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Ministry of Health
משרד הבריאות, ישראל

Israel's Digital Health Strategy

Health System in Israel

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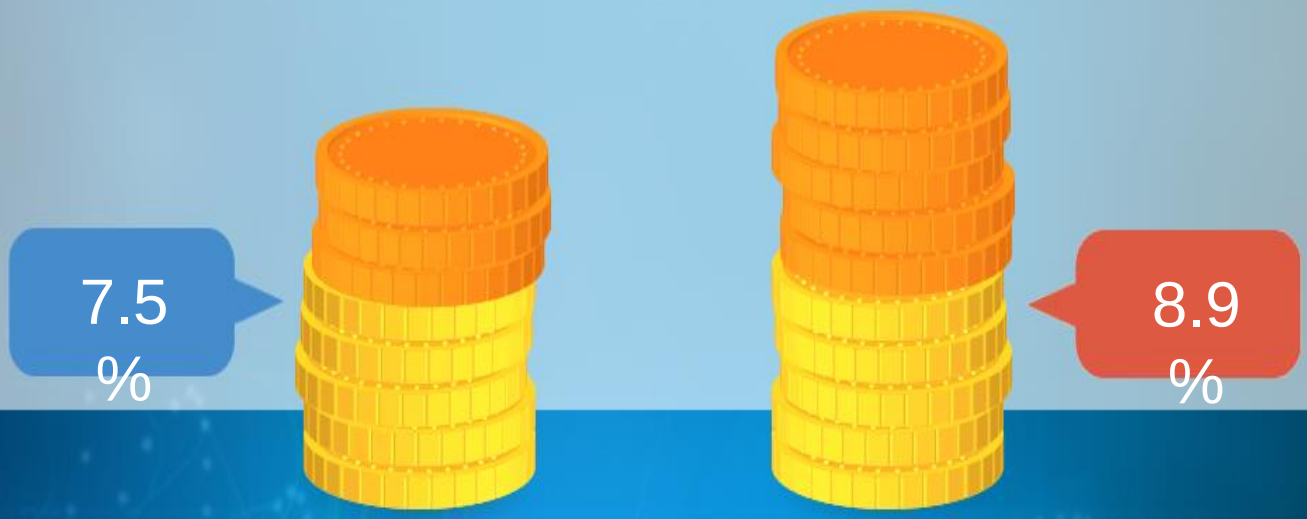
- 45 General Hospitals (15,500 beds)
  - 11 Governmental (47%)
  - 9 Clalit (30%)
  - 9 Public (20%)
  - 5 Private (3%)
- 4 HMOs
  - 52% Clalit
  - 25% Maccabi
  - 14% Meuhedet
  - 9% Leumit
- 326 Psychiatric and Geriatric Hospitals
  - 14 Governmental (4.3%)
  - 4 Clalit (1.2%)
  - 133 Public (40%)
  - 175 Private (53%)

Israel's Health System at a Glance

Health Expenditure



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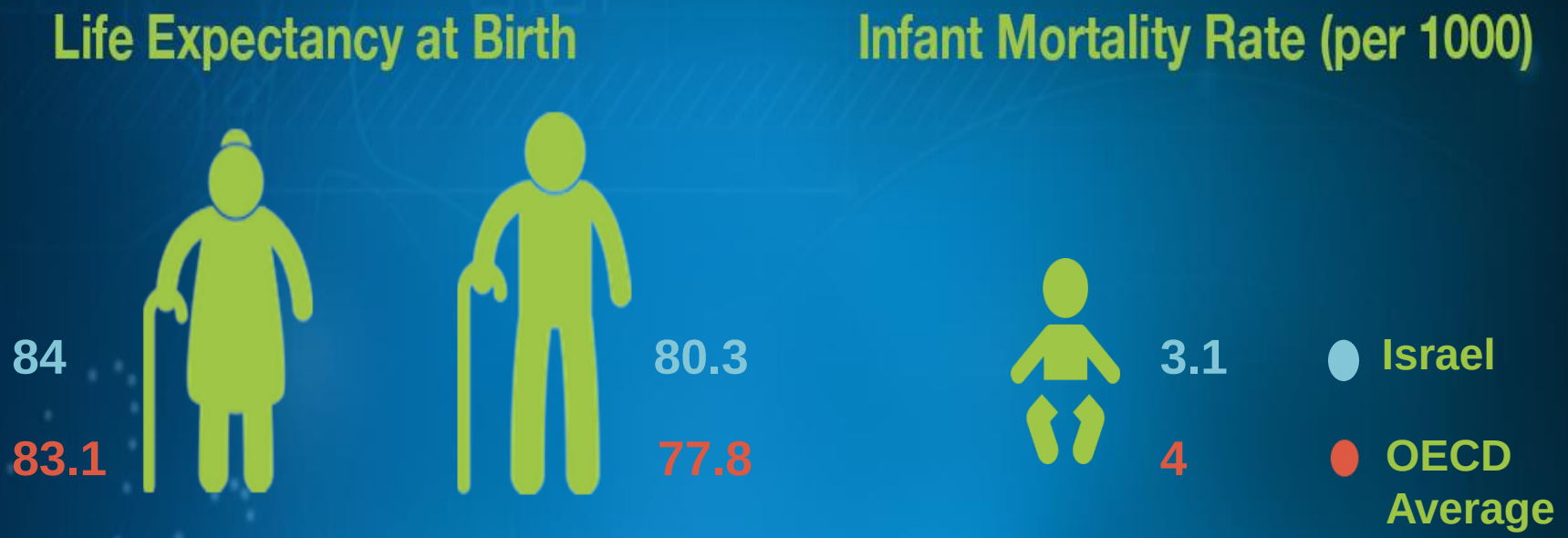
Israel's Health System at a Glance



- "**One of the most enviable healthcare systems among OECD countries**" 2012, OECD
- **Bloomberg Healthcare Efficiency Index** – Ranked #7

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The Roles of the Ministry of Health

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Ministry

Health Care System Management

Policy & Regulation

Direct the national health system with policies, regulations and guidelines

Licensing & Control:

The process of permitting an entity that complies with MOH guidance

Control: The process of reassuring compliance of an entity

The entities licensed and controlled can be medical institutions, businesses, medical technologies, medical personnel and

Health System Coordination

Managing national cross organizational processes in the health care system, such as: HIE, Birth & death, Organ transplantation and more

Info Mgmt.

Managing national health information as a mean to define policies, control & operate the system while protecting privacy

e-service

Omni-channel services and information for citizens, businesses and all customers of the MOH

National Chief Doctor

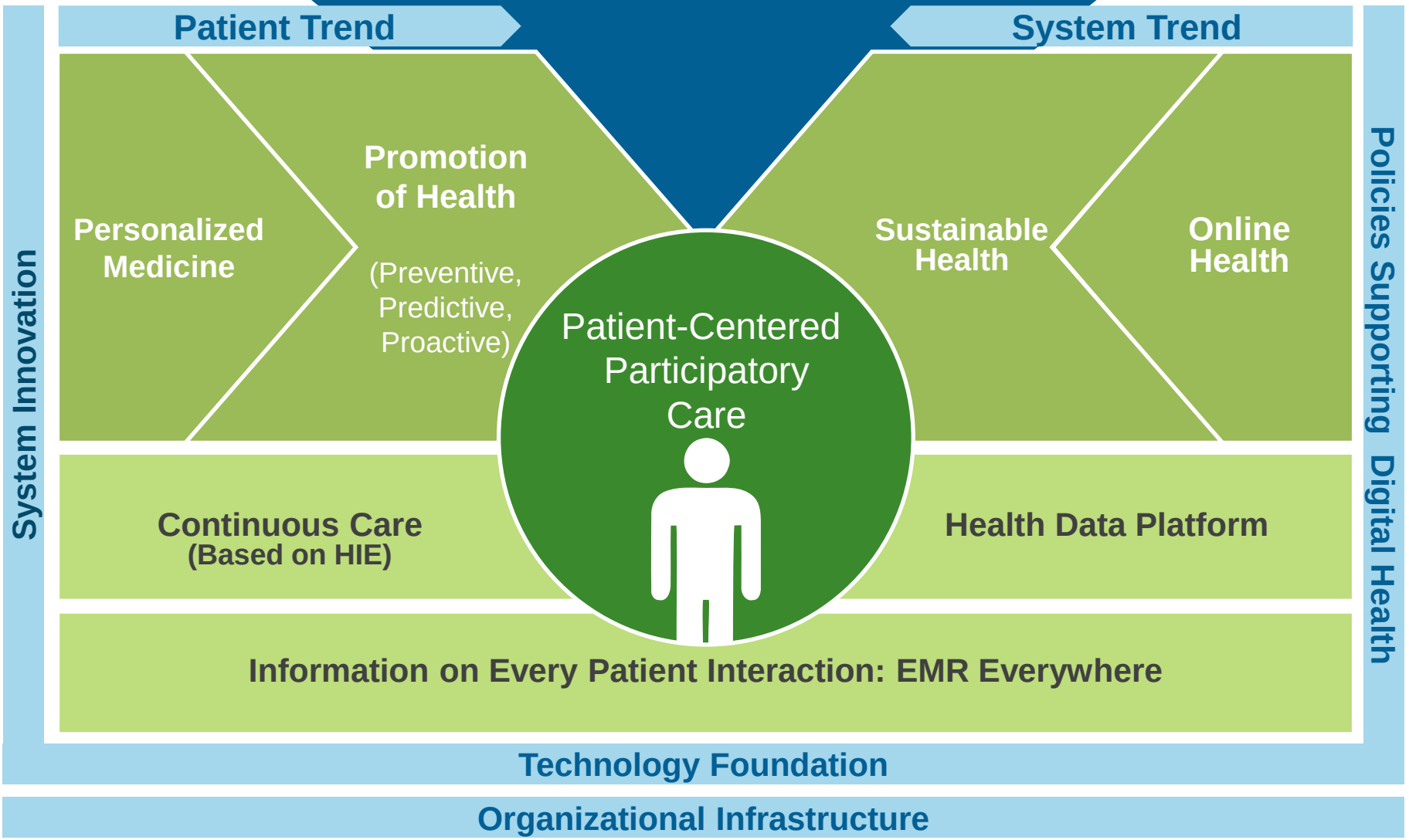
Gov Hospitals Operations

Clinical & Administrative

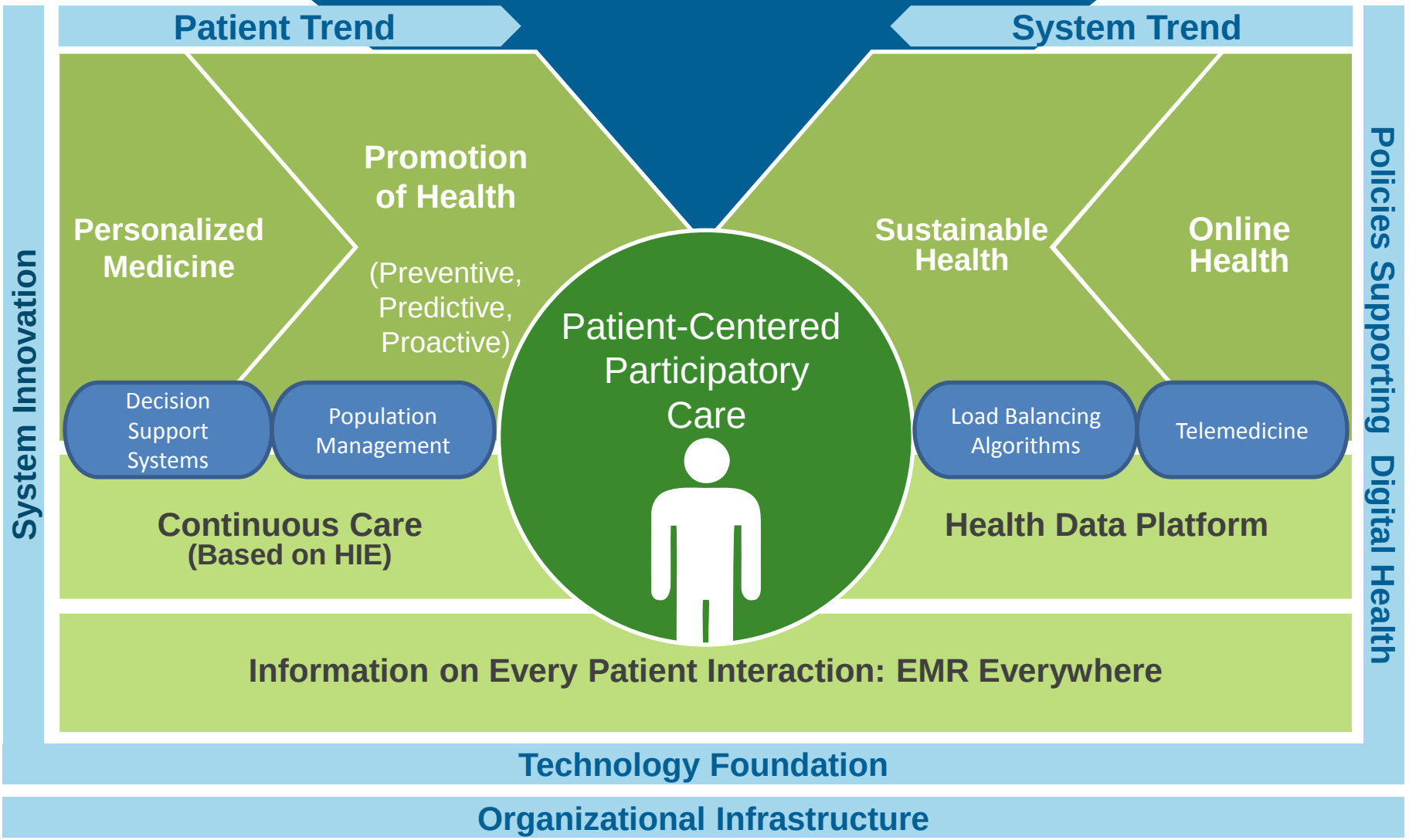
Insurer & Service provider

Medical services provided or funded, such as: Geriatric hospitalization, Rehabilitation, Mental Care and

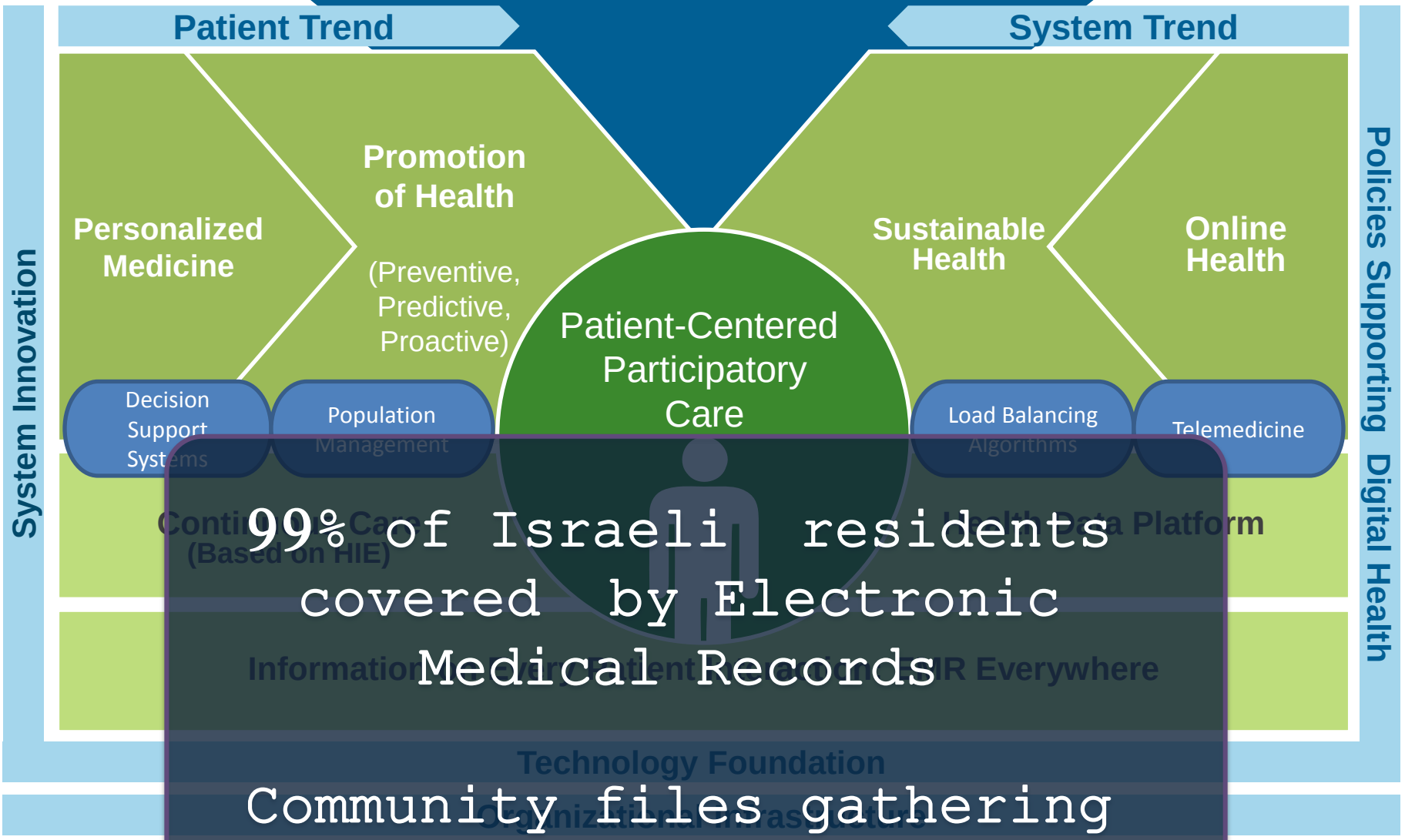
Digital Health Strategy



Digital Health Strategy



Digital Health Strategy



99% of Israeli residents covered by Electronic Medical Records

Community files gathering information for over 2

Telemedicine Centers

- "Moma like" centers which function as multidisciplinary medical therapy and support for chronic patients

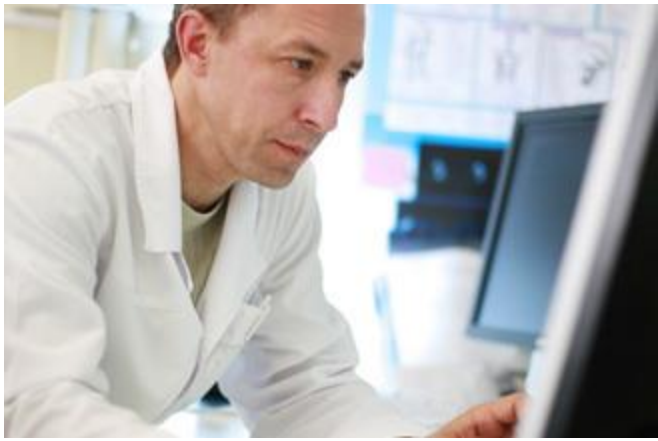
- Proposed populations:

  - Heart failure
  - Obstructive pulmonary disease
  - Members belonging to the home care unit.
  - Diabetics who began the use of insulin.
  - Unbalanced Diabetic patients.
  - Stoma patients.
  - Chronically ill homebound patients
  - Patients with difficult wound healing.
  - Oncology patients during chemotherapy or radiotherapy.

- 24/7 Availability

- Fully documented, maximizes continuity of care

- Proactive and Preventive care



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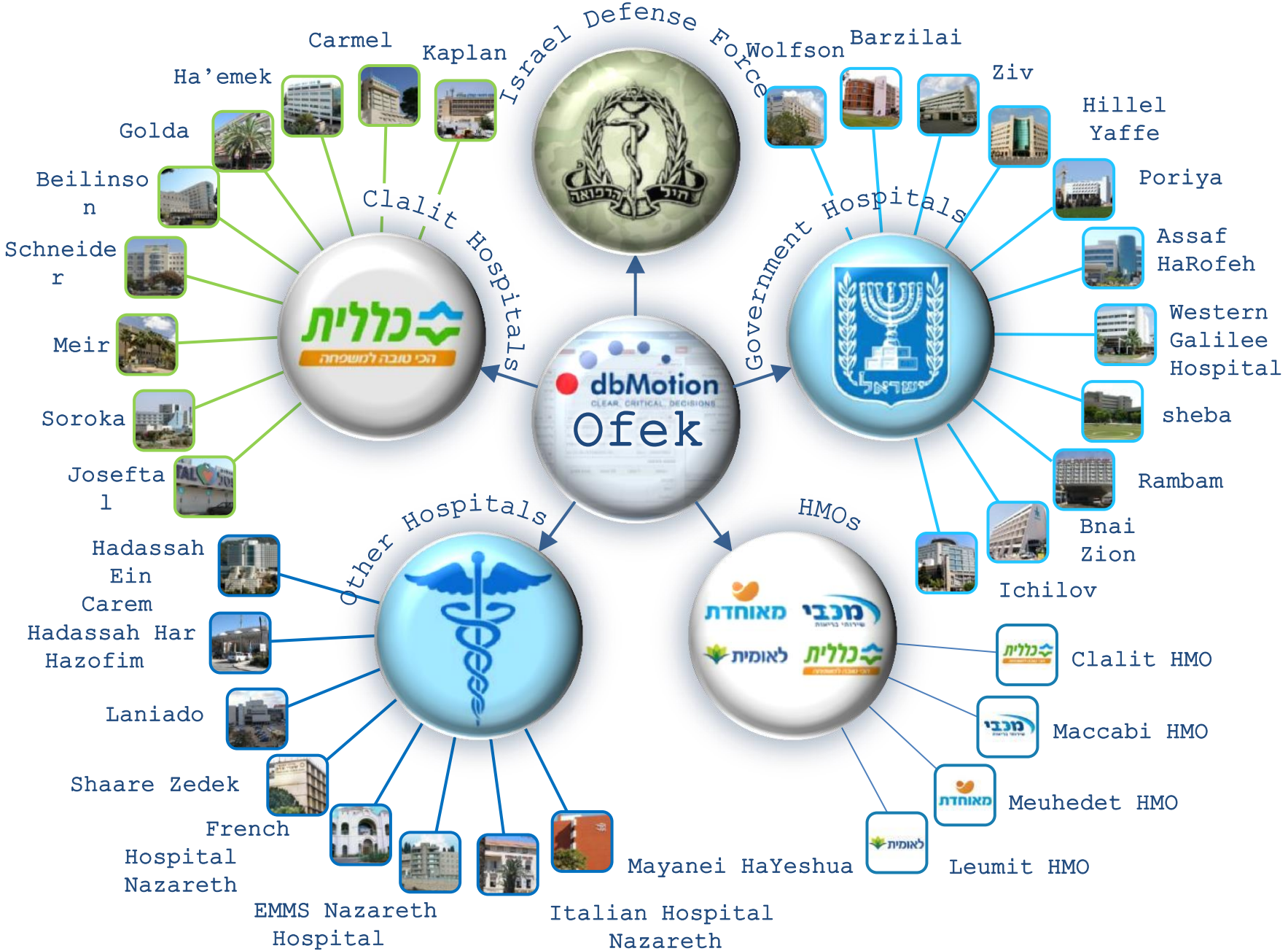

Eitan: The Next Generation HIE

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Changes day to day work within the healthcare system and enables digital transformations

Proactivity

Physician alerts of patients in pre-crisis situation prevent illness and deterioration

Medical terminology

Conversion of medical terminology as the data moves between various health organizations makes it more accessible to computer systems

Analytics

Better patient care based on analysis of distributed data, for example, identifying a process that precipitates the onset of diabetes

Experiments and innovation

Deployment of innovative solutions, available to all care givers at all end points

Data display

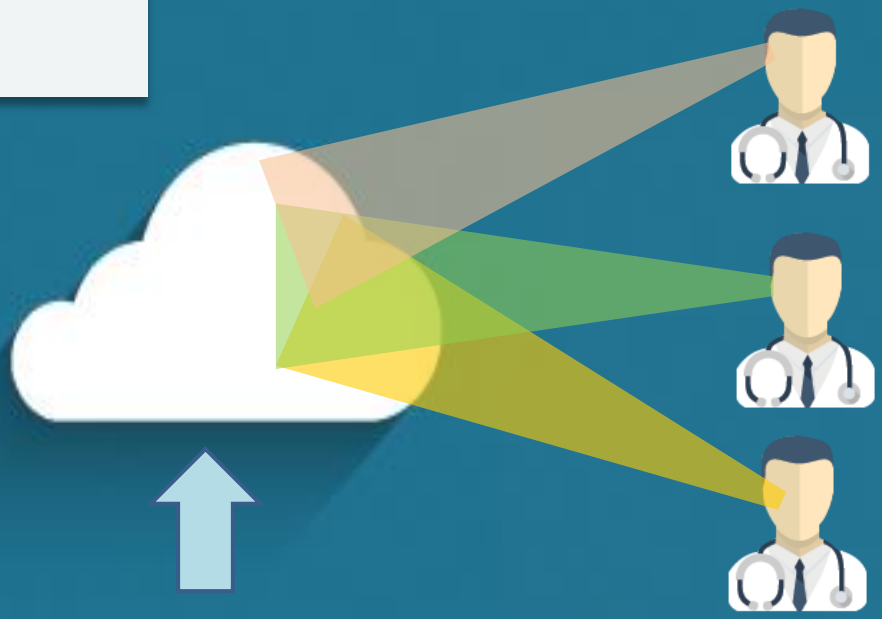
Smart agent presents new and relevant data only

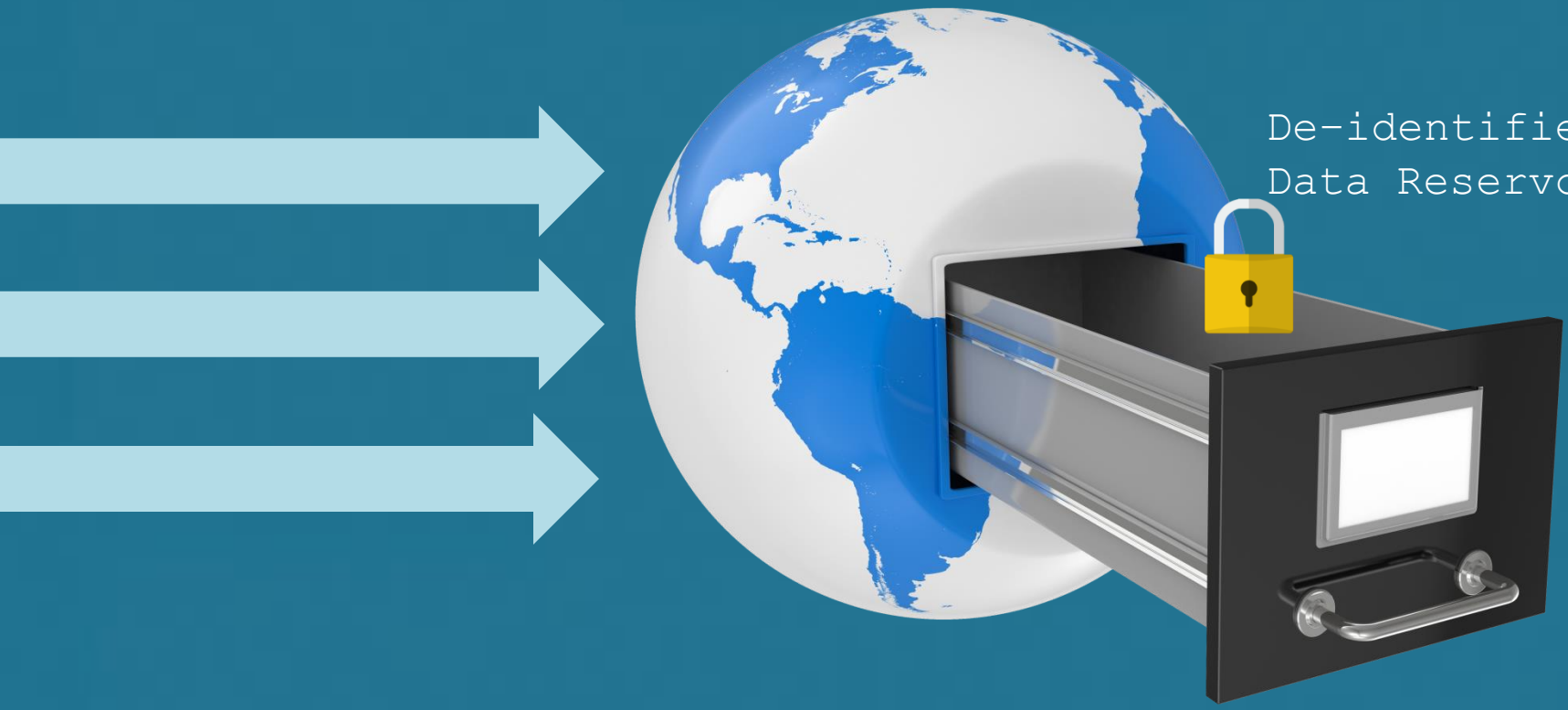
External documentation

Treatment documentation in any location, including remote treatment.

Big Data Infrastructure

Dedicated Controlled Research Environments





De-identified Big Data Reservoir

Current Use of Data Analytics

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Early detection of colon cancer (Maccabi)

Data analytics enabled Maccabi to routinely detect suspicion of colon cancer by regular blood tests Hemoglobin results

Renal failure preventive Treatment (Clalit)

Data analytics enabled detection and proactive treatment of a specific population of kidney patient with higher risk of deterioration

And 200+ Concurrent Digital Health Projects…

Public Inquiries	Health Call Center	Health Tests for Drivers	Web based Medical Scheduling	IT at MRI Centers	DDI	Smart ER	HIE	Infant Health
Suicide Prevention	Mental Health IT	Water Quality Assurance	Sewage Treatment	E-Learning	Telemedicine	Medical Cannabis	Ombudsman	Deaths and Births Registrar
Big Data	Easy-Clinic	Child Health	Infections Prevention	Medical Equipment Regulation	Project Management	Work plans Management	HR Management	External Budget Management
Appeals	Imaging	Labs IT	ERP	ATD Systems	Medical Equipment API	EMR for Government Hospitals	Command and Control Centers	Clinical Trials
Firearms Licensing	Hospitals BI	BI for Decision Makers	Public BI	Medical Committees	Medical Terminology	Transplants	Medication	Medical Reference
Medical Technologies Pricing	Medical Services Pricing	National Registrars	Quality Indicators	OTC App	Vendor's Portal	Business Portal	Citizen's Portal	Forensic Institute
Cosmetics Regulation	Technologies Licensing	Food Labs IT	Food Licensing	Inspections	Cyber Defense	Information Security	Animal Testing	Environment Health
Organizational Onboarding	De-Identification	Refugee Seekers Health	API Management	Knowledge Management	Task Management	Internal Budget Management	Internal Comptroller	Institutions Licensing

Internal Portal	Medical Rehab	Mammography	Addiction Rehab	GIS	And More…

משרד הבריאות

Unique Collaboration Opportunities

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Unique Collaboration Opportunities

Unique Collaboration Opportunities

Easy-Clinic

Smart ER

Regional HIE Platform

Telemedicine Centers

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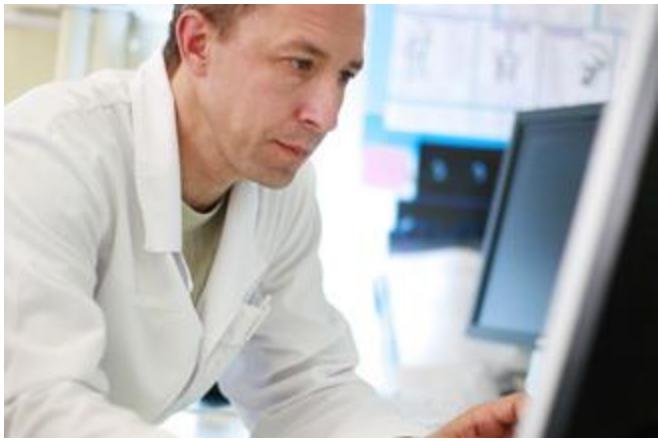
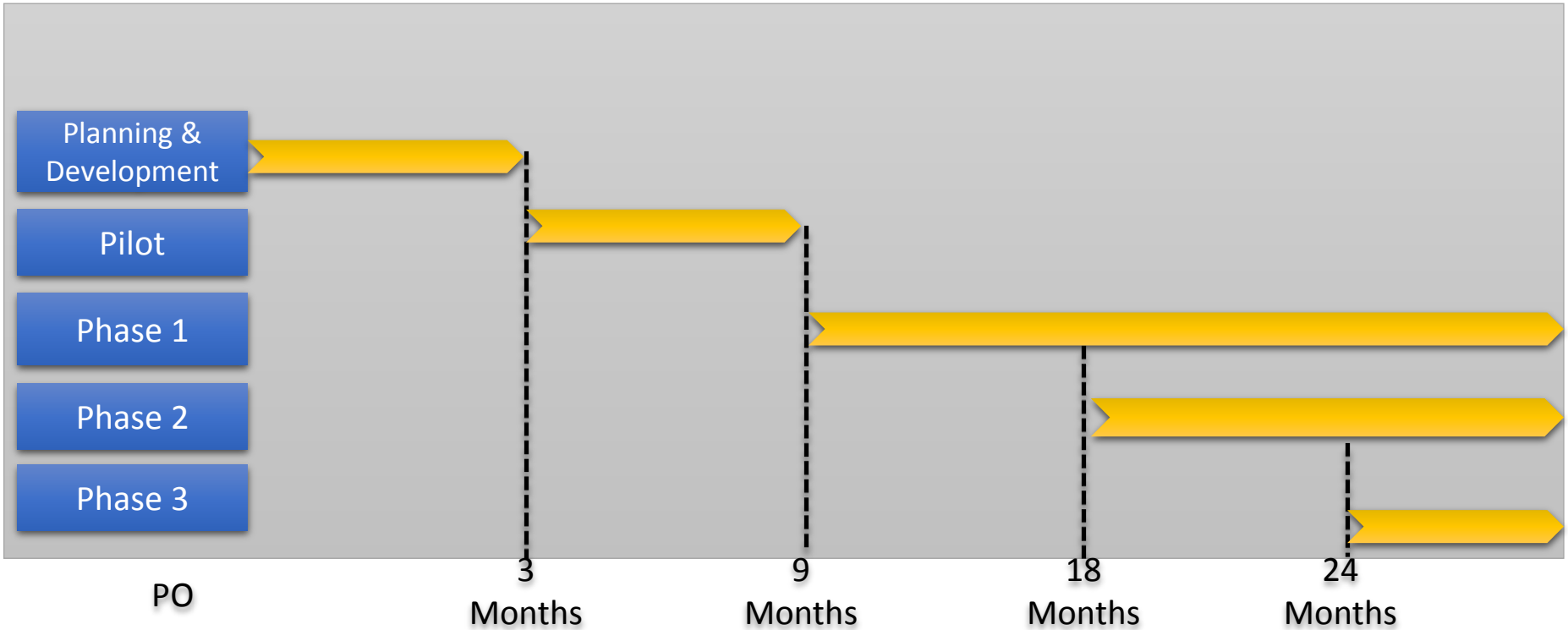


Telemedicine Centers: Project Scope

- Pilot: Voice + Video Telemedicine center, focus on 1 population
- Phase 1: Adding multiple populations
- Phase 2: Adding home visits support and integration
- Phase 3: Adding Medical Examination Tools



Unique Collaboration Opportunities

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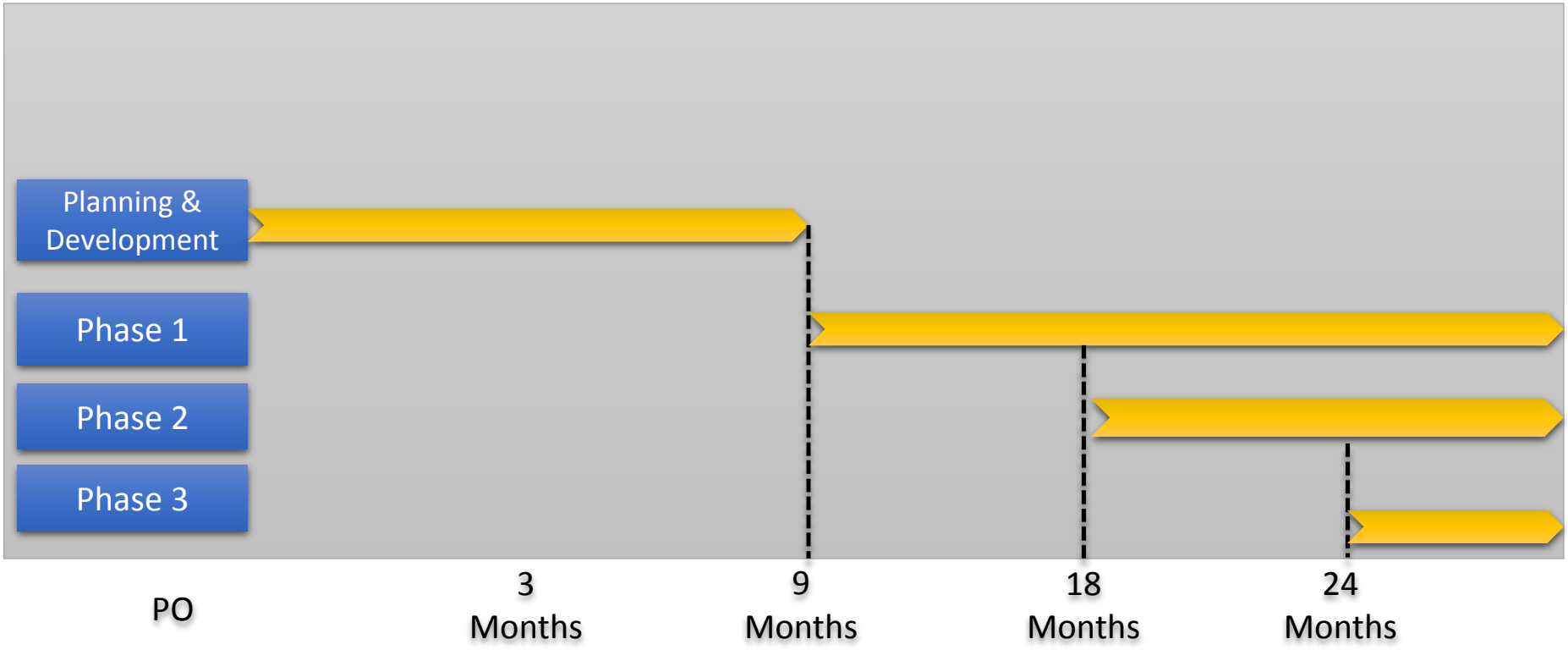
Easy Clinic: Unified Platform for Small Clinics Management

- National initiative to establish a unified EMR and HIE solution for small and medium clinics
- Includes all clinical and administrative aspects of various medical verticals:
  - Child Development Clinic
  - Addictions Rehab
  - Mammograms
  - Dialysis
  - Family Medicine and Vaccines
- Based on OpenEMR platform, with dozens of developers and millions of users
- Leverages the benefits of an end-to-end multi-vertical system for complex networks of clinics

Easy Clinic: Project Scope

- Phase 1: 1 medical vertical, EMR
- Phase 2: Multiple verticals, EMR + HIE Compliance
- Phase 3: Adding PHR & Telemedicine capabilities



Unique Collaboration Opportunities

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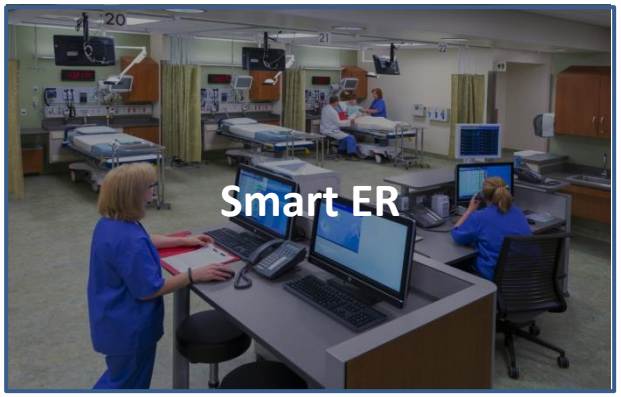
Easy-Clinic



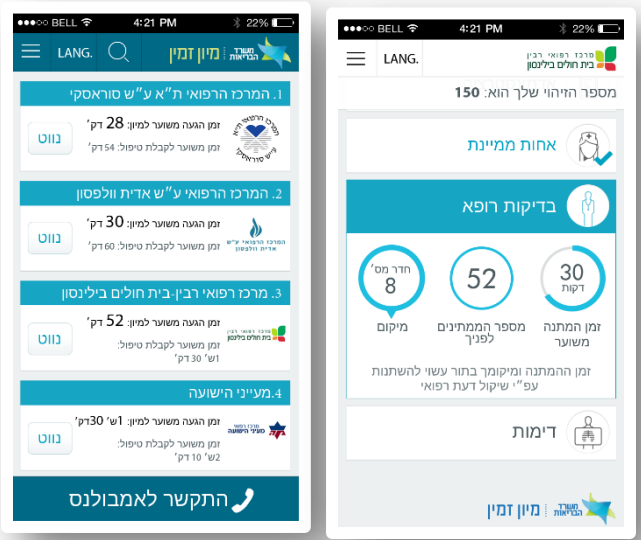
Regional HIE Platform

Smart ER: Streamlining Emergency Room Workflows

- National initiative for unified ER management

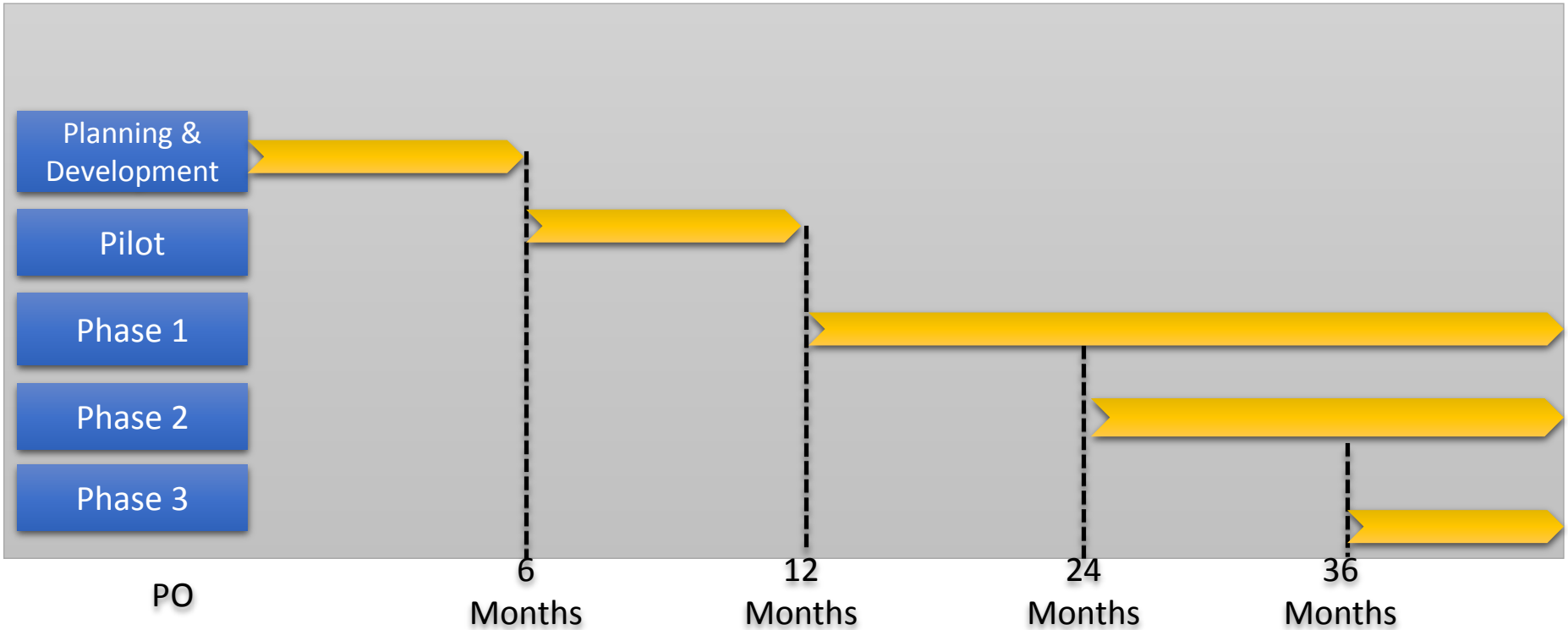
- Key Benefits:
  - Mobile app for choosing ER + early registration
  - Quick management of queues and load balance
  - Centralized and distributed BI
  - Fully connected digital environment
  - Optional: Full EMR at ER

- Results:
  - Minimizes errors
  - Shortens waiting times
  - Improves medical outcomes
  - Improves patient and personnel satisfaction



Smart ER: Project Scope

- Pilot: Minimal viable product (Queue Management)
- Phase 1: Adding flow optimization tools
- Phase 2: Adding the mobile app
- Phase 3: Adding full connectivity of devices within ER



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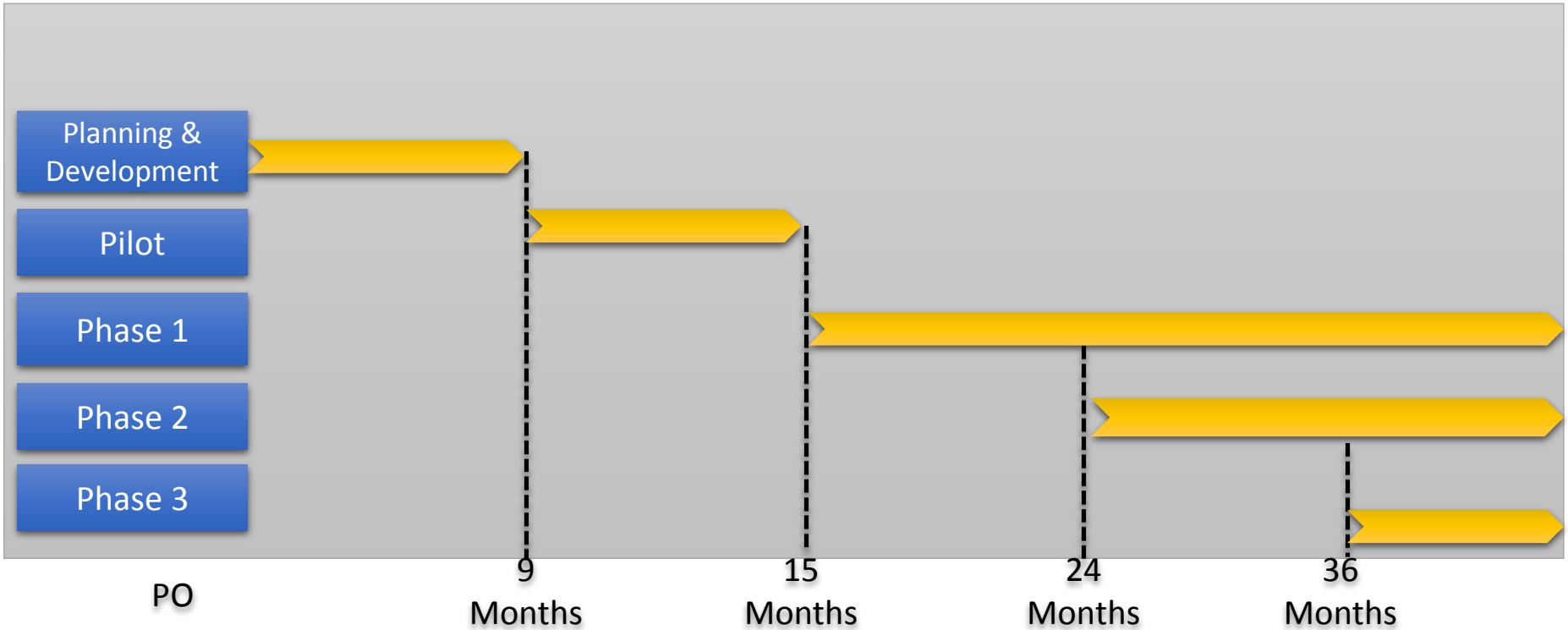
Regional HIE platform : Project Scope

- Pilot: 1 Hospital, 1 HMO
- Phase 1: General clinical and administrative data exchange
- Phase 2: Adding imaging HIE & Terminology Convergence
- Phase 3: Adding predictive populations management



G2G Commitment for all Proposed Projects

- Committed to End to end solutions
  - Equipment, Software, guidance, OJT
- Committed to the full product cycle
  - Planning, development, and successful implementation
- Continuous dialogue between working level officials in both countries
  - Benefit from every new release and every insight gathered at the parallel projects

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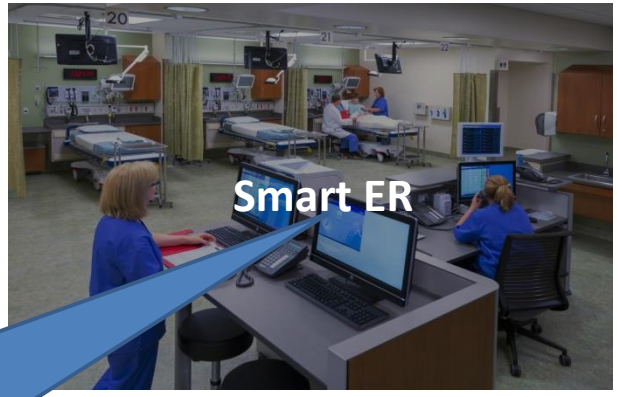
Digital Health G2G Portfolio: Summary

Summary:
Digital Health G2G Key Benefits

enable edge technologies to scale up

Minimize time to market



Leverage the Knowhow Gathered in similar projects

Adopt end to end solutions deployed on nationwide scales

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Thank You!