2024-27

Digital Health Plan

Cambridge Memorial Hospital

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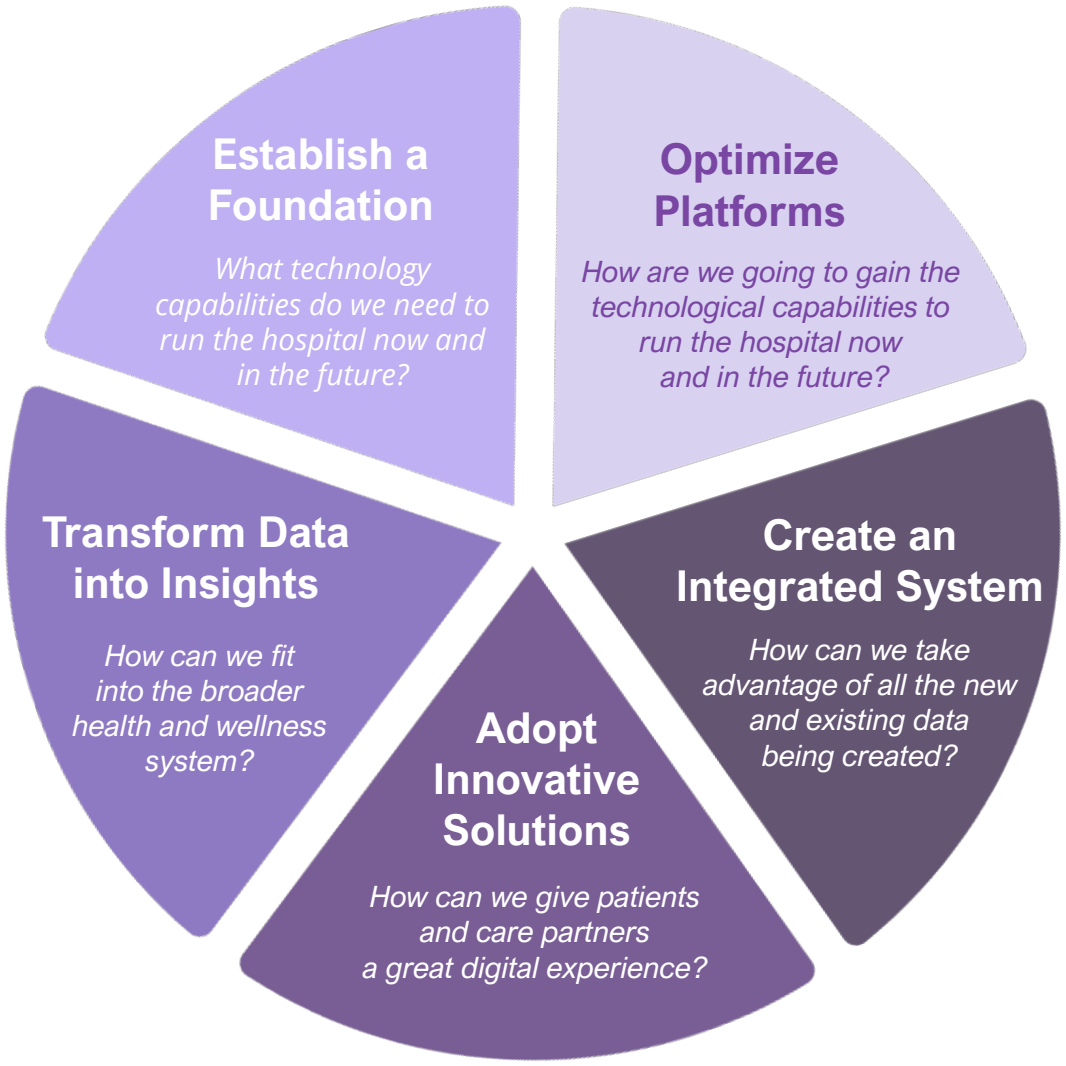
5-Year Success Goal

Achievement of Level 6 on the HIMSS Electronic Medical Record Adoption Model (EMRAM) with a plan to achieve Level 7 developed.

See Appendix C for Strategic Alignment

Priority Themes and Key Objectives

Each Priority Theme started with a question which led to an answer (the theme) and key objectives linked to that answer.



See Appendices D and E to see how the priority themes fit together.

#1 Establish a reliable and scalable digital health foundation

1. Benchmarking and improving hardware and core infrastructure maturity with an eye to the future
2. Implementation of modern and integrated clinical HIS
3. Development and implementation of corporate solutions strategy
4. Re-inventing IT governance and change management within CMH

#2 Optimize platforms for enabling future growth

1. Identification of critical platforms to innovate on into the future
2. Reducing complexity in terms of number of vendors and solutions in use
3. Active participation in regional and provincial innovation structures

#3 Create an integrated digital health ecosystem

1. Actively participate in healthcare information sharing across the care continuum and government agencies
2. Partner with the CND OHT to deliver on the Digital First for Health Strategy
3. Utilization of digital tools to reduce gaps in care and communication across transitions in care

#4 Adopt innovative digital solutions in patient & care partner engagement (strong ties to the CMH Patient Experience Plan)

1. Deliver on the priorities embedded in the Patient Experience plan including innovative methods for patient access to health information; develop a sustainable virtual visiting program; and modern options for patient/provider communication
2. Reduce inequities in the community's ability to access digital tools

#5 Transform data into insights to drive improvements in care (strong ties to the CMH Operational Excellence Plan)

1. Deliver on the Operational Excellence Plan priorities
2. Achieve Stage 5 of Analytics Maturity Model
3. Ensure data integration between organizational platforms and enterprise business intelligence system
4. Invest in data informed priorities to improve care and business productivity
5. Gather and transform data which can be used to elevate care

#1
Establish a
Foundation

Priority Theme #1: Establish a reliable and scalable digital health foundation

Why does this matter?

1. Without a strong foundation CMH will not be able to grow with the needs of the hospital and community
2. Our patients trust us to protect their health information against an ever-growing risk of cyber attacks; CMH needs to protect ourselves through improved infrastructure and systems
3. We cannot do everything at once – we need to prioritize and plan into the future to align resources
4. The future is unclear – we need to be setup to adapt and thrive in an ever-changing environment

Key Objectives

1. Benchmarking and improving hardware and core infrastructure maturity with an eye to the future
2. Implementation of modern and integrated clinical HIS
3. Development and implementation of corporate solutions strategy
4. Re-inventing IT governance and change management

Success Measures

1. Benchmarking and to be determined improvements on the HIMSS Infrastructure Adoption Model (INFRAM)
2. Development and implementation of prioritized corporate solutions, with a roadmap to implement modern solutions for all corporate solutions
3. Implementation of a robust digital governance model aligning investments and efforts with priorities
4. Creation and adherence to strict digital change management structures for new implementation, upgrades, and decommissioning of any hardware or software

See Appendix F for additional information.

#2 Optimize Platforms

Priority Theme #2: Optimize platforms for enabling future growth

Why does this matter?

1. We do not want to end up with many niche solutions which create gaps in the ability to add functionality
2. Selecting appropriate platforms to grow on will support CMH in planning for future expansion
3. Increased complexity in terms of number of solutions and vendors requires cost and effort to manage and integrate across the organization
4. Working within established innovation platforms provides access to otherwise difficult to acquire technologies and solutions

Key Objectives

1. Identification of critical platforms to innovate on into the future
2. Reducing complexity in terms of number of vendors and solutions in use
3. Active participation in regional and provincial innovation structures

Success Measures

1. Identification of operationally critical digital platforms and execution of a strategy to align resources and solutions to those with gaps
2. A reduction in the number of individual solutions, vendors, and contracts through application and system consolidation
3. Development of roadmaps for key platforms focused on improving usage and functionality while developing integrations across our platforms

See Appendix F for additional information.

#3 Create an Integrated System

Priority Theme #3: Create an integrated digital health ecosystem

Why does this matter?

1. Patients can receive care from a large number of providers in and out of our community, each with their own digital and data systems
2. We have committed to the CND OHT our support in achieving the deliverables and vision of seamless transitions in care
3. There is a future opportunity to advance population health which can benefit our community and Ontario

Key Objectives

1. Actively participate in healthcare information sharing across the care continuum and government agencies
2. Partner with the CND OHT to deliver on the Digital First for Health Strategy
3. Utilization of digital tools to reduce gaps in care and communication across transitions in care

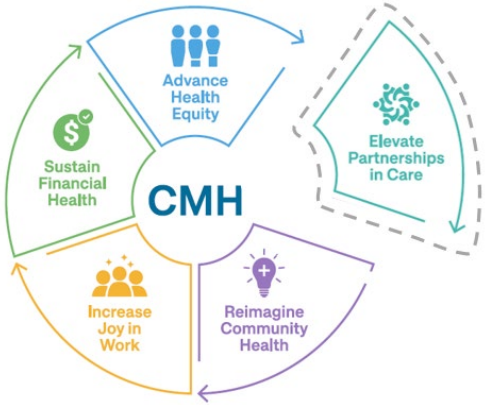
Success Measures

1. Achievement of CND OHT TPA and digital health deliverables as identified
2. Actively participate in the provincial strategy for connecting health data including, but not limited to, contributing to established repositories, connecting data through information exchanges, and increased sharing across currently separated health and community partners
3. Proven utilization of existing and CMH committed innovation structures and groups as aligned to CMH Innovation plan

See Appendix F for additional information.

#4 Adopt Innovative Solutions

Priority Theme #4: Adopt innovative digital solutions in patient & care partner engagement



Note: This priority theme has a strong connection to the CMH Patient Experience plan which falls under the Elevate Partnerships in Care strategic pillar.

Why does this matter?

1. Patients and their Care Partners are the core of the services we provide and should be able to use digital tools to participate in their care
2. Patients are becoming increasingly used to having digital access in almost every aspect of their lives; healthcare at CMH need not be the exception
3. There is a link between patient experience and joy at work as staff and patient experiences are connected

Key Objectives

1. Deliver on the priorities embedded in the Patient Experience plan including:
   - Innovative methods for patient access to health information
   - Develop a sustainable virtual visiting program
   - Modern options for patient/provider communication
2. Reduce inequities in the community's ability to access digital tools

Success Measures

1. Achievement of the Patient Experience plan deliverables
2. Score “Advanced” on the Virtual Care Maturity Model assessment
3. Achievement of the EMRAM Level 6 regarding Patient Engagement with progress to Level 7

See Appendix F for additional information.

#5 Transform Data into Insights

Priority Theme #5: Transform data into insights to drive improvements in care

Why does this matter?

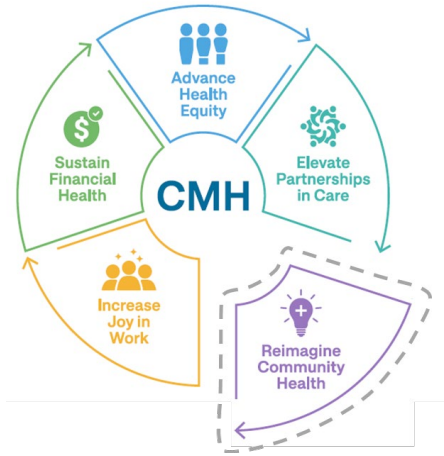
1. Digital health platforms and applications can gather large amounts of data which can be used to improve the delivery and quality of care
2. There are significant codependences and opportunities between digital and data ecosystems as health enablers
3. High quality data is a critical input into future models which will inform changes in operating and care models

Key Objectives

1. Deliver on the priorities embedded in the Operational Excellence plan
2. Achieve Stage 5 of Analytics Maturity Model
3. Ensure data integration between organizational platforms and enterprise business intelligence system
4. Invest in data informed priorities to improve care and business productivity
5. Gather and transform data which can be used to elevate care

Success Measures

1. Achievement of the Operational Excellence plan deliverables
2. Actively participate in the provincial collection of health data
3. Achievement and support of the HIMSS Analytics Maturity score (AMAM)



Note: This priority theme has a strong connection to the CMH Operational Excellence plan which falls under the Reimagine Community Health strategic pillar.

See Appendix F for additional information.

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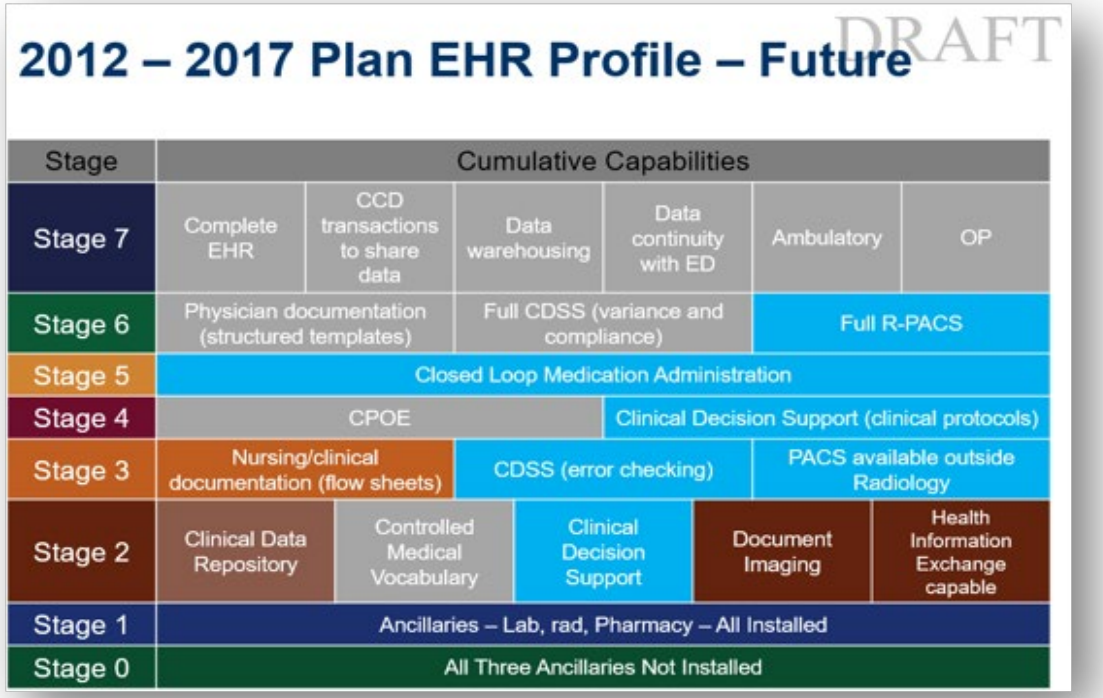
Appendix A: Consultation & Approach

1. Information / Background Gathering
    1. Review findings of previous CMH strategic planning work including (but not limited to):
        1. Comments / learnings from Strategic Planning engagement within community, hospital, and other stakeholders
        2. Public and in-progress corporate plans which have a dependency on the Digital Health Plan
    2. Environmental scan of provincial and national reference materials including (but not limited to):
        1. Your Health: A Plan for Connected and Convenient Care (Ontario), Digital Health Playbook (Ontario), Taking Back Healthcare (Public Policy Forum), Digital Health Canadian Survey (Canada Infoway)
    3. Consideration of publications and insights from international thought leaders including (but not limited to):
        1. Healthcare Information and Management Systems Society (HIMSS), College of Healthcare Information Management Executives (CHIME), Consultancy groups including Garner, Accenture, Deloitte, and others.
    4. Gathered insights from regional working groups and local stakeholders
2. Review of core content for review by targeted internal and external stakeholders
3. Implementing feedback into updated version of Digital Health Plan
4. Approval through CMH Executive, Digital Health Sub-Committee, Resources Committee, and Board
5. Publishing of plan through determined communication strategy

Appendix B: Background

- FY12-17 IT Strategic Plan focused on EHR future profile, projects and budgets
- FY17-22 IT Strategic Plan focused on projects, prioritization matrix, and perception
- FY22-27 IT Corporate Plan will align with broader strategy plan and corporate priorities with a focus on priorities, platforms, and strategic goals. These will drive projects and operational (1-2 year) plans
  - Timing of this plan is aligned to other corporate plans and strategic plan roll-out



Appendix C: Strategic Plan Alignment

Vision

Creating healthier communities, together.

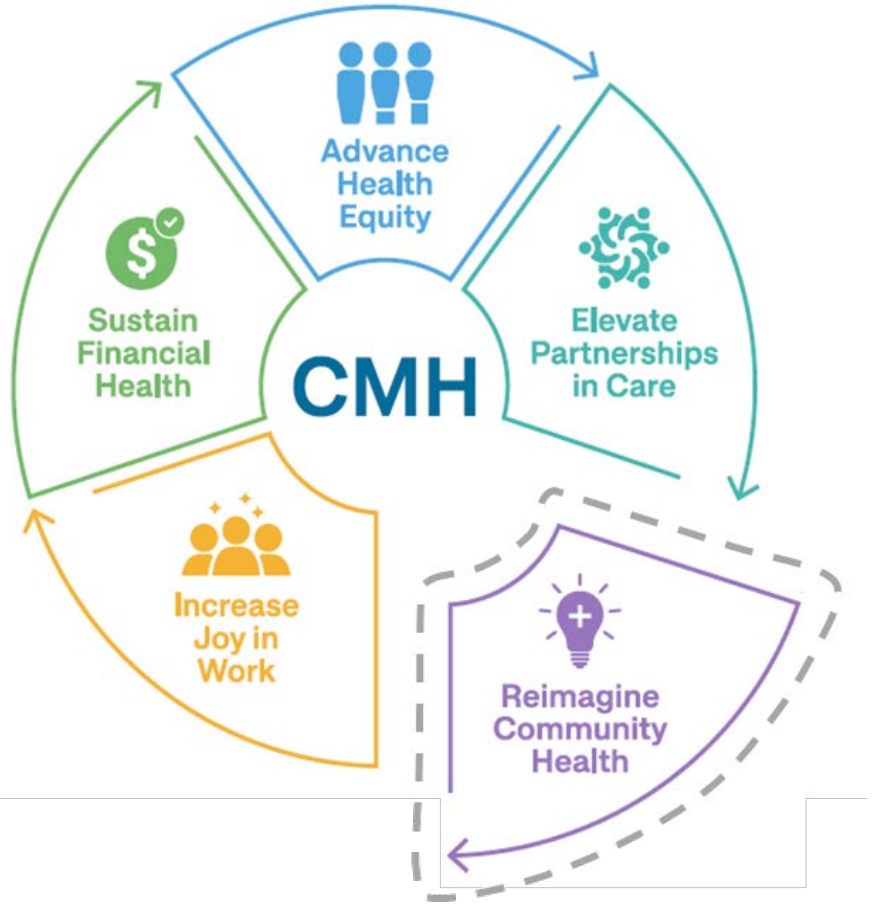
Mission

An exceptional healthcare organization keeping people at the heart of all we do.

Values

Caring
Collaboration
Accountability
Innovation
Respect

Strategic Pillars



- The Digital Health Plan is housed under the Reimagine Community Health strategic pillar
- Other corporate plans under this strategic pillar include the Ontario Health Team Plan, Innovation Plan, Operational Excellence Plan, and Environmental Sustainability Plan
- Priority Themes #4 and #5 of the Digital Health Plan are strongly tied to other corporate plans such as the Patient Experience (housed under the Elevate Partnerships in Care strategic pillar) and the Operational Excellence Plan

Appendix D: How the Priority Themes Fit Together

CMH 2024-27 Digital Health Plan

Patient and Care Giver Digital Experience

"Enhancing the digital experience"

THE BERYL INSTITUTE

Utilization of Data

"Make the data we are capturing useful"

HIMSS Analytics®
AMAM

Integration Across The Ecosystem

"Getting and staying connected"

Local

Regional

Region of Waterloo · KW4 Ontario Health Team · Guelph Wellington Ontario Health Team

Provincial

Ontario Health — Digital Standards in Health Care
Your Health — A Plan for Connected and Convenient Care

National

Canada Health Infoway / Inforoute Santé du Canada · CIHI ICIS

Technology Platforms

"Hardware or software to host an application or service"

Internet Providers

Bell · ROGERS · TELUS

Mobile O/S

HIS Solutions

MEDITECH · Epic · Cerner · Allscripts

Enterprise Apps

ORACLE · SAP · workday

Backup & Recovery

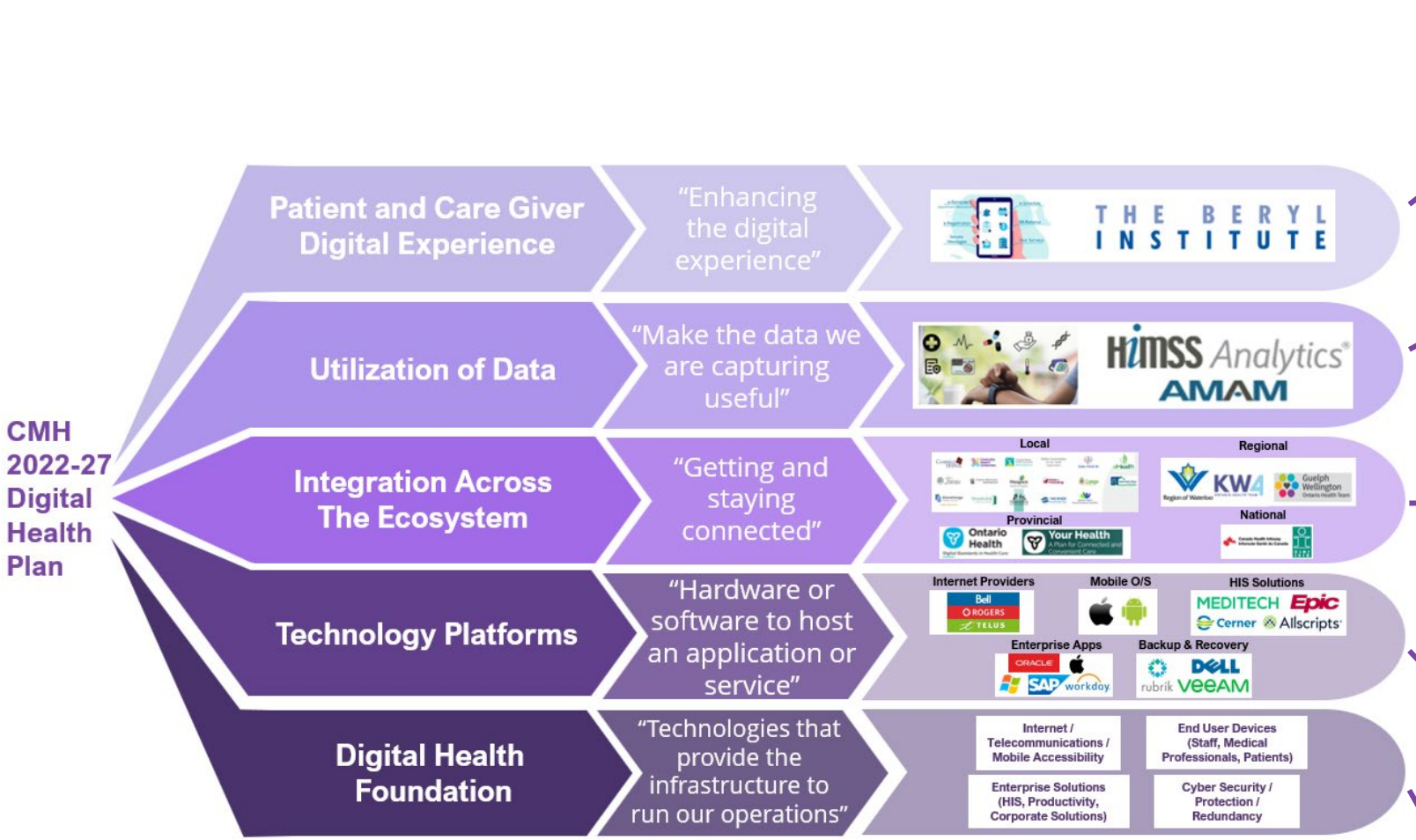
rubrik · DELL · VEEAM

Digital Health Foundation

"Technologies that provide the infrastructure to run our operations"

- Internet / Telecommunications / Mobile Accessibility
- End User Devices (Staff, Medical Professionals, Patients)
- Enterprise Solutions (HIS, Productivity, Corporate Solutions)
- Cyber Security / Protection / Redundancy

Appendix E: Interpreting the Plan – How does this relate to building a house?



Heated Floors, Accessibility for Visitors, Nice Art, Programmed Temperature Control.

Electricity Usage Patterns, Smart Appliances, Tracking of Occupant Behaviors

Can my phone control all aspects of the home (HVAC, security, alarms)? Are we feeding solar electricity into the grid? Do I have fences to protect my neighbor's yard from my dog?

Are we picking the same brand of appliance? Is our furniture style aligned? Will we be an Amazon shop? Can our security, lights, and doorbell camera be one app? Do our tools all take the same battery?

Residents (growth?), Connections with Core Services (i.e., plumbing, electrical), Space Available, Security Needs, Critical Rooms (i.e., office, in-law suite).

Appendix F: Priority Themes – Additional Information

This table contains supplementary information and resources for each priority theme.

Priority Theme	Additional Information
#1: Establish a reliable and scalable digital health foundation	1. HIMSS INFRAM Model (here) & (here) 2. HIMSS EMRAM Model (here) & (here) 3. Corporate Solutions / ERP Definitions & Market (here) 4. Digital Governance (here) & (here) 5. Emerging Technology & Potential For Change (here)
#2: Optimize platforms for enabling future growth	1. Technology Platforms (here) & (here) 2. Best of Breed vs. Integrated Solutions (here) & (here) 3. Application consolidation (here) & (here) 4. Examples of Innovation Structures (here) & (here)
#3: Create an integrated digital health ecosystem	1. Ontario Digital Health Playbook (here – note page 6 and 7) 2. Ontario Your Health: A Plan for Connected and Convenient Care (here) 3. Digital Health Information Exchange Standard (here) 4. HIS Interoperability (here), (here), and (here) 5. Ontario Health Data Strategy (here)
#4: Adopt innovative digital solutions in patient & care partner engagement	1. CMH Patient Experience plan (here) 2. The Beryl Institute (here) 3. Virtual care maturity model (here) 4. Digital inequity (here) & (here)
#5: Transform data into insights to drive improvements in care	1. CMH Operational Excellence plan (TBD) 2. Ontario health data strategy (here) 3. Digital health and data connection (here), (here) & (here) 4. HIMSS AMAM (here) & (here)

Appendix G: Roadmap & Key Milestones

FY23-24				FY24-25				FY25-26				FY26-27				FY27-28			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

- ◆ EMRAM Assessment
- ◆ Corporate Roadmap Developed
- ◆ LDG Cyber Assessment
- ◆ Digital Governance Established
- ◆ INFRAM Assessment & Planning
- HIS Project
- ◆ Digital Change Management Roll-Out
- ◆ Key Platform Roadmap Creation (Cyber, Productivity, Comms)
- ◆ Platform Current State
- Consolidate Functionality
- ◆ Provincial contribution to acCDR repository
- ◆ Virtual Care Maturity Assessment
- ◆ Platform Reduction Assessment
- ◆ EMRAM Stage 6
- ◆ Contribution to HIS Information Exchange
- ◆ INFRAM Assessment
- EMRAM Stage 7 ◆