5.2. Operational Security Updates

5.2.1. Essential 8 maturity level

ACT Health has undertaken considerable work to establish the Health Enclave, which has enabled us to meet all the Essential 8 elements for hosting. The current maturity levels vary between level zero and three, however, ACT Health is on target to achieve a minimum of maturity level two across all the Essential 8 elements for hosting by mid 2023.

At a Whole of Government level, DDTS have a plan to reach maturity level one (the base level) over the coming years. Until DDTS reach a similar level of maturity in this space to that in the Health Enclave, this will continue to pose a significant security risk to our services and infrastructure.

5.2.2. Privileged Account Management

DSD is in the process of implementing Beyond Trust's Privileged Account Management (PAM) solution within the Health Enclave. The benefits of this solution include the management of privileged accounts, vendor session monitoring/recording and password vault capabilities. The PAM solution is now live with multiple systems now being access this way. The cyber team is working with the Tech team and system administrators to continue onboarding systems and removing individual administrator accounts for system administrators.

5.2.3. Network and device visibility

DSD have had ForeScout eyeSight and Medigate implemented for several months now.
These tools have been beneficial to provide visibility over the various ACT Health networks such as Pathology, Medical Imaging, Devices, Security and Radiation oncology.
The security team work proactively with DDTS and CHS to remediate any vulnerabilities that may arise. Forescout and Medigate have been impacted by the network modernisation project at CHS, which has resulted in the data feeds to break. The Cyber team is working with the DDTS network team to restore connectivity so that network visibility is established.

5.2.4. Enabling port security on network switches (802.1X)

DDTS are implementing port level security (802.1X) across the ACTGOV network. 802.1X will improve the security posture of the ACTGOV network by preventing unauthorised devices from being connected. DSD have worked with DDTS to update all ACTHD network switches to 802.1x and are actively working with CHS to enable port security across CHS as part of the DDTS network modernisation project in 2022. Resource constraints within DDTS and hospital capacity issues within CHS are limiting the progress of this essential work, however plans are in place to accelerate this work in early 2023.

5.2.5. Network Monitoring and Segmentation

DSD has formed a working group with DDTS Security and DDTS Networks to explore network segmentation for health systems. This working group explores the current state of ACT Health's networks, limitations of current technologies used across ACTGOV and future requirements. This work will continue with the inclusion of the CHS CIO with the aim to implement improved network segmentation along with the network modernisation program. This work hasn't progressed as a broader project, however, it is being addressed as new systems are being brought online or migrated to the Health Enclave.

5.2.6. Personnel Security

We continue to engage the Australian Government Security Vetting Agency (AGSVA) through the Justice and Community Safety Directorate to assess various staff within DSD to a Negative Vetting Level 1 (NV1).

The staff that are being vetted are positions of trust and include staff that have elevated/admin access to multiple critical systems, can access and extract large amounts of sensitive data, have access to the data centres (which require an NV1 clearance) and other activities related to protective security functions.

There are approximately 340 staff that are fully vetted and roughly 25 staff that are in the process of being vetted.

5.3. Unsupported Operating Systems

5.3.1. Windows 7 Eradication

DSD and DDTS are collectively working towards reducing the Windows 7 devices across the ACT public health system.

The below table provides an overview on the Windows 7 devices across the Government network in December 2022 excluding 22 kiosks in directorates outside Health which are being remediated in a separate DDTS project.

We are on track to remove all Windows 7 systems from the ACT public health system by the end of January 2023.

Directorate	Oct 21	Jan 22	April 22	July 22	Oct 22	Dec 22
Health/CHS	312	165	58	57	47	29
Other	211	112	73	48	39	22
Total	523	279	131	105	86	51

5.3.2. Legacy Servers

DSD have been working actively to migrate/decommission the Windows Server 2008. There are currently 27 systems, which are actively being address as a priority.

The follow table identified the legacy Windows Server 2008 operating system servers hosting Directorate business systems as at the end of December 2022. The count includes shared infrastructure servers used to host multiple Directorate systems such as IIS web servers and SQL servers.

Directorate	Server May 22 Count	Server July 22 Count	Server Dec 22 Count
Health	124	112	98
Other	174	151	151
Total	298	263	249

5.4. System Security Plans

Our Security Hub is actively working with relevant stakeholders, including DDTS Security, system administrators, vendors, and Business System Owners (BSO) to ensure business systems have up-to-date System Security Plans (previously known as Security Risk Management Plans). System Security Plans are being updated and/or developed as systems are being implemented, upgraded or migrated to the Health Enclave. System Security Plans for systems that will be decommissioned when DHR goes live will not be updated.

The below table is a snapshot from December 2022 outlining the status of the security plans across the ACT Government.

Directorate	Current	Expired	No Plan	Under Review	Not Required	Total
Health	13	23	14	30	15	95
Other	50	37	16	54	34	181
Total	63	60	30	84	49	276

The Security Hub are actively working to address the outstanding System Security Plans as can be evidenced from the table above where 30 are currently under review by either DDTS or DSD.

ACT Health Directorate

To:	Minister for Health	**Tracking No.: MIN23/7**
CC:	Rebecca Cross, Director-General	
From:	Sandra Cook, Acting Chief Information Officer and Executive Group Manager, Digital Solutions Division	
Subject:	Digital Health Record Program – Monthly Briefing March 2023	
Critical Date:	14/03/2023	
Critical Reason:	Briefing to be available for the Digital Health Record Update on 14 March 2023	

Recommendations

That you:

1. Note the ACT Health Digital Health Record (DHR) Program Status Report to 6 February 2023 at Attachment A; and

Noted / Please Discuss

2. Note the Epic Status Report February 2023 at Attachment B.

Noted / Please Discuss

Rachel Stephen-Smith MLA ……..... …../…../…..

Minister's Office Feedback

Background

1. At a meeting held with ACT Health Directorate (ACTHD) on 21 January 2021, you requested a monthly briefing on the DHR Program to keep you up to date with the status of the Program. These meetings have been scheduled for the third Monday of every month and commenced on 24 May 2021.

Issues

2. The DHR Program is currently in Tranche 2 – Delivering the Capability. The DHR System was implemented on Saturday, 12 November 2022 at 5.30am.

3. The ACT Health DHR Program Status report from February 2023 is attached at Attachment A.

4. Epic's latest status report is the report from February 2023 (Attachment B). This report rated the implementation at a Watch status with a score of three out of five. Concern areas raised in this report are surrounding National Submissions, interface configuration changes post Go-Live and the Business As Usual (BAU) Support staff transition.

5. On 16 February 2023, you requested an update about whether there are remaining patient data cut over issues. Please note:

    - Cutover was completed on the night before go-live for all patients who were inpatients during go-live.
    - Abstraction of data from the patients record into the DHR was undertaken across specialities and focused on key items such as problem list, allergies and different alerts.
    - This work was completed for all patients who had an outpatient appointment within the eight weeks post go-live. From then on, the information is entered by the clinical teams on a rolling basis.
    - All paper records from before go-live are all available on the Clinical Patient Folder system, which makes all scanned paper records for the last 27 years available digitally. That system was available during go-live and will continue to be available.

6. The following achievements have been delivered in the last month:

    - The DHR team resolved complex issues around pathology and commenced the upgrade process by analysing over 1700 tasks to determine the scope of the upgrade.
    - The DHR team worked closely with NSW Health to collaborate as they begin their work with Epic across the State, as part of the Single Digital Patient Record.
    - Post live visits across pharmacy and oncology teams have taken place to gather feedback and prioritise issues, including having a plan in place for all remaining post live visits across all specialties for 7 - 9 March 2023.

- The DHR team collaborated with private health facilities to enhance and coordinate care with the use of DHR Link.
- Completed the development of the ongoing governance structure to support changes and ongoing support across the public health system with a territory wide view.

7. The DHR Program has been running a Top 10@10 meeting that started out daily and has now moved to weekly. The current issues being discussed are as follows:

Issue	Description	Status
Business Intelligence	Issues – • Concerns regarding availability and quality data	**Submissions and Accountability** Meeting and working groups have been established with initial focus on APC and ED. Roles and responsibility are established, detailed schedule being developed, and issues are being captured and reviewed. **Elective Surgery Wait List Reporting** Reports have been developed and are currently in UAT for sign off prior to promoting production **Outpatient Reporting** Initial meeting occurred to review existing reports in Epic. BI Team will develop a plan for outstanding requests that outlines new development, modifications to existing reports, and core concepts to validate.
PAS related issues	Provider Record validation Referrals and CHI intake	Provider records: • Have a clear minimum dataset for collection. • Steps in place when an incorrect HealthLink ID is identified. • Working on the inactive provider records (practices are complete, working through the build updates for patient records). **Inconsistent expected dates making scheduling difficult** *A) converted orders* - Will be addressed as a part of update to item number 3. *B) New follow up orders not capturing expected date* - expected date field made Mandatory on 31/01/2023.

		Clinicians Placing Incorrect Appointment Orders *A) Appointment requests being placed instead of referrals* - Ambulatory trainers providing additional documentation/training to clinical leads *B) Incorrect Appointment request being placed* – Preference lists need to be updated to include Hospital Follow up request orders. **Difficulties with Reporting Unused Slots** PAS Boost resource working on application dashboards to address reporting gaps.
Oncology Pharmacy	Oncology Pharmacy workflow issues	SLADE: Board approval was granted for DHR Link to be used as the method for security sharing the patient's medication chart with SLADE pharmacy. Final functionality agreed with Slade, built and being tested. Final oncology pharmacy workflows agreed and to be trained in the week beginning 6 March 2023. Go live planned for 7th March.
Specialist Medicare Billing	Billing	Close to resolving the Outpatient Bulk Bill Volume Decrease issue, no information lost only checks in financial classes assigned. PBRC Error Volumes: Daily new errors in specialist billing now approx. 150/day (equivalent to pre-DHR). Backlog: At 02/03/23 impacted services, Impacted Specialist Billing CHS – 6049, CAL – 663. CHS/CAL Accounts team to action errors/provide timeline.

Oral Health	MiPACS	Performance issues with MiPACS sending and retrieving images impacting clinic durations: Issue identified and resolution complete in Tuggeranong Health Centre, will be implemented soon in other sites. Long term fix is under investigation with MiPACS.
		Working on confirming workflows required to be undertaken to appropriately identify ready patients versus waiting. Additionally reviewing waiting list generation logic.
	Dental Services restorative waitlist	Ongoing work to ensure routing to correct waiting list which will include records from legacy system. Identified ~500 entries that were not converted, operations to review list and add patients that still need to be on the list.

Financial Implications

8. The DHR Program now has a total budget of $328.803 Million over nine years (including offsets and the Pathology system replacement Budget) with ACTHD portion of the Supplementary Business Case added. The detailed review of the budget has been done and the overall position over the nine years is as follows:

	Actuals to October 2022 & Forecast expenditure to 2026/27	Difference to budget
Capital (Treasury funding – original Business Case plus New Initiative funding from 2022/23)	$135,778,671	-$4,991,671
Opex (Treasury funding – original Business Case plus New Initiative funding from 2022/23)	$39,639,469	$35,755,093
BAU	$151,173,260	-$28,551,217
Total	**$326,591,400**	**$2,212,205**

9. The Capital budget figures above does not include the return of the $7.515 Million utilised for the delivery of a new Notifiable Disease Management Systems during COVID.

10. The above financial position is predicated on the assumptions that the offsets for staffing and ICT systems costs would be able to be fully achieved from 1 April 2023. There is concern that these offsets will not be able to be completely achieved. To assist with this an external financial audit will be performed to outline the budget position within the Digital Solutions Division (DSD) and how this should be managed moving forward.

Consultation

Internal

11. Nil for the purpose of this briefing.

Cross Directorate

12. Over 500 subject matter experts were identified from across the health services to provide key clinical guidance to the Program team to ensure the program remains clinically led.

External

13. Keith McNeil, Chief Clinical Information Officer, Queensland Health, is the independent Chair of the Program Board and Darlene Cox, Executive Director, Health Care Consumers Association ACT is a member of the Program Board.

14. External organisations such as Winnunga Nimmityjah Aboriginal Health and Community Services continue to be consulted through attendance at direction setting sessions and meetings with the Senior Director, DHR Implementation Project.

15. There are representatives from the following external organisations on the following Steering Committees for the Program:

Consumer Experience Steering Committee

- Health Care Consumers Association;
- ACT Mental Health Consumer Network;
- Carers ACT;
- Meridian;
- People with Disabilities ACT; and
- A consumer representative from Calvary Public Hospital Bruce.

Union Engagement Advisory Committee

- Australian Nursing & Midwifery Foundation;
- Australian Salaried Medical Officers Federation;
- Community and Public Sector Union;
- Professionals Australia;
- Health Services Union;
- Visiting Medical Officers Association (ACT); and
- Australian Medical Association (ACT).

Work Health and Safety

16. The DHR Program have not received any issues with Work Health and Safety post go-live but will monitor with the health services.

Benefits/Sensitivities

17. This monthly update provides a useful account of recent accomplishments of the DHR team in relation to the DHR. It also provides an overview of the issues experienced by the DHR and how those issues are managed by the DHR technical team.

Communications, media, and engagement implications

18. Communication and media engagements occurred over the Go-Live period.

19. The Program team would like to continue to work with your office through the ACT Health Communications team to provide you with the opportunity to participate in media or community opportunities for the DHR now it is in production.

Signatory Name**:** Sandra Cook Phone: 5124 9129

Action Officer: Rebecca Heland Phone: 5124 9508

Attachments

Attachment	**Title**
Attachment A	ACT Health Digital Health Record Program Status Report to 6 February 2023
Attachment B	Epic Status Report February 2023

ACT Government | ACT Health

Digital Health Record Program

Digital Solutions Division
PROGRAM STATUS DASHBOARD

Digital Health Strategy Theme

- Patient-centred
- Health services enabled by contemporary technology
- Research, discovery and collaboration

Reporting Period: 7 January 2023 to 6 February 2023

Program Governance

Program ID	PG0002
Approval Stage	Tranche 2 - Delivering the Capability
Executive Sponsor	Rebecca Cross
Governing Committee	DHR Program Board

Program Overview

The Digital Health Record (DHR) Program will deliver a single, contemporary, trusted, real-time, person-centred clinical record that can be accessed by all members of the treating team regardless of location.

Trending

▼ Declining

Clinical Owner/s

David Peffer, Chief Executive Officer, Canberra Health Services

Ross Hawkins, ACT Regional CEO, Calvary Public Hospital Bruce

Program Performance Indicators

Overall Health Status	Schedule Status	Budget Health Status	Quality Health Status	Risks & Issues Health Status	Scope Health Status	Benefits Health Status
🔴	🟢	🟢	🟢	🔴	🟢	🟡

Program Delivery Team

Approver	S Sandra Cook
EBM, Future Capability	J Justine Spina
Technical Project	T Timothy Panoho
Implementation Project	P Philippa Kirkpatrick
BI & Data Project	S Sean Winefield

Program Baseline

Current Schedule	Baseline Schedule	Approved Budget	Budget Variance
01/01/19	01/07/19	$130,787,000.00	$47,610,970.00
Start Date	Baseline Start Date	CapEx Budget	CapEx Variance
31/03/23	30/12/22	$77,752,000.00	$58,273,720.00
End Date	Baseline End Date	OpEx Budget	OpEx Variance

Program Status Commentary

Program Status

The program is reporting a red status. The DHR system was successfully implemented on Saturday 12 November 2022 at 5.30am; however, issues have been discovered in the production data available for external reporting such as National Submissions. The focus of the DHR Implementation Project and DHR Technical Project has been on managing support tickets and working through issues as they arise as well as planning for the Epic Upgrade to the February 2023 version in May 2023. As of 6 February 2023, there have been 28,752 jobs logged for assistance with 24,998 of those jobs resolved and 443 jobs awaiting confirmation from the reporters that the job is resolved. The stabilisation period will continue until the 24 February 2023. The ACT Health ongoing support team recruitment to manage the DHR ecosystem has been completed with job offers made and all positions filled. These resources will transition into their new ongoing roles by the 24 March 2023.
The Privacy Impact Assessment is now final and is published. Progress against recommendations will be managed and monitored by the DHR Program Office.

The EY Go-Live Readiness Assurance review has been presented to the Program Board. The next and final review will be performed in April 2023 and will focus on the Benefits Realisation/ Post Implementation Review for the Program.

Quality

The final Quality and Assurance Strategy and Plan was approved by the Program Board on 18 May 2021.

EY has been selected as the company to provide external assurance activities outlined in the Quality & Assurance Strategy and Plan. Recommendations arising from the previous assurance review reports are being tracked and added to the Program Board papers monthly. The next review will be the Benefits realisation/ Post implementation Review in April 2023 with EY attending the March 2023 Board to discuss the scope of this review.

Risks & Issues

Risks - There are currently 35 open risks. There are 10 risks reporting a high rating:
#12 The Territory may have problems with national reporting and submissions during the transition period from existing systems to the Digital Health Record.
#20 Data Quality in the DHR is poor - additional risks associated with the reporting database have been added to this risk
#22 The Clinical Record does not provide ready access to information
#29 Clinical Engagement
#38 Slow decision making
#46 DHR team unable to deliver tasks in alignment to schedule
#47 Cyber Attack
#49, #50 & #51 Technical Architecture risks.

Issues – there are 6 high issues still open the top one being:
Pathology result formatting and sending to external parties through the interface and provider information not being correct is impacting timely review of results for referring clinicians.

Benefits

Abt Associates (in partnership with bdna) were the successful external consultancy to perform the Benefits Realisation Plan for the DHR.

The overarching headline Benefits Management Plan was approved by the DHR Program Board 8 April 2022 and will now be managed in the DHR Program Office to gather the baseline data prior to Go-Live of the Epic DHR solution and will work on cadence of gathering data post Go-Live. There are 23 baseline data metrics related to the 14 headline benefits identified. The metrics were approved by the DHR Program Board in October 2022 and baseline data will be provided in March 2023. The BI & Data team are working to deliver this data in the timeframes set and have collated baseline data for the last 3 years where available.

Budget

The figures in this report are still report to October 2022 as the DSD Finance Manager has resigned and a replacement is due to commence next week. As soon as this replacement starts, actual figures for November and December 2022 will be added to the March 2023 report. The below figures are predicated on the assumptions of offsets being achieved and next month's finance report will deep dive into the likelihood of these offsets being able to be actualised. The total budget for the DHR Program is now $328.803 Million over 8 years with the addition of funds to ACT Health Directorate from the Supplementary Business Case. This comprises of $114.932 Million Treasury Capital, $64.273 Million Treasury Operational and $122.622 Million in Offsets. A Supplementary Business Case has been approved in the 2022/23 Treasury Budget Cycle totalling $50.828 Million ($26.070 Million Capital and $24.758 Million Operational). There is $20.348 Million allocated to the ACT Health Directorate and these figures have been added to the Program Budget ($15.855 Million Capital and $4.493 Million Operational budget). The Actual figures to October 2022 are as follows - Capital $83.176 Million (Budget $84.702 Million) Opex $19.478 Million (Budget $22.689 Million). There is $31.756 Million Capital remaining and $44.796 Million Opex remaining. At the end of October 2022, the total forecast over-expenditure for Capital over the 8 years is $3.583 Million and a forecast underspend of Operational expenditure of $37.593 Million. This is without recouping the $7.515 Million reallocation to the notifiable disease management system. The forecast underspend for the whole of life DHR Program at present is $2.212 Million over the 8 years with including the BAU expenditure. Therefore, the budget will be reporting Green. Detailed quarterly reports will be provided to the Board in December 2022 (Jul-Sept 2022 quarter) and March 2023 (Oct 2022 to Dec 2022).

Scope

Scope refinements are being managed through Change Request processes. A request to add 3 use cases to the DHR Link pilot has been drafted and is on the agenda for the February 2023 Board meeting.

Schedule

The DHR Program schedule has been reforecast after the agreement from the September 2021 Board to delay Go-Live from September 2022 to November 2022. The re-baselined schedule was achieved with Go-Live of the system occurring on 12 November 2022.

Project Summary Dashboard

DHR Technical Project

RAG 🟡 **% Complete** 96%
Trending –

The project status is green as the solution is in production and operating. The focus of the technical project is now on the transition of interfaces from the AETHER integration engine to Rhapsody to combat the intermittent issues with the AETHER integration engine. This was agreed to through a formal paper circulated amongst key stakeholders in CHS, Calvary and ACT Health. This switchover is planned to be completed by March 2023.

DHR Implementation Project

RAG 🟢 **% Complete** 99%
Trending –

The Digital Health Record (DHR) Implementation Project is reporting an overall green status and is improving.

The application workstreams are now managing the tickets logged across the health services to stabilise the system prior to optimisation requests being reviewed and prioritised over the next month. The application teams are also preparing for the Epic upgrade to the February 2023 version in May 2023. Each workstream will be noting the feature improvements availabble and will take recommendations through governance processes for what should be implemented in that Upgrade.

DHR Business Intelligence & Data Project

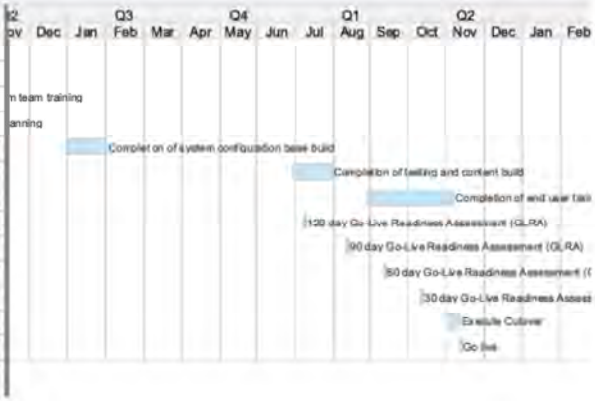
RAG 🔴 **% Complete** 77%
Trending ▼

This project is reporting red due to the issues with external reporting for required reports such as National Submissions. There are daily meetings with subworking groups in Admitted Patient Care (APC), ED, Elective Surgery Waitlists (ESWL), Mental Health and Non-Admitted Patient Care. The request to extend the BI and Data project was not agreed at the January 2023 Board and the project will prepare closure documentation detailing what was delivered for Go-Live and what is still outstanding work and will manage this outstanding work as Business As Usual (BAU). Scope for reporting for Go-Live has been delivered but issues are being managed in ED data and other elements of National Reporting. The National Submission data is being careful analysed now prior to the first submission that will contain Epic and legacy system data combined.

Key Program Activities

Key Program Activities

At Risk	Task Name	Start Date	End Date	Status
	Program authorised to commence	08/02/21	08/02/21	Complete
	Contract with vendor signed	01/01/19	01/01/19	Complete
	Completion of staffing and program team training	30/06/21	30/06/21	Complete
	Completion of detailed program planning	30/06/21	30/06/21	Complete
	Completion of system configuration base build	31/12/21	31/01/22	Complete
	Completion of testing and content build	30/06/22	29/07/22	Complete
	Completion of end user training	29/08/22	04/11/22	Complete
	120 day Go-Live Readiness Assessment (GLRA)	07/07/22	07/07/22	Complete
	90 day Go-Live Readiness Assessment (GLRA)	10/08/22	10/08/22	Complete
	60 day Go-Live Readiness Assessment (GLRA)	12/09/22	12/09/22	Complete
	30 day Go-Live Readiness Assessment (GLRA)	11/10/22	11/10/22	Complete
	Execute Cutover	04/11/22	11/11/22	Complete
	Go live	12/11/22	12/11/22	Complete



Financial Performance

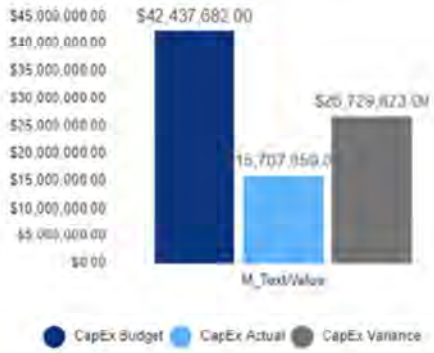
Whole of Life Budget & Expenditure — **Current FY 2022/23**

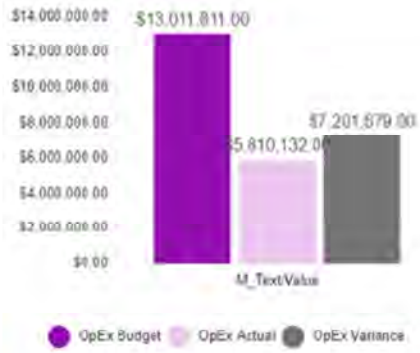
CapEx

Budget	$130,787,000.00
Actual	$83,176,030.00
Variance	$47,610,970.00

OpEx

Budget	$77,752,000.00
Actual	$19,478,280.00
Variance	$58,273,720.00





Program Risks & Issues Profile

Risk Matrix (Post Treatment)

Primary	2	3	4	5	6
Risk Matrix					
Almost Certain					
Likely			2	2	
Possible			2	3	
Unlikely					
Rare					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Issue Matrix

Primary	2	3	4	5	6
Issue Matrix					
Critical					
High					
Moderate			6		
Low					
Planning					
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**

Program Risks

Title	Residual Rating	Description
Data quality in the Digital Health Record is poor	High	"Insufficient focus on the design of the data dictionary and structures. Data entry by end-users may not enter quality data into the fields. "
Lack of or insufficient clinical engagement in the development and implementation of the DHR	High	The Program may be delayed, or may not deliver a high quality outcome.
Schedule delays due to slower than required decision-making or revisiting decisions already made	High	The project will require a devolved decision-making framework to ensure decisions are made in a timely manner. If this does not occur due to stakeholder unavailability or inability to reach a decision, this will delay the project. Scope creep/changes
The team are unable to complete all tasks in accordance with the schedule.	High	Causes of task non-completion may include: - The scope of work is larger than originally anticipated and there are issues that arise that take longer to troubleshoot delaying delivery of tasks - Delays to decision-making - team member's performance is not as expected - delays due to external pressures such as COVID-19 - delays to dependencies including conversions, interfaces and user provisioning Task effort not estimated correctly Recruitment and onboarding of staff Unplanned leave Unidentified scope
Cyber attack penetrates the DHR system	High	Hacking of the system or through mismanagement of the data. Critical systems fail to have geographic redundancy and availability.
Technical Architecture Documentation may be siloed and not sight clinical workflow requirements required to ensure a seamless clinical end user experience	High	Lack of architecture documentation and end user journey maps due to a lack of resourcing in the technical team
The DHR solution does not work in an efficient and effective way for end users at the time of Go-Live	High	Medical Grade End User Devices are not available in time for Go-Live, there are not enough devices for the workflow or the wrong devices are procured for areas making the workflow slower than anticipated.

Program Issues

Description	Residual Rating	Action to Be Taken
There have been issues with Pathology results being sent to the appropriate referring clinicians. This is for a number of reasons; provider data is poor, the AETHER integration engine failed to send the message, data entry did not add the right doctor to the record. There has been significant work to improve this and there is a daily process in place to check results have been sent. This issue will remain open until the work to switch the interface from AETHER to Rhapsody is complete.	Medium	

When results are sent to GPs there is an issue with some types of test results formatting poorly. This is due to the interface not marrying up with the GP Practice Management Software (PMS) systems. There are around 7 PMS systems used in Canberra with 3 of them being used by 90% of the GP community. Epic are working on a change to send a PDF report to reduce this issue in the interim whilst the team work on changing the atomic data in the longer term.	Medium
National Submissions data had started to be validated and there were errors noted in the data. The BI and Data team are now going through each operational database data field and ensuring it is mapped appropriately to the Epic SQL reporting tables appropriately. There is also work to identify why the data is not as expected. Reasons could include - the field is not mandatory and therefore not being captured, the order of the data capture is wrong and therefore the workflow needs to change, the fields do not contain the right selections, the mapping from the operational database to the reporting database may not be right. Each data element is being investigated to ensure the data is accurate before being reported. This was a risk that was reported throughout the program and has been realised. It was only able to be fully understood when production data was available.	Medium
There have been issues with referrals not going to the right clinician due to the HealthLink Service tree not going down to the sub-specialty level. This results in clinicians having to redirect the referral in the Epic system manually which can be time consuming and can delay the referral getting to the right person. There are iterative changes being made to the Healthlink service tree (and these are likely to be needed fortnightly ongoing to adjust the changes in the health service staff and services provided). This will be tracked for the first few iterations to ensure that these changes have improved the experience.	Medium
Issues have been raised with the Aria to Epic interface and the management of oncology protocols with the Slade Pharmacy arrangement for the provision of oncology drugs. Slade do not have access to the real-time information they need to be able to prep the Oncology protocols appropriately, so investigations are occurring to provide them access to patient charts through DHR	Medium
An ongoing governance structure has yet to be agreed but needs to be prior to the DHR Program closure on 24 March 2023 to ensure that decisions and changes to the system are agreed by health services. The Support Model working group has regular meetings for the next 4 weeks to finalise this governance.	Medium