Diabetes Remote Monitoring Pilot Evaluation Briefing Paper

Recommendation

That the Executive Manager of Commissioning endorses the recommendations of the evaluation report for the diabetes remote monitoring pilot and its progression to the Board under the Digital Health Strategy.

Summary

The Diabetes Remote Monitoring pilot aimed to stabilise blood glucose levels through use of Continuous Glucose Monitors, for patients who use insulin therapy for the management of Type 2 Diabetes Mellitus. The objectives of the pilot were to:

1. Enable clinicians to access individual patient data on blood glucose levels (BGLs) through use of intermittent Continuous Glucose Monitors to tailor diabetes management care plans of people who have a history of poor glycaemic awareness or suboptimal glycaemic control related to Type 2 Diabetes.

2. Establish the value of intermittent Continuous Glucose Monitoring (remote monitoring) for patients with insulin dependent type 2 diabetes and the value to the primary care sector in the HNECC PHN region.

An external provider, Insight Australia conducted the evaluation (SUP-144 Diabetes Remote Patient Monitoring Evaluation). The purpose of the evaluation was to determine the effectiveness, appropriateness, and value of the intervention for the management of patients with insulin dependent Type 2 Diabetes Mellitus in the primary care setting.

The evaluation report found that the return on investment is estimated to be $66 to $1 investment.

Recommendations include the PHN progressing reiterations of this pilot, with consideration given to fit against the PHN Digital Health Strategy, delivery in existing models of care, quality improvement, financial benefit and ethics. Recommendations can be found in the background section of this brief.

Issue

In 2020, the PHN was exploring planning ahead of the COVID-19 pandemic, including remote monitoring and the value to primary care.

The Abbott FreeStyle Libre Flash Glucose Monitoring system is considered an intermittent Continuous Glucose Monitoring (iCGM) System, with glucose readings taken every 15 minutes. The FreeStyle system has been approved by the Therapeutic Goods Administration (TGA) for people with Type 2 Diabetes, who are 4 years and older and are insulin dependent to measure blood glucose in the interstitial fluid.

This pilot involved six general practices in the Hunter New England Central Coast region to recruit up to 12 patients into the pilot.

Desired Outcome

Innovative technology solutions are applied in the primary care setting to improve health outcomes for people living with Type 2 Diabetes Mellitus.

Financial Impact

There is no financial impact on endorsing this brief. The cost of the evaluation is outlined in the internal evaluation report.

Risks

Risk	Mitigation
The report is not considered in its entirety	The HIP Team has been involved throughout the process and this pilot has been included in the evaluation tracker
Recommendations of the report are not embedded in change processes	Seeking to have the recommendations endorsed and reported to Board under the Digital Health Strategy

Prepared and Submitted By: **Reviewed By:**

Name:	Joanna Coutts and Sara James	Name:	Catherine Turner
Title:	Integrated Health Manager and Integrated Health Care Officer	Title:	Commissioning Executive Manager
Date:	8 September 2022	Date:	

Decision:

APPROVED	NOTED	CHANGES REQUIRED: Details:	NOT APPROVED Reason:

Background

The internal evaluation report can be found here.

Diabetes Remote Monitoring Evaluation Recommendations from the internal report are:

Recommendations from the External Evaluation are:

It is recommended that the Hunter New England Central Coast Primary Health Network roll out further funding of the technology to patients living with Type 2 diabetes who are treated with insulin.

Any future roll out of the intervention should include a focus on those practices that are able to reach patients with greater risk of developing diabetes related complications and higher rates of hospitalisations. To encourage future buy in from practices it is recommended that the PHN:

- provide technical support to practice nurses, to enable them to transfer data from devices to the PenCAT system
- provide appropriate training to practice nurses about how to use the devices, readers and the app. This could include funding for practice nurses to trial the device themselves as hands on training
- prepare written or video information about the anticipated benefits for patients and practice nurses
- provide small grants directly to practices to compensate for any additional administration work associated with future roll out. The level of funding should reflect the level of reporting back required by the PHN
- provide clear guidance to practice nurses about the type of patients who would most benefit from the intervention, being patients with low levels of activation
- provide a template reporting framework (if reporting back is required).

PHN considerations on recommendations includes the following recommended next steps:

1. How a further project fits into the PHN Digital Health Strategy and determine timing and resources to progress.

2. Should a further project be initiated, to include considerations to:

    a. Inclusion into existing models of care in the region such as the HNE Integrated Care Partnership Diabetes Alliance rural weeks (targeted LGAs) or Central Coast Diabetes Case Conferencing model explored for sustainability

    b. Process implementation improvement considerations as outlined by the External evaluator

    c. Financial benefits and Ethics. Ethics application and approval to enable external public reporting on the evaluation, funded appropriately to determine financial Return on Investment (ROI), Value for Money or Cost-Benefit analysis, and population level outcomes, clinician experience, and patients' outcomes including the ability to manage their diabetes better through directly seeing the impact of their lifestyle on their blood glucose levels more robustly, and therefore potential advocacy to NDSS for access to people with insulin dependent type 2 diabetes to access LibreView, as appropriate.

Project Evaluation

Project Name
Diabetes Remote Monitoring

Purpose of the Evaluation (end of project, progress report, to support decommissioning)
Evaluate the process, outcome, and economic evaluation of the pilot related to the use of intermittent Continuous Glucose Monitors (FreeStyle Libre) for Type 2 Diabetes care.

External Consultant Used (if any)
Insight Australia

Other Partners (eg LHD's)
Nil. 6 general practices receive grants to participate in the pilot.

Cost of the Evaluation
$19,800 (exc GST)

Cost of Funding for Program/Project (if relevant)

What	Cost
FreeStyle Libre Sensor (Units 144) @92.50	$13,320.00
71548.01 FreeStyle Libre Reader (Units 72) @95.00	$6,840.00
Glucose strips (pack of 100 per practice – for finger testing if clinically appropriate) (42.72 X 6)	$256.32
Postage = $ 26 (to PHN) + 414.75 (PHN to practices)	$440.75
Grants to 6 practices, $5,000 each	$30,000
Total	**$50,857.07**

Dates of the Engagement of the Consultant
- The initial contract was for June 1st 2021 to December 2021, however due to COVID, a 6 week extension was agreed for the pilot. The accepted report was received on July 19, 2022.

Key Findings and Recommendations
The external evaluation found an estimated return on investment to be $66 to $1 investment. Recommendations include progressing reiterations of this pilot, with consideration given to:
- fit against the PHN Digital Health Strategy
- delivery in existing models of care
- quality improvement (in processes of pilot/ program)
- robust financial benefit analysis and ethics approval.

Risks

Risk	Mitigation
The report is not considered in its entirety	The HIP Team has been involved throughout the process and this pilot has been included in the evaluation tracker
Recommendations of the report are not embedded in change processes	Seeking to have the recommendations endorsed and reported to Board under the Digital Health Strategy

Project Lead: Joanna Coutts **Executive Manager:** Catherine Turner