DIGITAL ROADMAP FOR MEDICAL CLINICS IN MALAYSIA

CHARTING THE PATHWAY FOR SEAMLESS DIGITAL TRANSFORMATION
TOWARDS HIGHER PRODUCTIVITY OF PRIVATE HEALTHCARE SUBSECTOR

INTRO

The digital roadmap is a guide to assist the private medical clinic operator in realising digitalisation efforts in line with the current technology policies established in Malaysia.

It provides an overview of the digital transformation of the healthcare sector, including the development of e-health services, the use of health information technology, and the expansion of telehealth services.

The roadmap also outlines the key actions and milestones comprising steps and measures to ensure the effective achievement of digital transformation in the private healthcare subsector.

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DIGITAL ROADMAP FOR MEDICAL CLINICS IN MALAYSIA

HEALTHCARE AT OUR FINGERTIPS

Achieving the service excellence expected in a patient-centric healthcare ecosystem entails a more seamless experience for patients and clinicians. This roadmap will enable the clinic operator to take advantage of the latest digital technologies, thus automating labour-intensive tasks, minimising errors, freeing up healthcare professionals to focus on patients, improving productivity and the quality of care.

The private clinics in Malaysia have perceived the effects of an increasingly competitive healthcare landscape, particularly in attracting new patients and retaining the existing ones.

Challenges such as rising costs, an ageing population, and a shortage of healthcare workers impact the delivery of care. In addition, the prevalence of chronic diseases is increasing, and the country is struggling to cope with the burden of infectious diseases.

Patients also turn to alternative medicines or a mix of traditional and alternative treatments. This trend is driven by several factors, including a growing dissatisfaction with the conventional medical establishment.

GLOBAL TRENDS IN HEALTHCARE SECTOR

The Malaysian private healthcare sector has proliferated profoundly in recent years due to increasing demand for quality healthcare services.

CLINIC

8000 private clinics estimated nationwide

- They are typically owned by individual practitioners, families or groups of investors.

- Their establishment and operation are regulated by Private Healthcare Facilities and Services Act 1998, which sets standards for medical care and establishes a registration system for private healthcare facilities.

- Most are single-doctor operations, although some have two or more doctors.

- The type of services provided by private clinics includes general practitioner (GP) services, specialist services, and diagnostic services.

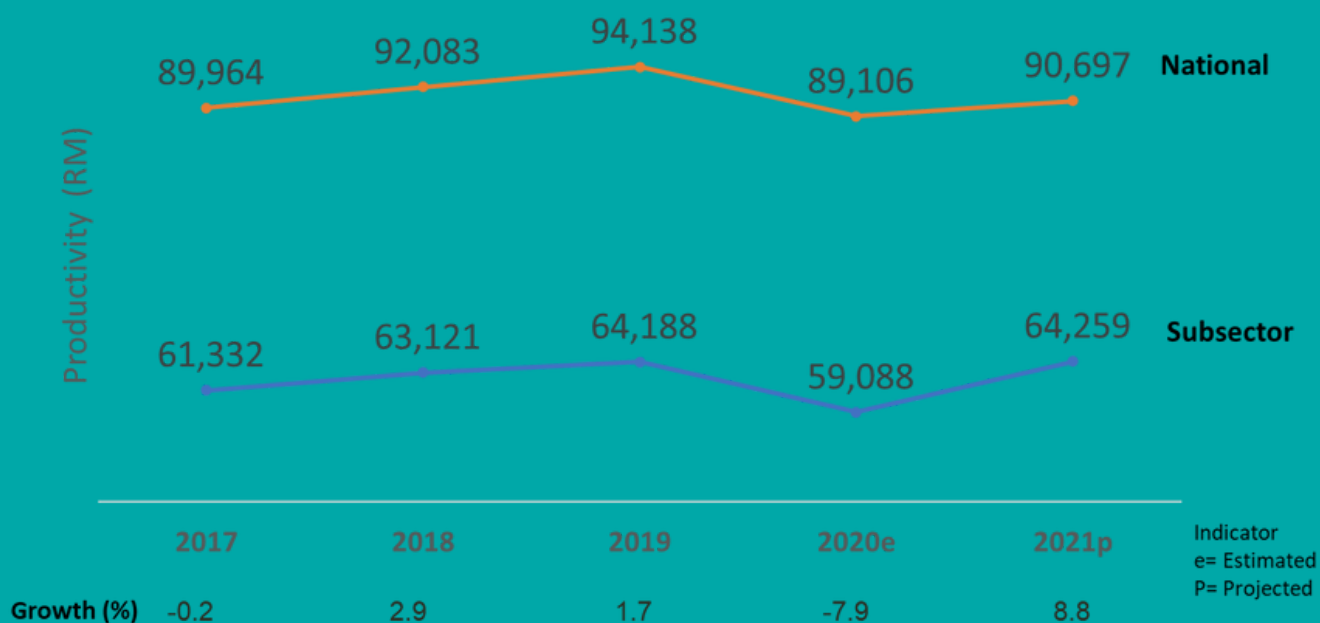## The clinic is typically a two-person team

Clinician

- Assessing Patient
- Developing & Implementing treatment plans
- Communicating with patient & their family
- Maintaining medical records
- Initiating quality improvement initiatives

Clinic Assistant

- Scheduling appointments
- Filing insurance paperwork
- Dispensing medication
- Handling customer service inquiries

CURRENT PRODUCTIVITY PERFORMANCE OF PRIVATE HEALTHCARE SUBSECTOR

Productivity (RM)

	89,964	92,083	94,138	89,106	90,697	**National**

	61,332	63,121	64,188	59,088	64,259	**Subsector**

	2017	2018	2019	2020e	2021p	Indicator e= Estimated P= Projected
Growth (%)	-0.2	2.9	1.7	-7.9	8.8	

NOTES:
1. Source: Department of Statistics Malaysia (DOSM)
2. Productivity level refers to value added per worker

OVERVIEW

Under the 12th Malaysia Plan, Malaysia aims to boost productivity growth across all sectors in restoring the momentum of economic growth and enhancing the competitiveness of industries, including the private healthcare subsector.

This effort is a timely call from the government as the productivity performance of this subsector needs a further boost.

In 2021, the value-added productivity per employee recorded by the private healthcare subsector was at RM64,259, which was significantly below the national average of RM90,697. This performance has been taking place for the past five (5) years since 2017.

WHY DIGITALISE?

According to MyDigital Blueprint, the effective use of technology and digitalisation will contribute to a 30% uplift in productivity across all sectors by 2030.

Digitalisation is the answer because the operation will be more efficient, automating tasks while being easier to store, access and share data with relevant parties.

In private healthcare, low productivity can directly impact the quality of service provided to patients.

The need to be physically present at the clinic premises, high waiting times and undergoing similar tests and imaging procedures can all lead to a deterioration in the quality of care received.

Once digitalisation begins, patients can expect several changes in how they interact with their doctors.

Among the most significant changes will be how appointments are booked and medical records are managed. Private clinics will immediately start seeing the benefits, and this trend is anticipated to continue.

Patients can receive the care they need without coming into the clinic, which is incredibly convenient for those who live in rural areas and are immobile.

Patients will be able to manage their time better and receive safer healthcare, including everything from online booking and appointment reminders to telehealth services.

POTENTIAL KEY DETERMINANTS

TECHNOLOGY ADOPTION AMONG MEDICAL CLINICS

If more sophisticated technologies lead to productivity gains, why don't firms adopt and use them more intensively?

Understanding what drives firms to adopt a specific technology is essential to improve the effectiveness of policies aiming to support technology upgrading.

01. Information & Behavioural Biases
A critical element in explaining a firm's decision to adopt a more sophisticated technology is its willingness. A firm may believe it is already adopting more sophisticated technologies relative to its competitors. As such, it is unlikely that businesses will invest in additional technologies.

02. Management & Organisation
The firm's capabilities in adopting technology can be determined by the human capital of the principal manager. The knowledge of the management is required to master technologies and elements that facilitate the accumulation of this knowledge

03. Know-how & Skill Capabilities
the spread of new capital equipment enhanced by information technology (IT) coincides with increases in the skill requirements of machine operators, notably technical and problem-solving skills, and with the adoption of new human resource practices to support these skills.

04. Competitition, Demand & Regulation
Firms integrated to international markets as exporters, importers, foreign-owned entities, or multinationals tend to use more sophisticated technologies across different business functions.

05. Supply of Knowledge & Human Capital
Firms can learn and improve their know-how through different sources, including knowledge transfer through other firms, within the firm, and from consultant services. Another vital source of knowledge is associated with the availability of technical experts, as a specialized type of human capital that plays a critical role in technology absorption.

06. Access to Finance
An inefficient financial system may make it harder for firms to access finance to invest in technology, and thus may deter technology adoption

Source: World Bank

INTEGRATE DEVICES WITH SOFTWARE

HIGH LEVEL OF SECURITY

SMART AND CONNECTED EQUIPMENT THROUGH EHR & IOT

INTEROPERABLE & SEAMLESS WORKFLOW FOR OPERATION OF CLINIC

BIG DATA DASHBOARD FOR PREDICTIVE & PRESCRIPTIVE INSIGHT

SHARED INFORMATION BETWEEN RELEVANT PARTIES

REMOTE MONITORING & TELEMEDICINE CONSULTATION

ACCESS TO EHR ANYWHERE, ANYTIME

NOTIFICATION ON APPOINTMENT & MEDICATION REFILLS

FUTURE-PROOF EMERGING TECHNOLOGY
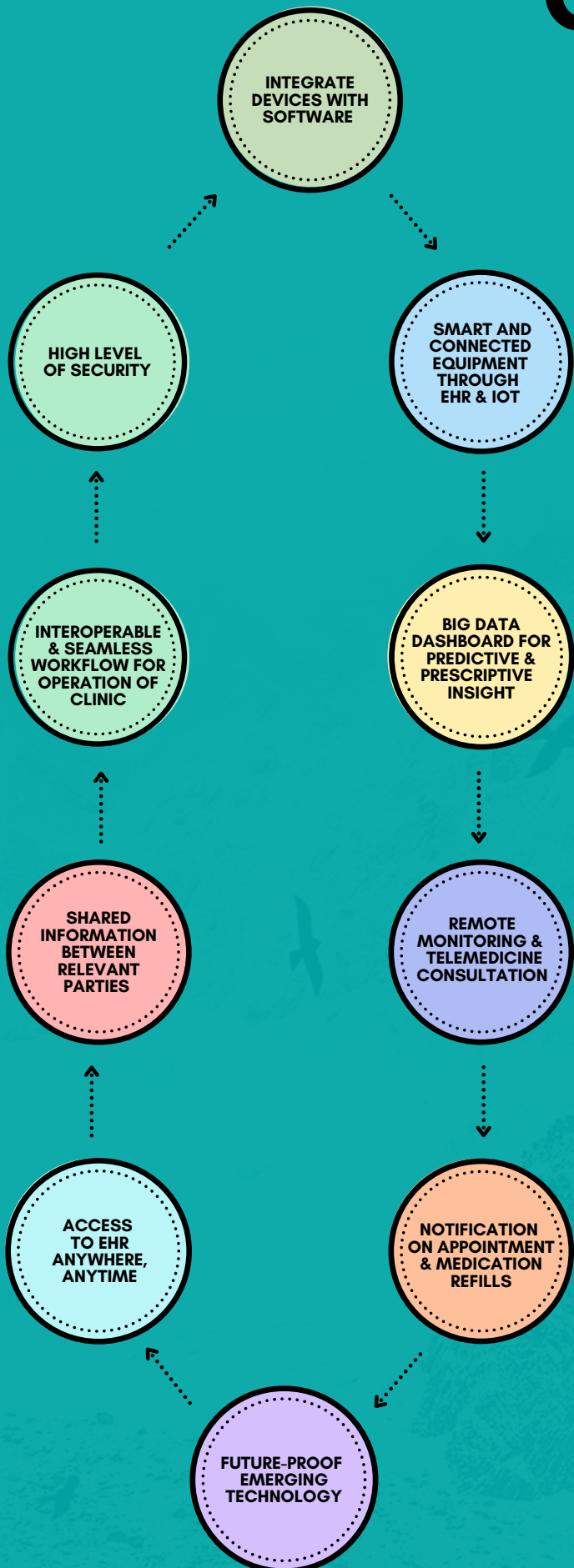
INTEGRATED HEALTHCARE ECOSYSTEM MODEL

When the health system is integrated, all stakeholders operating the medical clinics can collaborate more efficiently and productively to provide the best possible care for patients.

GO DIGITAL

08 Broader choice of communication with clinician from anywhere

01 Helpdesk for advice on the best and safest options for clinicians

07 Remote notification on waiting time for appointments

02 Consultation at the preferred location

Integrated Healthcare Ecosystem for Patient

03 SOS button for emergencies
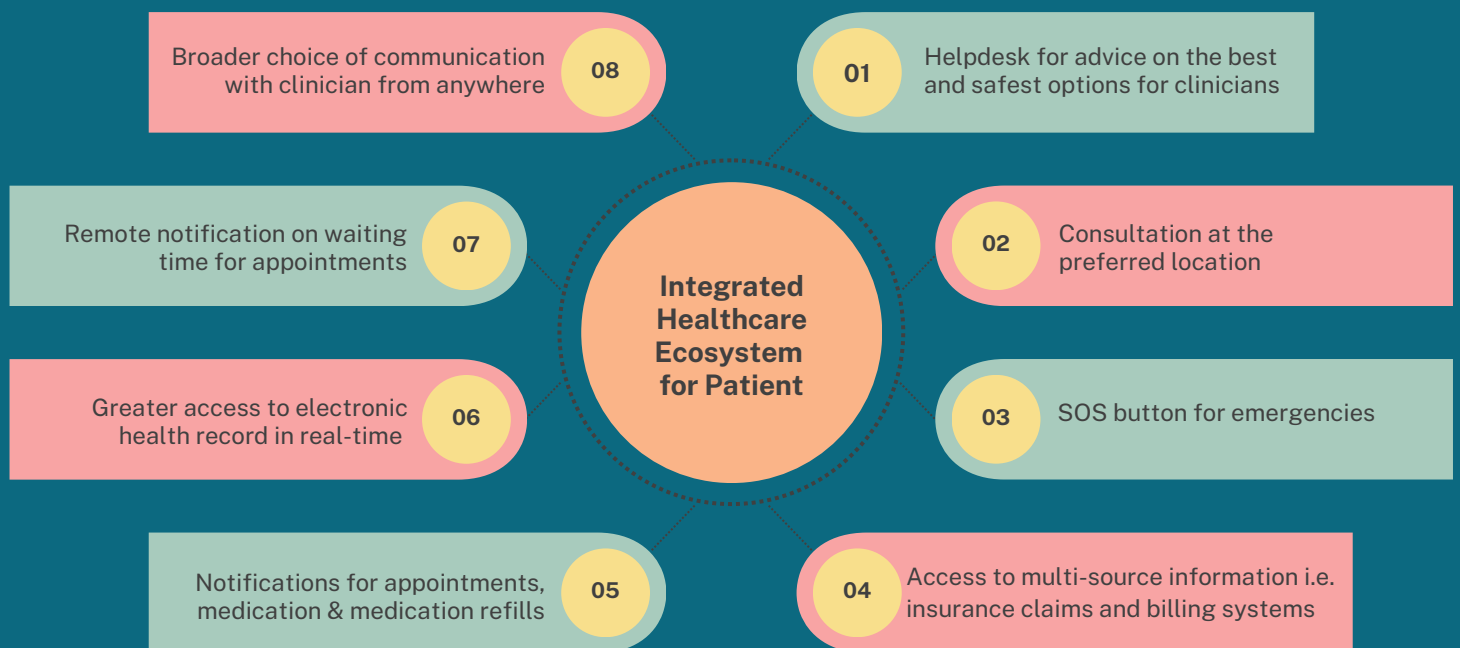
06 Greater access to electronic health record in real-time

05 Notifications for appointments, medication & medication refills

04 Access to multi-source information i.e. insurance claims and billing systems

INTEGRATED HEALTHCARE ECOSYSTEM FOR PATIENT

Integrated care can help reduce overall costs as the patients seize the most effective care possible while clinicians optimise their time and resources.

When care is coordinated, and patient data is shared among all members of the care team, patients are less likely to experience duplicate tests and procedures. They are more likely to receive care tailored to their needs.

ENVISAGING THE FUTURE FOR PRE-REGISTRATION

WHAT ARE THE ABILITIES PRODUCTIVITY IMPROVEMENT TECHNOLOGY SHOULD FACILITATE FOR CLINICS TO STREAMLINE THIS PROCESS?
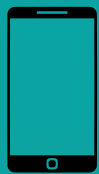
The appointment can be booked through the web portal / mobile app, helpdesk or walk-in

For online bookings, GPS matches the location of the patient and clinician

Available locations & timetables are displayed for easy booking

Patient books direct or video consultation at preferred location

Patients can book additional services for the wheelchair, lounge, drop-off, fetch & ferry and valet parking

The type and length of appointments are displayed

Waitlist number and walk-ins allowed per day are displayed

Patients can choose a clinician by speciality, consultation fees, work experience, language spoken and availability

Outstanding patient appointments is displayed to avoid conflicts, manage travel and wait time

The period of follow-up appointments required can be viewed (in days, weeks or months)

Clinicians can share patients' records with caregivers and other consulting clinicians (Patient's history, surgery, allergies)

Patients can pre-book for recurring appointments as per the clinician's advice

Reminders can be set to book follow-up appointments

Appointments can be modified, transferred, or cancelled as per user needs

ENVISAGING THE FUTURE FOR PATIENT REGISTRATION

WHAT CAN TECHNOLOGY OFFER FOR GREATER PRODUCTIVITY AND MORE SEAMLESS EXPERIENCE FOR PATIENTS?

Retrieve patient data from external sources or databases by scanning relevant ID cards or number

Sort and filter patient data through numbering (alphanumeric), including pre-fix

Define the mandatory data elements as part of the registration data entry process

Maintain different patient series for different categories of patients

Capture multiple IDs, names, contact points and addresses as per FHIR standards

Define numerous next-of-kin details as part of the registration

Capture various communication languages with the preferred language

Maintain audit trail along with changes made to patient demographic and financial details

Mark the patient as inactive based on healthcare facility instructions

Mark the patient as deceased based on document evidence

Define various types of referrals like in-house, organisation, partner and external

Identify patient visit registration with referral letter with or without an appointment

Accept multiple practitioners, which can be used for multi-resource appointments and consultation

Upload documents required for consultation and/or further treatment

Modify or cancel visits as per user needs & Capture details of accompanied adults for minor patients

ENVISAGING THE FUTURE FOR CONSULTATION

WHAT ARE THE ATTRIBUTES THAT TECHNOLOGY CAN PROVIDE FOR BETTER DECISION-MAKING AMONG CLINICIANS?

01   Access to patients' charts from any and/or all locations as required

02   Built-in co-sign and authorisation workflow for the primary caregiver

03   Summary view of Patient EHR available based on tasks (diagnosis, allergy, medication etc.), timeline (year, month, date) and type of encounter (OP/IP/ER)

04   Transfer of patient care from one clinician to another

05   Patient chart summary available with real-time vitals, active diagnosis, allergies, considerable risk condition, medications, Lab & Radiology orders and encounter details

06   Capture true allergy, intolerance, and adverse reaction to drug, dietary or environmental triggers as unique, discrete entries

07   Capture, display and report all active problems and diagnoses associated with a patient

08   Capture displays and reports history of all the diagnoses related to the patient's family medical history

09   Display and report patient-specific medication lists, diagnostic tests with results, immunisations, patient-specific family medical history, and radiological tests

10   Create clinical measurement scores and categorise risk accordingly

ENVISAGING THE FUTURE FOR CONSULTATION[1]

WHAT ATTRIBUTES THAT TECHNOLOGY CAN PROVIDE FOR BETTER DECISION MAKING AMONG CLINICIANS?

11   Comparison in elements of assessments captured across time and displayed as a flow sheet and graph

12   Evidence-based recommendations to decide clinical intervention and prescription contraindications.

13   IoMT device integration for faster and remote vital capture

14   Clinical documentation utility tools like voice annotation and handwriting recognition

15   Proactive and reactive alerts like real-time vital alerts and risk profiles

16   Extension to DICOM Image/Video repository to annotate the image

17   Formulary and Government/Private registry integrations

18   Ability to access complete EHR, documenting history, patient correspondence, physician's notes, referral letters, etc

19   Real-time vitals, allergies, chief complaints, and assessment forms and reassign practitioners

20   CPOE – diagnosis, notes, Lab, Rad, medication & follow-up consultation

21   Tele-consultation made easy with video calls, audio calls, chat, document uploads, extended call duration, screen sharing

ELECTRONIC HEALTH RECORD

REVENUE CYCLE MANAGEMENT SYSTEM

HUMAN RESOURCE MANAGEMENT SYSTEM

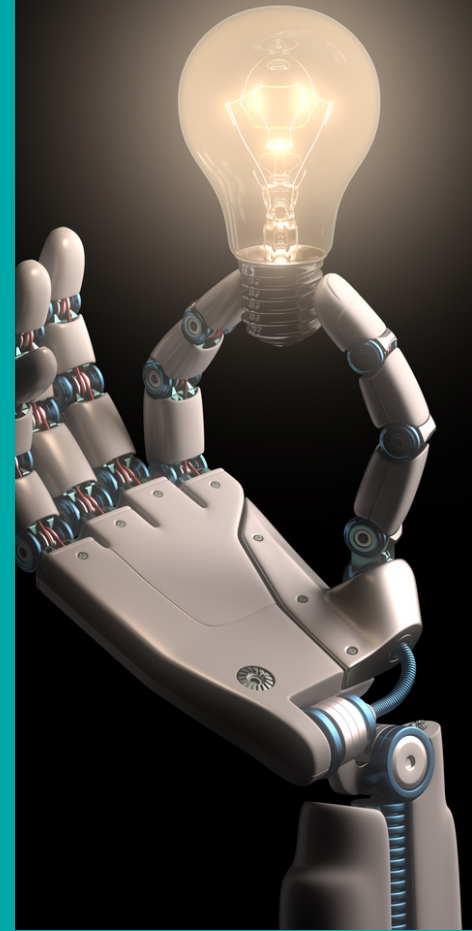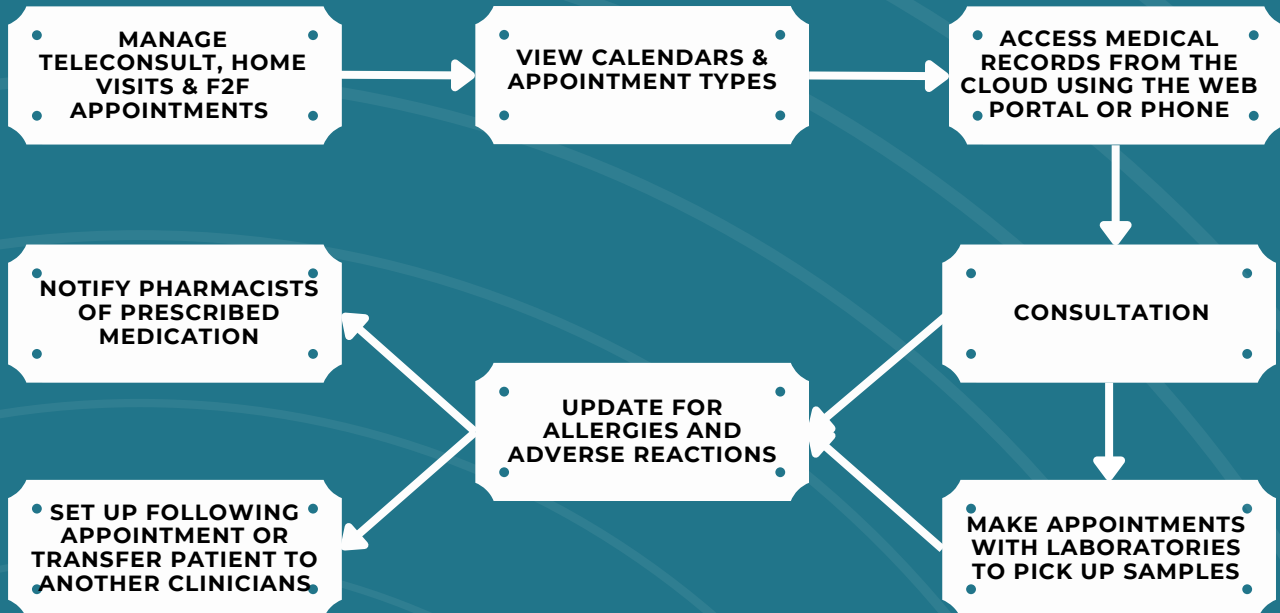**SUPPLY CHAIN MANAGEMENT SYSTEM**

PHARMACY MANAGEMENT SYSTEM

FINANCE AND ACCOUNTING MANAGEMENT SYSTEM

SYSTEM COMPONENTS FOR COMPLETE DIGITALISATION

These components can match the ever-growing needs, future-proofing scalable digital solutions. They will be integrated to deliver a complete system enabling cohesive and accessible healthcare for patients and providers to caregivers and merchants.

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┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐
│ MANAGE           │     │                  │     │ ACCESS MEDICAL   │
│ TELECONSULT, HOME│ ──> │ VIEW CALENDARS & │ ──> │ RECORDS FROM THE │
│ VISITS & F2F     │     │ APPOINTMENT TYPES│     │ CLOUD USING THE  │
│ APPOINTMENTS     │     │                  │     │ WEB PORTAL OR    │
│                  │     │                  │     │ PHONE            │
└──────────────────┘     └──────────────────┘     └──────────────────┘
                                                            │
                                                            v
┌──────────────────┐                              ┌──────────────────┐
│ NOTIFY           │     ┌──────────────────┐     │                  │
│ PHARMACISTS      │ <── │ UPDATE FOR       │ <── │ CONSULTATION     │
│ OF PRESCRIBED    │     │ ALLERGIES AND    │     │                  │
│ MEDICATION       │     │ ADVERSE REACTIONS│     └──────────────────┘
└──────────────────┘     └──────────────────┘              │
┌──────────────────┐                              ┌──────────────────┐
│ SET UP FOLLOWING │                              │ MAKE APPOINTMENTS│
│ APPOINTMENT OR   │ <──                          │ WITH LABORATORIES│
│ TRANSFER PATIENT │                              │ TO PICK UP       │
│ TO ANOTHER       │                              │ SAMPLES          │
│ CLINICIANS       │                              └──────────────────┘
└──────────────────┘
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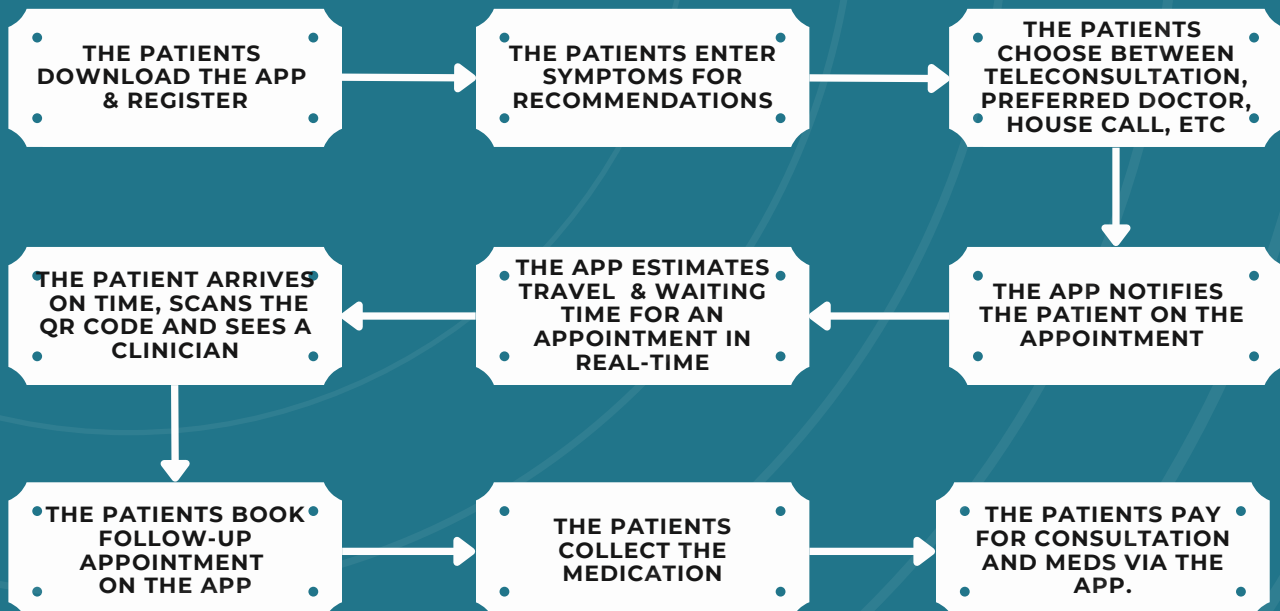
DIGITAL JOURNEY AT A GLANCE

This situation elevates the patients' and caregivers' experience, making managing their health a breeze and giving them more time to focus on other things.
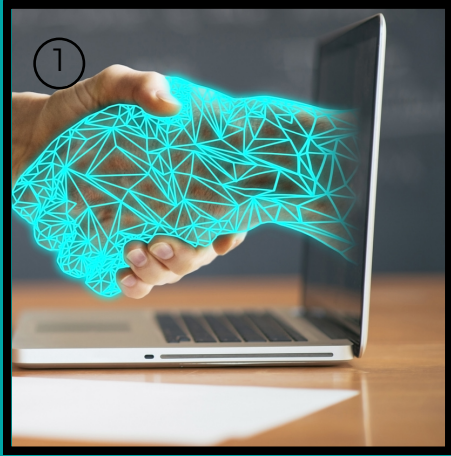
An exciting journey awaits clinicians and patients when clinics go digital. Patients can now easily and quickly access their medical records, book appointments and even order prescriptions online.

Clinicians, meanwhile, can reap the benefits of digitalised healthcare systems in various environments and communities to provide better patient care and improve the workflow to be more efficient.

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┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐
│ THE PATIENTS     │     │ THE PATIENTS     │     │ THE PATIENTS     │
│ DOWNLOAD THE APP │ ──> │ ENTER SYMPTOMS   │ ──> │ CHOOSE BETWEEN   │
│ & REGISTER       │     │ FOR              │     │ TELECONSULTATION,│
│                  │     │ RECOMMENDATIONS  │     │ PREFERRED DOCTOR,│
│                  │     │                  │     │ HOUSE CALL, ETC  │
└──────────────────┘     └──────────────────┘     └──────────────────┘
                                                            │
                                                            v
┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐
│ THE PATIENT      │     │ THE APP ESTIMATES│     │ THE APP NOTIFIES │
│ ARRIVES ON TIME, │ <── │ TRAVEL & WAITING │ <── │ THE PATIENT ON   │
│ SCANS THE QR CODE│     │ TIME FOR AN      │     │ THE APPOINTMENT  │
│ AND SEES A       │     │ APPOINTMENT IN   │     │                  │
│ CLINICIAN        │     │ REAL-TIME        │     │                  │
└──────────────────┘     └──────────────────┘     └──────────────────┘
         │
         v
┌──────────────────┐     ┌──────────────────┐     ┌──────────────────┐
│ THE PATIENTS BOOK│     │ THE PATIENTS     │     │ THE PATIENTS PAY │
│ FOLLOW-UP        │ ──> │ COLLECT THE      │ ──> │ FOR CONSULTATION │
│ APPOINTMENT ON   │     │ MEDICATION       │     │ AND MEDS VIA THE │
│ THE APP          │     │                  │     │ APP.             │
└──────────────────┘     └──────────────────┘     └──────────────────┘
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Provide Access to Better Technology

STRATEGY & GOALS

The outcome of successful digitalisation refers to the ability of medical clinics to increase their productivity and adapt to stay competitive using technology as the enabler. As such, a plan of action should be put in place to achieve the desired outcomes.

Educate Patient to Adopt Digitalisation

Integrate Patient-centered Care

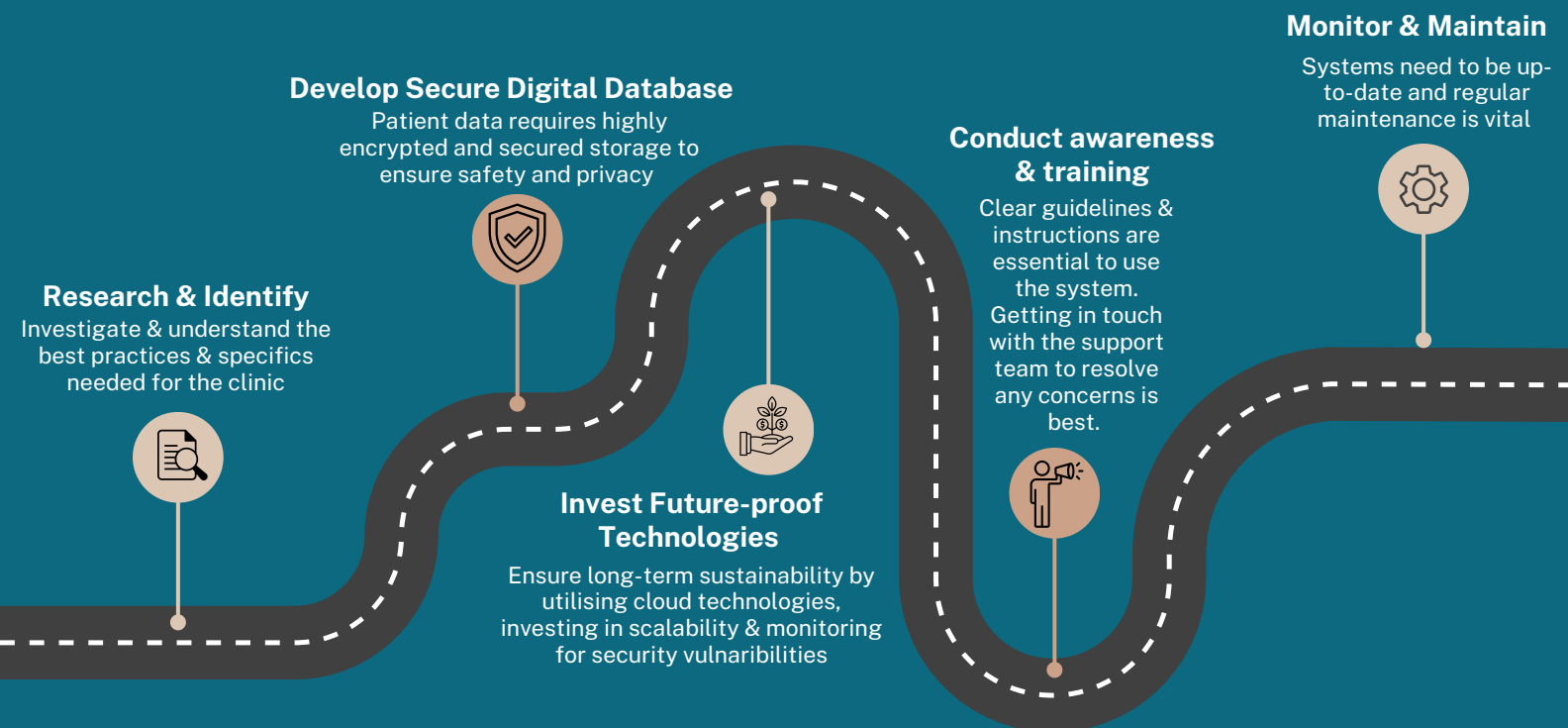**Secure a Safe Data Collection**

Encourage Use of Medical Technology

DIGITAL ROADMAP

The digitalisation process will include several steps that the individual medical clinics need to undergo. Extensive commitment is necessary to ensure the intended impact of process improvement through technology can be achieved

Digital Roadmap for Medical Clinics

Monitor & Maintain
Systems need to be up-to-date and regular maintenance is vital

Develop Secure Digital Database
Patient data requires highly encrypted and secured storage to ensure safety and privacy

Conduct awareness & training
Clear guidelines & instructions are essential to use the system. Getting in touch with the support team to resolve any concerns is best.

Research & Identify
Investigate & understand the best practices & specifics needed for the clinic

Invest Future-proof Technologies
Ensure long-term sustainability by utilising cloud technologies, investing in scalability & monitoring for security vulnaribilities

DIGITAL SKILLS NEEDED

While the technical digital skills have always been the centre of attraction, the human side of technological transformation should also be considered

.

The skills and expertise required to digitalise clinics across the country are numerous and varied. They include everything from big data and analytics to cloud computing and cybersecurity.

ALL USERS	ADVANCED USERS
Require broad-based digital literacy and awareness	Require higher proficiency digital skills
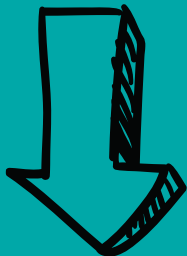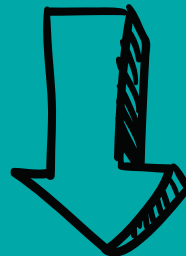
TECH BASIC COURSES	"TECH ADVANCED" COURSES
Broad-based innovation mindset and digital literacy / awareness Solution-specific user level digital skills	Higher proficiency level digital skills

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To successfully digitalise their clinic, clinicians must be familiar with the various software, platforms, and tools available to help manage a digital clinic. They should also be able to identify the best use of these tools to manage their patients' data and streamline their operations effectively.

It is recommended that clinicians invest in solution providers that are experienced in their industry and can offer comprehensive solutions tailored to their specific needs. Such providers should have a proven track record in delivering successful projects and in-depth knowledge of the technology and trends in the industry.

A successful solution provider will have a team of experienced professionals that can help organisations develop a strategy that meets their goals and objectives. They should be able to quickly adapt to changing business needs and provide comprehensive services such as project management, system design, implementation, and maintenance.

Furthermore, solution providers should have the ability to provide training and technical support to ensure that employees are well-versed in the system. Investing in the right solution providers can improve operational efficiency, save costs, and enhance customer satisfaction.

However, it is more than just the technical skills that are needed. For securing total transformation, there is also a need for experts with experience in organisational change management and collaborative engagement to participate in this endeavour.

Change Management Skills

Change management is the first phase in digitalising the healthcare ecosystem. The goal of change management is to minimise the negative impact of change on the organisation and its employees, considering that change can be disruptive, particularly on something as massive as the healthcare ecosystem.

Planning for change requires careful consideration of several factors. These include the nature of the change, the impact it will have on different parts of the healthcare system, and the resources and capabilities required to implement the change.

Key Steps in Change Management

- Planning
- Executing
- Monitoring
- Modifying

VISION
STRATEGY
CHANGE
MANAGEMENT
PLAN
IDEA
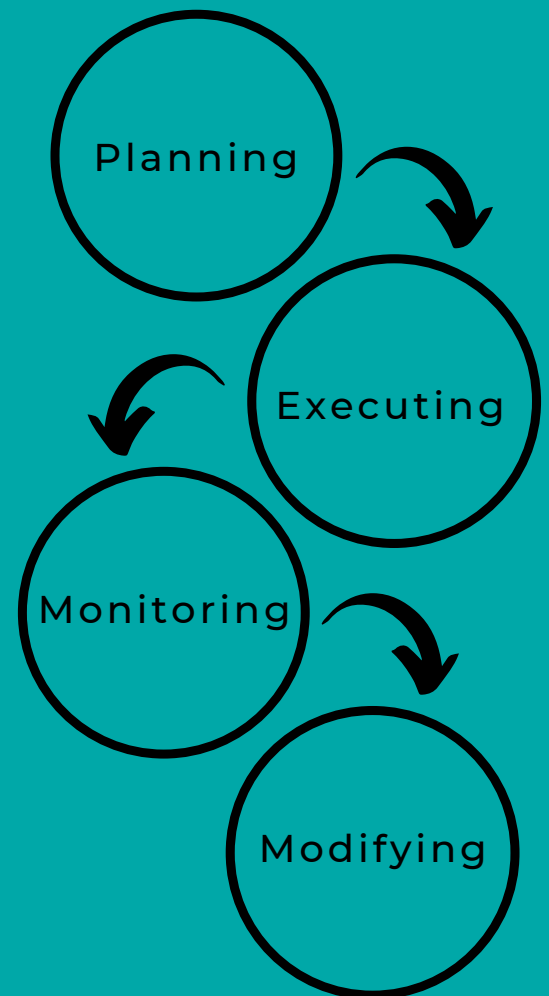
Collaboration Skill

Each group brings a unique perspective and set of skills to the table. All must be considered to create a smooth transition to an integrated digital clinic ecosystem.

Patients must be kept informed of changes to the clinics' operations and must be able to access their medical records and appointments online easily.

Clinicians must be trained in using new digital tools, and IT staff must ensure that all systems are secure and user-friendly. Administrators must manage the overall project, ensuring it stays on track and within budget..

HEALTHCARE ANALYTICS

Healthcare analytics is the process of turning data into insights that can help improve patient care. It can be used to identify trends and patterns, predict outcomes, and improve decision-making.

Healthcare analytics can help organisations identify areas of waste and inefficiency to make recommendations for improvement. By analysing the patient's length of stay, readmission rates, and cost, providers can identify opportunities to improve care and reduce costs.
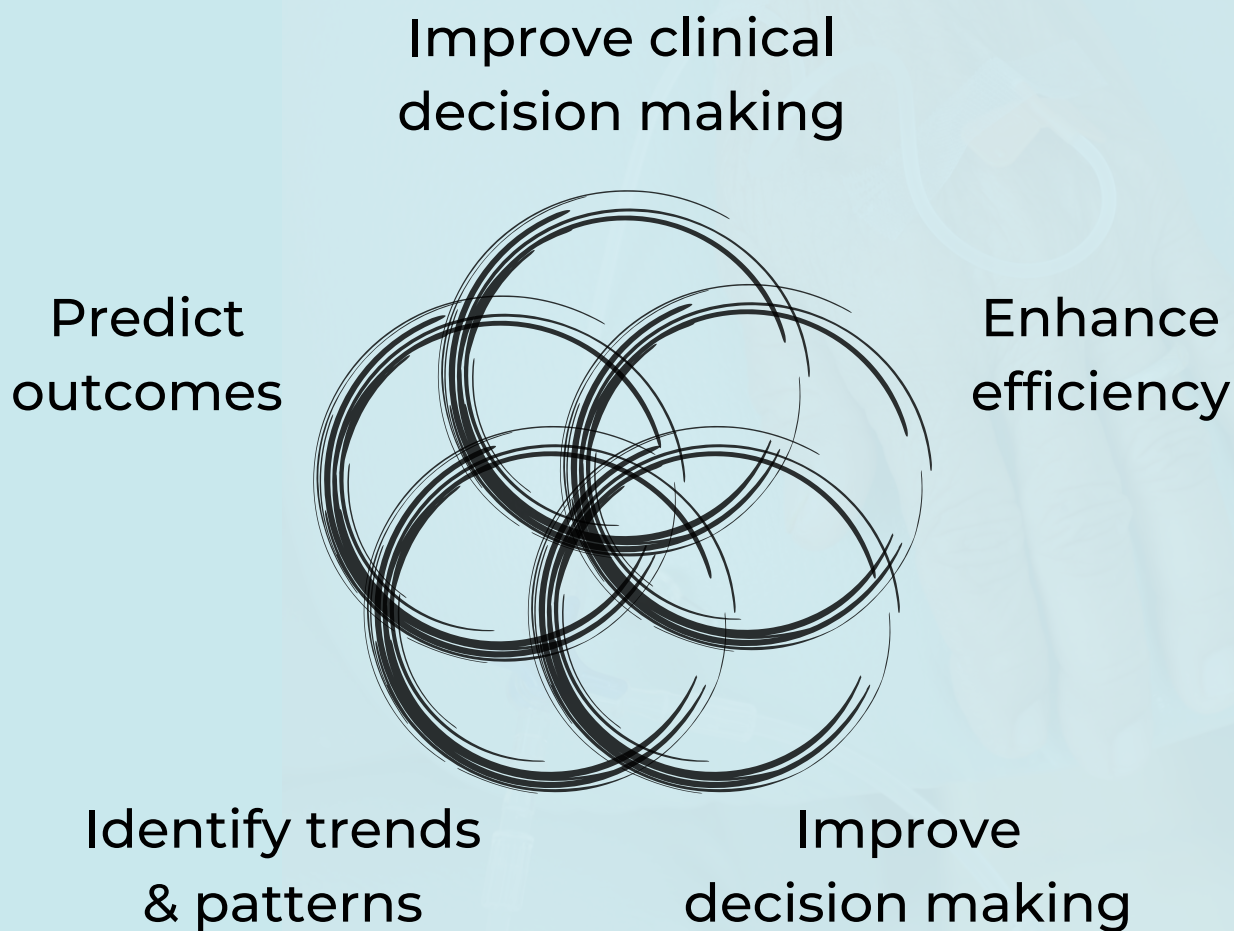
THE RIGHT INFORMATION TO THE RIGHT PEOPLE AT THE RIGHT TIME

Better information exchange makes care not only safer but also more effective and efficient.

Care can be better coordinated by different providers and integrated with other services, with better results and less duplication and waste.

THE BETTER THE DATA,
THE BETTER THE TECHNOLOGY,
THE BETTER THE CARE

Improve clinical
decision making

Predict
outcomes

Enhance
efficiency

Identify trends
& patterns

Improve
decision making

IDEAL STAKEHOLDERS SYSTEM

Medical technology is at the forefront of this change. From electronic medical records and telemedicine to 3D printing and robotics, medical technology is improving the healthcare ecosystem and making it possible for providers to deliver better care at a lower cost.
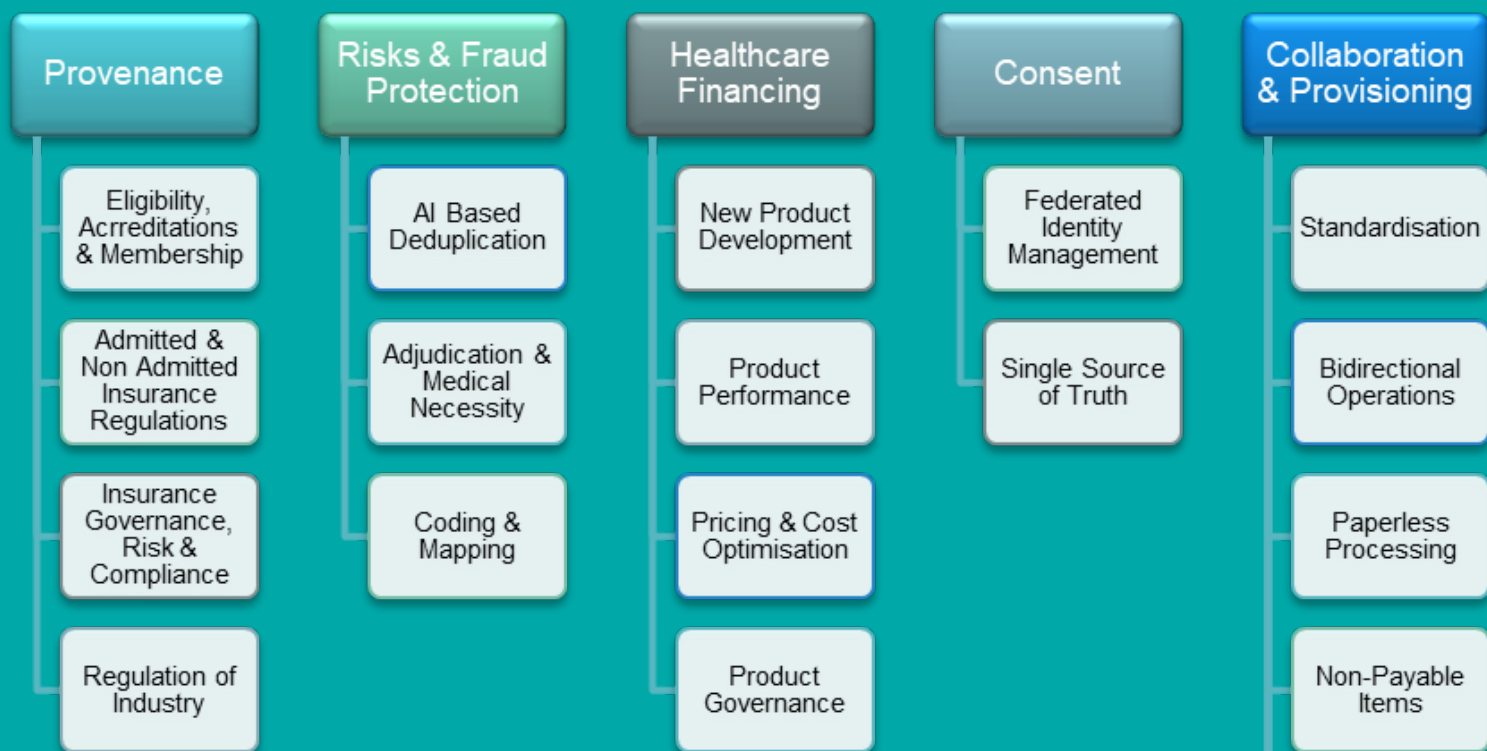
There are multiple layers to digitalising private clinics. First, we need the hardware infrastructure in places such as computers, the internet and software.

Then we need to look at automating processes and workflows using technology. And finally, we need to engage patients and clinicians in using digital tools to improve communication and care.

Above it, there are layers of software services and platforms which encapsulate additional building blocks required to operate the programs.

They include a Unique Digital ID development, a Drug Formulary, Payor-Provider Gateway, Laboratory and Radiology and an Electronic Medical Record Framework, amongst others.

Provenance

- Eligibility, Accreditations & Membership
- Admitted & Non Admitted Insurance Regulations
- Insurance Governance, Risk & Compliance
- Regulation of Industry

Risks & Fraud Protection

- AI Based Deduplication
- Adjudication & Medical Necessity
- Coding & Mapping

Healthcare Financing

- New Product Development
- Product Performance
- Pricing & Cost Optimisation
- Product Governance

Consent

- Federated Identity Management
- Single Source of Truth

Collaboration & Provisioning

- Standardisation
- Bidirectional Operations
- Paperless Processing
- Non-Payable Items
- Contract/Policy Plan Review
- Direct Integration to Existing OSS/BSS
- ML Based Cleansing
- Efficient & Effective Payment Management
- Authenticated Discharge Information
- Denial Process Management

THE PROCESS WILL BE STREAMLINED WITH ALL STAKEHOLDERS, POLICIES & PROCESSES, WORKING TOGETHER IN ECOSYSTEM.

Analytics, performance management, real-live data and predictions will act as a continual monitoring tool.
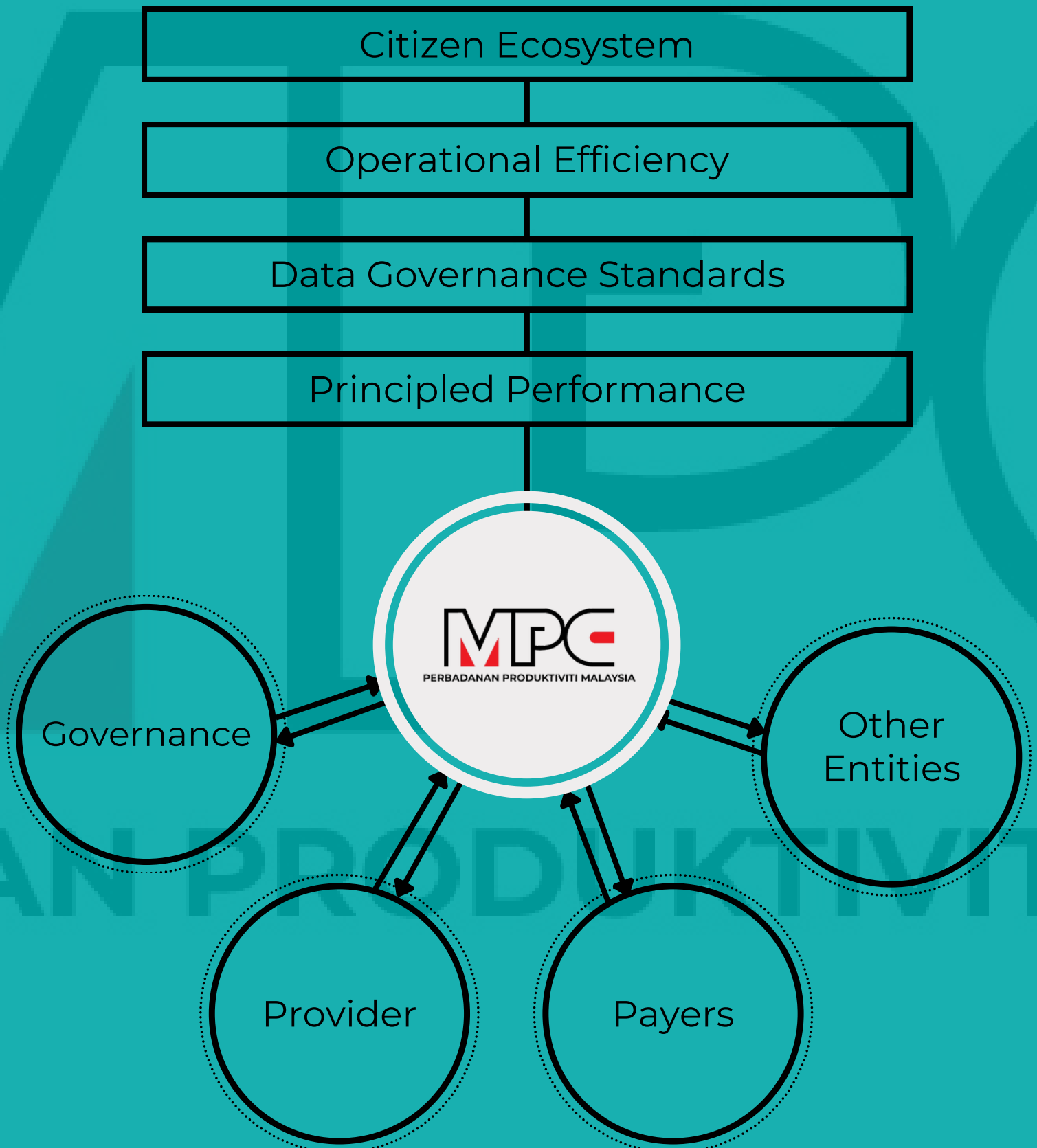
INTEGRATED HEALTHCARE ECOSYSTEM

In a top-down approach, all private clinics have the same healthcare standards to follow. This standard ensures that patients receive seamless care no matter which clinic they visit.

Having all clinics adhere to the same guidelines, the transfer of patients between clinics will become more seamless. This approach has many benefits and requires a high level of coordination between all the private clinics.

MPC WILL COORDINATE AND USE ALL THE RESOURCES AVAILABLE FROM THE PEOPLE TO INFRASTRUCTURE

Citizen Ecosystem

Operational Efficiency

Data Governance Standards

Principled Performance

Governance

Provider

Payers

Other Entities

GET STARTED TODAY WITH DIGITAL SOLUTION DIRECTORY

This directory provides easy-to-deploy digital solutions for Medical Clinics. It speeds up business recovery and accelerates technology adoption among the industry players to improve productivity.

With this directory, medical clinics can discover digital solution providers that match the needs of their business

Please visit https://www.digitaldirectory.wayup.my/ to get your copy for a more seamless digital transformation towards bolstering the productivity.

This directory contains a complete list of solutions to restructure, reinvent or reboot the medical clinics towards creating demand for their services and fulflling other business needs.

Office Productivity	Office Productivity (Workflow, Work Spaces, Operations, Sales, Marketing)
Communications/Networking	Communication/Networking; Communications (Business, Customer Service, Sales, Marketing)
Data Centre/Web Hosting	Data Centre; Web Hosting Providers; SEO
eCommerce	eCommerce
Telco/Digital Infrastructure	Telco/Digital Infrastructure; Managed Network Services - Telecommunications
Distributors/Resellers/Retailers	Distributors; Principal & Manufacturers; Resellers; Retailers
CRM/ERP/MES/WMS	CRM; ERP; Warehouse Management; Asset Tracking; Manufacturing Execution System
HRMS/POS/HMS/CAMS/FM	Accounting Software; HR/Payroll Software; Hotel Software Solutions (Management, Administration); College Administration Management System; Point-Of-Sales System; Fleet Management Platform and Services
BPO/ITO/KPO/Consultancy	Business Process Outsourcing; IT Outsourcing; Knowledge Process Outsourcing; Consultancy/Professional Services; Disaster Recovery
Security/Cybersecurity	Information Security/Cybersecurity; Security – Software; Security – Network; Electronic Surveillance; Cybersecurity Monitoring Services

The directory also features business matching elements to connect providers and end users, serving the needs of medical clinics going through process of digitalisation

Data Analysis/ Synchronisation	Data Synchronisation; Data Analysis; Data Management
Big Data/Analytics	Big Data/Analytics; Business Intelligence
Process Automation	Process Automation (Business, End-to-end process)
IOT/Robotics	IOT; Robotics; Maintenance; Robotics Process Automation Solution
Artifcial Intelligence	Artifcial Intelligence
Software Development	Software Development; Games; Mobile Apps Development
Shared Services/SI	Shared Services; Systems Integrators
Creative Content	Creative Content; Branding & Digital Marketing; 3D Mapping, Interactive virtual tour, Digital Twin, VR & AR content creation
Event Management	Event Management (Hybrid - ofline and online platforms)
Education/Training	Education/Training; HRDF Authorised Training
Blockchain	Blockchain Technology; Corporate Tokenisation

AVAILABLE GRANT TO KICKSTART YOUR DIGITAL TRANSFORMATION JOURNEY

Digitalising SMEs by MDEC
https://mdec.my/digital-economy-initiatives/for-the-industry/sme/

Assistance Programmes by MDEC
https://mdec.my/digital-economy-initiatives/for-the-industry/corporations/

SME Digital Financing by SME Corp
https://home.smecorp.gov.my/sme-digital-financing-programme/

SME Automation And Digitalisation Facility
https://budget.mof.gov.my/manfaat/en/faq/pemerkasa-adf.html

SME Digitalisation Initiative
https://budget.mof.gov.my/manfaat/en/faq/bsn-digitalisation.html

Smart Automation Grant
https://www.mida.gov.my/forms-and-guidelines/special-tax-incentives-under-penjana/smart-automation-grant-under-penjana-b/

Addressing the barriers to enable the health workforce to engage with digital transformation and use digital technology to improve their work as well as its outcomes requires action on a range of fronts.

CONCLUSION

More effective use of digital technology and electronic data can help improve healthcare delivery, make health policy more effective, and improve health system governance.

Technology also ensures that resource allocation is based on needs and helps inform citizens and patients so that they can contribute more actively to their health and their care.

Digital education and training should be dynamic and support strong ties across the education-to-practice continuum.

Clinicians and patients must be actively engaged in the design and implementation of the digital technologies that they are meant to use to avoid usability issues and increase the success rate.

A digital transformation must begin with an explicit recognition that data are a valuable resource but have no intrinsic value unless put to work within an enabling institutional environment.