

# SITREP 2024 Cybersecurity in PNG

Disrupting and advancing the Health sector using Technology

#### 65 Years of Care

# First Private Clinic in Papua New Guinea

First private practice clinic opened in Port Moresby during the then-Australian Territory of Papua by Dr. Shirley Clifton-Smith on the site of where the Hospital now stands. She was the wife of the Director Commonwealth Department of Works



## 1979

#### Dr Glen Mola's Clinic

Professor Glen Mola purchased the clinic through a loan from the Agriculture Bank of PNG and rebranded it "Dr. Mola's Clinic", with 5-bed maternity and labor ward and a small operating theatre. Dr Mola's Clinic became a household name throughout the young state of PNG







#### Practice Sold to Dr Allan Hutchinson

The clinic was bought by Dr. Allan Hutchinsons who employed several esteemed doctors as "assistants" in the mid-seventies including Dr Aldo Vacca (pictured) – renowned acclaimed (globally) for vacuum-extraction



## 1984

#### First Private Hospital in Papua New Guinea

After returning from post graduate studies in the United Kingdom in 1981, Professor Glen Mola expanded the facility into the country's first private hospital in 1984

#### 65 Years of Care

## 1993

#### Shared Ownership – Prof Glen Mola, Dr Robin Sios & Dr Misi Lam

Prof. Glen Mola forged a partnership and shared ownership with Dr. Robin Sios and Dr. Misi Lam. This was the beginning of a 25-year-long partnership that would see the clinic-turned-hospital grow from strength to strength, changing the face of private healthcare in this country



### - 2022 -

#### **Transformation Roadmap**

Launched our 5 years Strategic Plan 2022 – 2027 "Our Health". The Plan sets out a roadmap and shall guide the way forward for the hospital in the provision of health service delivery into the future. We acknowledged the importance of Technology in assisting us in delivering our strategy, shaping future healthcare models and meeting international best practices





#### — 2014 — 100% National Owned

#### Dr Robin Sios & Mrs Janet Sios

In 2014, Prof. Glen Mola and Dr. Misi Lam handed over the reins and their shareholding to the remaining partner Dr. Robin Sios and his wife, Mrs Janet Sios. PPH becomes a 100% first nationally owned private hospital. The couple have built the hospital up to a 40-bed facility, treated over 80,000 patients annually, and is staffed by 200 professional both medical and corporate





#### The Year We Went Digital

The standard patient cards have played a vital role over the years in managing our clinical workflows and business processes. But the future is technology, we launched our new Hospital Management system in October. We are now the first cloud based digitally enabled Hospital with a solid foundation for future growth

#### Family to Corporate

#### Believing in "Locals"

As the Directors and Owners, we made a strategic decision to bring local talented young Papua New Guineans to help us in our modernization, digital, and transformation ambition.

- Chief Technology officer and IT Operations Manager
- Chief Operating Officer for corporate and change management
- Director Human Resources Focus on our people & culture

Supported by our existing highly qualified team of doctors and nurses:

- Director Medical Services
- Deputy Director of Medical Services
- Director of Nursing Services
- Deputy Director of Nursing Services
- All the local Specialist Doctors

## **Corporate Strategy – Way Forward**



# Corporate Strategy – 2022 to 2027

| Our Purpose We are here to show love, compassion and care for all |  | Our Mission  | Our Vision Shaping the Heath Care future in PNG to improve lives  |   |  |  |  |
|---|--|--|---|---|--|--|--|
|   |  | Striving for excellence in medical care and service  |   |   |  |  |  |
| Strategic<br>Priorities   | 1. Reliable, Safe Models of Care   | 2. Talented and engaged people   | 3. Responsible and sustainable growth   | 4. Financial Sustainability and<br>Governance   |  |  |  |
| Strategic<br>Initiatives  | <ul> <li>+ Our Facility - Providing modern, world-class infrastructure for our patients.</li> <li>+ Our Services - Providing integrated, culturally safe and competent multidisciplinary health services that deliver better and safer care.</li> <li>+ Our patients - focus on patient experience and outcomes, innovation and performance and driving improvements that matter to our patients and their families</li> </ul> | <ul> <li>+ Our People - Working with our staff to support their development and their own health and wellbeing and to improve the ways in which we work together as a team including partnering with our patients and their families</li> <li>+ Our Learning - Developing education, training and professional development for our clinicians and health professionals including all our corporate team that fosters a workplace culture of excellence in the delivery of health and healthcare with professional support services.</li> </ul> | <ul> <li>+ Our Growth - Strengthen key partnerships to allow for growth, while exploring new initiatives and commercial diversification to meet future demands.</li> <li>+ Our Community - Improving the environment in which our communities live and work beyond the Hospital</li> </ul>                    | <ul> <li>+ Our Sustainability - Managing and improving our financials and help fund our growth plans.</li> <li>+ Our Governance – Strengthening our clinical and corporate governance in meeting industry standards with patient care as the core focus.</li> </ul> |  |  |  |
|   | Technology as the enabler  |  |   |   |  |  |  |
| Outcomes  | <ul> <li>Consistent excellence in service</li> <li>Safe and competent delivery of service</li> <li>Strengthen the tertiary level of care</li> <li>Strong clinical pathways and partnerships</li> </ul>   | <ul> <li>Attract and retain top talents</li> <li>Increase levels of employee engagement</li> <li>Strong alignment between strategic direction<br/>and performance outcomes</li> <li>Improve workforce planning and streamline<br/>people processes</li> <li>Increase capability and confidence in leaders</li> </ul>   | <ul> <li>Clear value proposition</li> <li>Mitigate concentration risk</li> <li>Brand position – innovative and differentiator</li> <li>Growth in new and existing business</li> <li>Stronger, more sustainable and beneficial<br/>relationships with partners</li> <li>Long term shareholder value</li> </ul> | Reliable financial information<br>Business partner – delivering insights to facilitate quality<br>decision making<br>Strong cash flow<br>Well capitalized balance sheet<br>Meet and exceed regulatory obligations and best practice<br>Long term shareholder value  |  |  |  |
| Our<br>Values   | We care  | We are together  | We bring our best   | We innovate   |  |  |  |



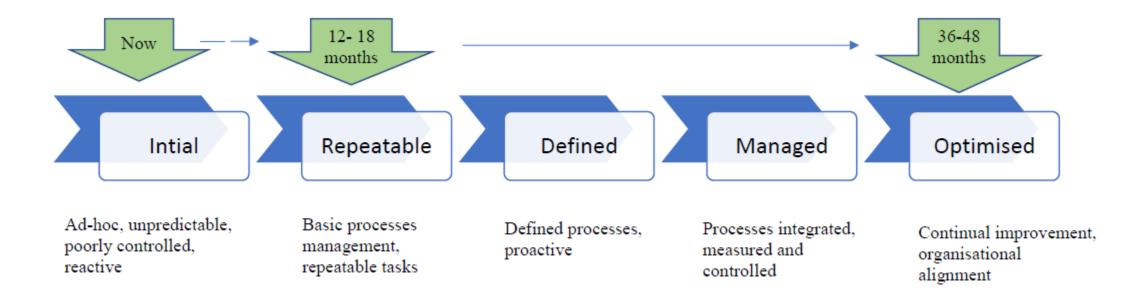
# Challenges Leading up to Digital Transformation



Stacks of papers and getting our clinicians to accept technology

### We embark on PPH IT Maturity Assessment

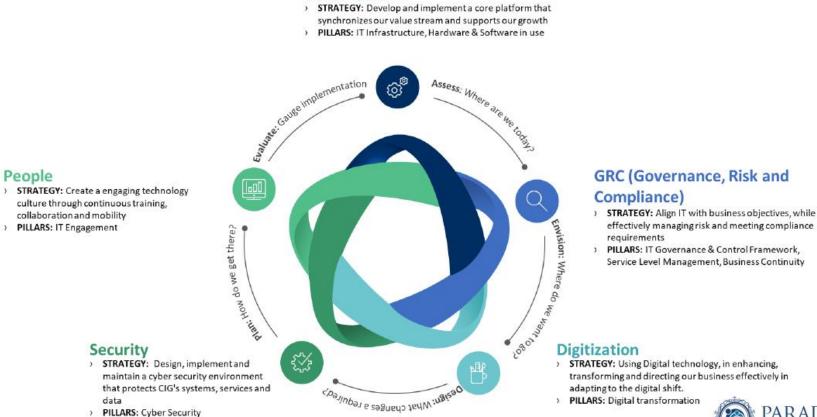
PPH IT function was assessed and compared against current setting, mgt expectations and good practice.



### **Remediation Strategy**

Based on the information gathered and the dependencies identified leveraging best practice, a simple five-prong strategy remediation were identified.

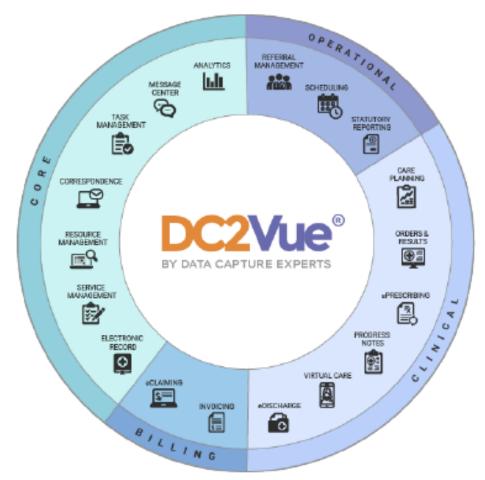
**Core Platform** 





#### DC2Vue®

An EHR (Electronic Health Record System) that lets you coordinate care efficiently. Modular independent modules that can be added, removed, or replaced without affecting the overall functionality of the platform. This approach enables flexible, scalable, and customized software solutions.



## Security

Cybersecurity was our major concern from planning the transformation journey, we ensured all best practices were implemented.

Our Cloud Services are ISO 27001 certified, which means patient data is safely secured with redundancy backups in the cloud. The platform is highly interoperable and designed to take advantage of Microsoft Azure cloud, mobility and modern security best practices and Single Sign-on capabilities.



## We Went Live 11 Oct 2023

The digital project started in March 2022.

It took us 1 year 6 months from assessment, remediation, implementation and "go live".

| 0  | Dashboard  |             |                       |                                |         |                    |  |  |  |  |
|--|--|-------------|-----------------------|--------------------------------|---------|--------------------|--|--|--|--|
| ÷  | Dashboard  |             |                       |                                |         | ${\cal G}$ Refresh |  |  |  |  |
|  | Patients   | Admissions  | <b>E</b> Appointments | Episodes                       | Triages | Finance            |  |  |  |  |
| Task List         My tasks       My staff group tasks       Completed       Cc to me       Cc to my staff groups       Created by me |  |             |                       |                                |         |                    |  |  |  |  |
|  | Search<br>Search by patient ID / name / task ID<br>Priority  | Task source | •                     | Task status<br>Staff attending | *       | 🖉 New Task         |  |  |  |  |
| Тс   | Task ID Patient ID Name Task Action Created Created date/time Task age Due date/time Priority To staff source required by Status |             |                       |                                |         |                    |  |  |  |  |

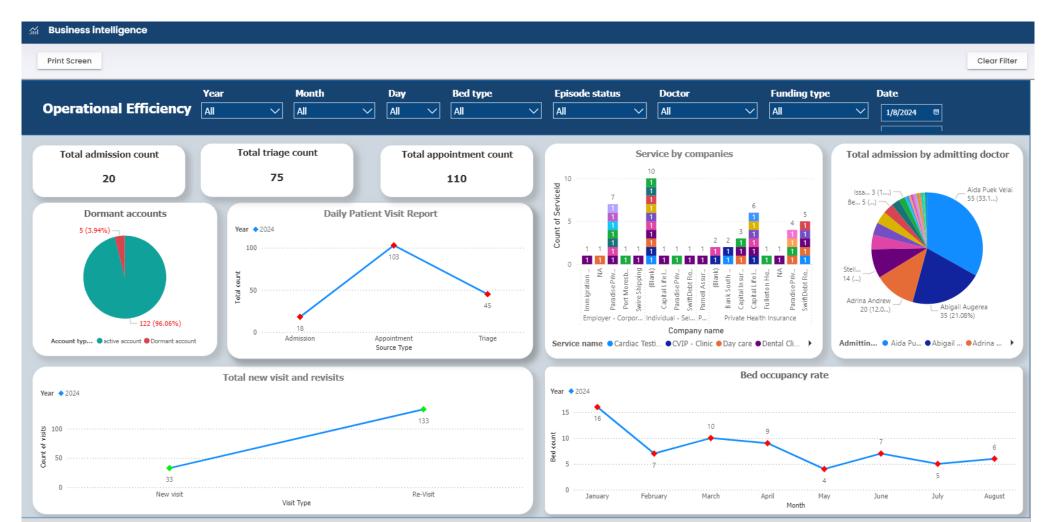
## **Benefits of Digitizing Our Services**

- Unlike before Patients spend less time waiting and can easily access their health records.
- Our team works more seamlessly together, with realtime access to patient information.
- We have better financial oversight, which will help streamline billing and budgeting.
- Clinical data is securely stored, protecting patient privacy and confidentiality.

Reduce inefficiencies, Improve access Reduce Costs Increase quality Better Management & decision making

## **Business Intelligence - Data is Gold**

Our system, we can provide automated click-of-a-button data for all stakeholders. We use Microsoft PowerBI for electronic dashboards and exportable functions and formats.



## What's Next – DC2Vue/PPH

# DC2Vue

- Integrated Quotation Module Recently went Live
- Telehealth
- Online Patient Portal
- Mobile APP
- Future Upgrades

## **PPH - Exclusive Promotor**

- We recently Signed an exclusive agreement with DCE to be the exclusive promoter of this system in PNG and the Pacific, after 12 months of operating.
- Data Capture Experts Pty Ltd (DCE) is an Australian owned software company head quartered in Melbourne, Australia.
- PPH is local implementation Partners in PNG and the region.

## Key Learnings – Our Experience

Critical pillars for successful Digital Transformation

- Mapping Exercise (Understand your pain points)
- Strong Leadership with less red tapes "Just do It"
- No external consultants. PNG team from Mgt to Staff, including post-project management
- Change Management "Critical". How do you get 230 staff to be on the same boat and accept change
- IT Infrastructure, new network infrastructure, Virtualization of our Servers required to cater for a hybrid environment consisting of both cloud and on-premise infrastructure inclusive of a turn key backup solution, Our Software Office 365/HMS/Power PI, Intranet, End user Security with our Partners Sprint Networks, PC's from Datec PNG.
- Internet & Redundancy (PNG DataCo and Vodafone)
- Reliable Power/BackUp (PNG Power installed our own transformer to supply over 500kva)
- 24/7 Support Team (new unit with 5 staff on shifts)
- HMS Champions both clinic and administrations.

**DC2Vue Demo Video** 

https://www.youtube.com/watch?v=fF5Av-Ks0Rs



