Business Case on a page

REDCAP

General Information

Division	Allied & Digital Health
Department	ICT/Digital
Project Type	Capacity Expansion - New Capital & Opex
Project Duration	Ongoing

REDCap has the capacity to support clinical databases, facilitate institutional obligations to report to National quality improvement databases (e.g. ANZNN, ANZICs e.t.c.) and enable research and clinical improvement activities to be firmly embedded in the inpatient and outpatient settings. The lack of REDCap is negatively impacting our research culture and commitment to quality improvement. Implementing an RCH owned REDCap instance has been identified as a top priority by the Research and Improvement Leads at RCH, and this was reiterated during their recent meeting with our CEO and CMO. REDCap is considered a long-term solution, not a temporary fix.

Financial KPIs ($'000)

Total Revenue	Total OPEX
-	$ (1,044.7K)

Net Offsets
-

CY Operating Result	Net Operating Result
$ (117.2K)	$ (1,044.7K)

Total CAPEX	Total Assets Disposed
-	-

People/Capital

FTE

Nursing	-
Administration/Clerical	0.9
Medical Support	-
Hotel & Allied Services	-
Medical Officers	-
Hospital Medical Officers	-
Sessional Clinicians	-
Ancilliary Support	-
Total	**0.9**

Capital Items

Total	-

Cash Flow

Annual Cash Flow
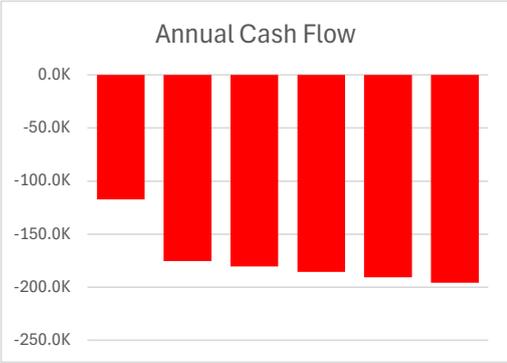
Net Cash Flow	NPV
$ (1,044.7K)	$ (918.2K)

Payback Period
Indefinite

Business Case

Initiator Name	Mahesh Chellamuthu	**Date**	12/01/2026
Division	Allied & Digital Health	**Department**	ICT/Digital

Project name	REDCAP		
Project type	Capacity Expansion - New Capital & Opex	**Expected Duration**	Ongoing
Project Start Date	2/02/2026		
Financial Year	2026		

Project description

Summary of the project and what improvements will be achieved

REDCap has the capacity to support clinical databases, facilitate institutional obligations to report to National quality improvement databases (e.g. ANZNN, ANZICs e.t.c.) and enable research and clinical improvement activities to be firmly embedded in the inpatient and outpatient settings. The lack of REDCap is negatively impacting our research culture and commitment to quality improvement. Implementing an RCH owned REDCap instance has been identified as a top priority by the Research and Improvement Leads at RCH, and this was reiterated during their recent meeting with our CEO and CMO. REDCap is considered a long-term solution, not a temporary fix.

Reason for project

Describe why the project is needed, alternatives considered, how it benefits the RCH, and risks

In the absence of our own instance of REDCap, RCH clinicians currently rely on workarounds to use other organisations' instances (including seeking MCRI and UoM honorary appointments) or use other databases that are not fit for purpose (e.g. excel spreadsheets, Microsoft Forms, Microsoft Access). These practices introduce significant risks, including data privacy and security vulnerabilities, a lack of audit trails, inconsistent data quality, limited user access controls, and challenges in meeting ethical and regulatory compliance. Furthermore, these fragmented approaches lead to inefficiencies, duplication of effort, and hinder the scalability and sustainability of research and clinical improvement initiatives creating data management/security risks and inefficiencies.

Endorsements

Function	Name	Signature & Date	Comment
Biomed (Clinical Equipment)	N/A		
Digital (IT, Comms, EMR)	Mahesh Chellamuthu	C Thuldy 14/01/2026	Requesting for REDCAP cost as per Executive Paper
Infrastructure	N/A		

Approvals

	Name	Signature & Date	Comment
Department Head	Michelle Rennie	M. Reni 14/01/26	
Finance Business Partner	Lewis Richards	Lewis Richards 14/01/26	
Executive Director	Doug McCaskie	McCaski 19/1/2026	
Chief Financial Officer	Claire Hare	Hare 29/01/2026	
Chief Executive Officer			
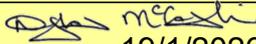
Supporting Material
REDCAP

RCH Executive

Briefing Paper – Implementation and Support for REDCap at RCH

DECISION REQUIRED – For Approval
Endorse support for initial implementation and ongoing support for REDCap at RCH

Background

REDCap is a web application for building and managing online surveys and databases, used worldwide to facilitate data collection and storage. MCRI and the University of Melbourne (UoM) have their own instance of REDCap as do all other hospitals in our precinct and all other quaternary paediatric hospitals in Australia.

In the absence of our own instance of REDCap, RCH clinicians currently rely on workarounds to use other organisations' instances (including seeking MCRI and UoM honorary appointments) or use other databases that are not fit for purpose (e.g. excel spreadsheets, Microsoft Forms, Microsoft Access). These practices introduce significant risks, including data privacy and security vulnerabilities, a lack of audit trails, inconsistent data quality, limited user access controls, and challenges in meeting ethical and regulatory compliance. Furthermore, these fragmented approaches lead to inefficiencies, duplication of effort, and hinder the scalability and sustainability of research and clinical improvement initiatives creating data management/security risks and inefficiencies.

REDCap is a top priority for the Research and Improvement Leads at RCH, and this was reiterated in a recent meeting with them with our CEO and CMO. The lack of REDCap is negatively impacting our research culture. REDCap is considered a long-term solution, not a temporary fix.

Due to the widespread use of REDCap throughout Australia and worldwide, a large proportion of the RCH workforce already know how to use REDCap, so uptake will be quick. Currently hundreds of RCH staff have an active login to the MCRI instance of REDCap.

MCRI has one of the most respected REDCap support teams worldwide. RCH would benefit from their support in rolling out our own instance of REDCap. Additionally, aligning RCH's version with MCRI's in terms of user design, set-up, roll out of updates and user support will prevent clinicians cherry-picking the 'better' version. A collaborative work relationship between the RCH and MCRI REDCap support teams will also protect the support of RCH users in the case of staff changeover at RCH, as the MCRI REDCap team is large. Most importantly, due to the close nature of the work done in organisations, there needs to be strong aligned governance, from both groups, to ensure appropriate data governance.

EPIC interoperability is possible and already in place at other Parkville Precinct hospitals. With the use of MCRI's instance, it has been used at RCH to facilitate collection of patient reported outcome and experience measures (PROMs and PREMs) and there is potential to embed clinical trials, including allowing randomisation by the clinician at the bedside.

Current Status

There is no REDCap instance at RCH. RCH staff are frequently seeking honorary appointments at MCRI and/or UoM to access REDCap. Use of another organisations' REDCap means the data entered is stored at that organisation.

Beyond risks associated with storing and transferring patient data inappropriately (potentially breach of privacy and compliance obligations), the workarounds significantly increase workload and hinder research.

On 6th September 2022, the Technical Review Board (TRB) at RCH reviewed and approved the proposed technical implementation of REDCap at RCH. While supportive of the solution, the TRB requested that it be deployed within a secure RCH cloud environment, ensuring all necessary controls and processes are in place.

Cost estimates associated with initial implementation and ongoing support are listed below. The main ongoing cost is for a RedCap application analyst that would complete the following tasks:

- Roll out of regular updates including at short notice in the event of critical security patches
- Training of users
- Developing and implementing governance processes
- Management of user access
- Day-to-day support including approving changes to databases, troubleshooting, resetting passwords

IT support would be required to

- Maintain the Azure environment where the RCH instance of sits on (Microsoft Azure)
- Ensure back-ups are being stored
- Develop Disaster planning/management (i.e. if system crashes)

Costs:

Initial rollout: up to $46K

- Initial Azure Setup: ~40K
- Implementation Support from Luke Stevens (Head of MCRI REDCap team): $6K

Ongoing support: $139K/year

- REDCap Application Analyst (AO75, 1.0FTE): $121K/year without on-costs
- Ongoing support from the MCRI REDCap team: $8k/year (1hr/week)
- Ongoing Azure Fees: up to $5-10K/year
- REDCap license fee: free
- RCH IT Support to maintain REDCap security in the Azure environment: absorbed into general operations, with no change of budget

Financial Summary

REDCAP

Financial Year	FY26	FY27	FY28	FY29	FY30	FY31	
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Business Case Impacts							
Revenue	-	-	-	-	-	-	-
OPEX	(117,249)	(175,220)	(180,340)	(185,475)	(190,627)	(195,796)	(1,044,708)
Offsets	-	-	-	-	-	-	-
Net Impact - Operating Result	**(117,249)**	**(175,220)**	**(180,340)**	**(185,475)**	**(190,627)**	**(195,796)**	**(1,044,708)**
Asset Disposals	-	-	-	-	-	-	-
Net Impact Accounting Result	**(117,249)**	**(175,220)**	**(180,340)**	**(185,475)**	**(190,627)**	**(195,796)**	**(1,044,708)**
CAPEX	-	-	-	-	-	-	-
Net Cash Flow Impact	**(117,249)**	**(175,220)**	**(180,340)**	**(185,475)**	**(190,627)**	**(195,796)**	**(1,044,708)**
Accumulated Cash Flow	**(117,249)**	**(292,470)**	**(472,809)**	**(658,284)**	**(848,911)**	**(1,044,708)**	**(1,044,708)**
Discounted Cash Flow	(117,249)	(166,876)	(163,573)	(160,220)	(156,829)	(153,412)	(918,160)
Payback Period (Years)	Indefinite						

FTE Breakdown							Average FTE
Nursing	-	-	-	-	-	-	-
Administration/Clerical	-	-	-	-	-	-	**-**
Medical Support	0.4	1.0	1.0	1.0	1.0	1.0	**0.9**
Hotel & Allied Services	-	-	-	-	-	-	**-**
Medical Officers	-	-	-	-	-	-	**-**
Hospital Medical Officers	-	-	-	-	-	-	**-**
Sessional Clinicians	-	-	-	-	-	-	**-**
Ancilliary Support	-	-	-	-	-	-	**-**
Total	**0.4**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**0.9**

Financial Details
REDCAP

Enter all numbers as positives

Financial Year	FY26	FY27	FY28	FY29	FY30	FY31

Activity Data

Activity Description	Activity Type	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Project Total
								-

Operational Revenue and Expenses

Revenue	Type	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Project Total
NWAU $	State Activity Revenue	-	-	-	-	-	-	-
NWAU #		-	-	-	-	-	-	-
								-
								-
								-
								-
Annual Totals		-	-	-	-	-	-	-

OPEX	RSX	Type	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Project Total
Salaries	Salaries	Salary and Wages	64,049	157,220	161,800	166,379	170,958	175,537	**895,943**
Initial Azure Setup	Goods and Services	Other	40,000						**40,000**
Implementation Support	Goods and Services	Other	6,000						**6,000**
Support from the MCRI REDCap team	Goods and Services	Other	3,200	8,000	8,240	8,487	8,742	9,004	**45,673**
Azure Fees	Goods and Services	Other	4,000	10,000	10,300	10,609	10,927	11,255	**57,091**
									-
									-
Annual Totals			117,249	175,220	180,340	185,475	190,627	195,796	**1,044,708**

Offsets	RSX	Type	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Project Total
									-
									-
									-
									-
									-
									-
Annual Totals			-	-	-	-	-	-	-

Capital Expenses

CAPEX	Funding Source	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Project Total
								-
								-
								-
								-
								-
Annual Totals		-	-	-	-	-	-	-

Asset Disposal	FAR#	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Project Total
								-
								-
								-
								-
								-
Asset Disposal Totals		-	-	-	-	-	-	-

FTE Detail by Labour Categories
REDCAP

Financial Year	FY26	FY27	FY28	FY29	FY30	FY31	
Project Year	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	

Cost							Total
Nursing	-	-	-	-	-	-	-
Administration/Clerical	64,049	157,220	161,800	166,379	170,958	175,537	895,943
Medical Support	-	-	-	-	-	-	-
Hotel & Allied Services	-	-	-	-	-	-	-
Medical Officers	-	-	-	-	-	-	-
Hospital Medical Officers	-	-	-	-	-	-	-
Sessional Clinicians	-	-	-	-	-	-	-
Ancilliary Support	-	-	-	-	-	-	-
	64,049	157,220	161,800	166,379	170,958	175,537	895,943

FTE							Average
Nursing	-	-	-	-	-	-	-
Administration/Clerical	0.4	1.0	1.0	1.0	1.0	1.0	5.4
Medical Support	-	-	-	-	-	-	-
Hotel & Allied Services	-	-	-	-	-	-	-
Medical Officers	-	-	-	-	-	-	-
Hospital Medical Officers	-	-	-	-	-	-	-
Sessional Clinicians	-	-	-	-	-	-	-
Ancilliary Support	-	-	-	-	-	-	-
Total	0.4	1.0	1.0	1.0	1.0	1.0	5.4