



CANADA'S FUTURE SMART HEALTHCARE

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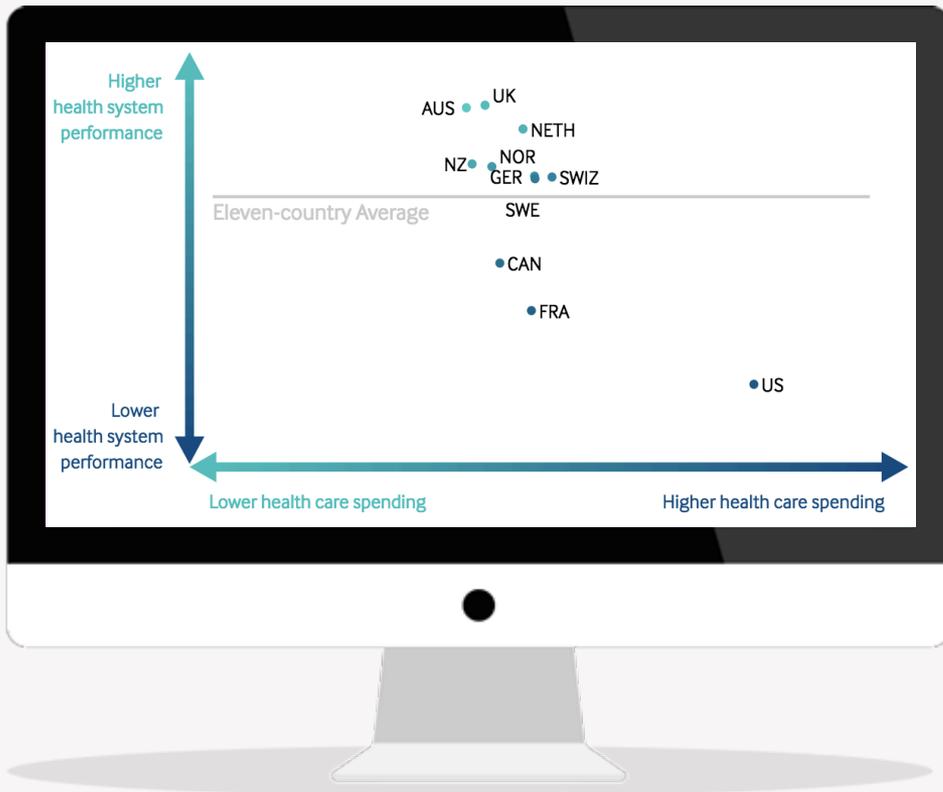
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Canada's Overall Healthcare System

UNDERPERFORMS RELATIVE TO SPENDING

\$242B

Total Healthcare Expenditure in 2017



43%

Saw a doctor the same day medical care was needed

57%

10.4%

GDP spent on healthcare

8.9%

10%

30 day in-hospital mortality rate following a stroke

7.3%

Improving operational inefficiencies across all aspects of our healthcare system will not only improve how it performs, but can lead to annual savings of up to **\$42B¹**

1. [OECD](#), [StatsCan](#)

Graph denotes Healthcare spending as a percent of GDP. Source: Spending data are from OECD for 2014, and exclude spending on capital formation of health care providers. Commonwealth Fund analysis

KEY CHALLENGES in Improving the Healthcare System



Information

No centralized information system

No consolidated, long term health records available to key decision makers

Lack of transparency



Care

Patient data is open to interpretation by care providers to provide largely reactive care

1/3 of preventable deaths occur in hospitals



Capacity

Large-Community Hospitals regularly operate at/over capacity

Shortage of hospital beds due to increasing demand of healthcare needs

Inefficient care administration increases wait times and patient volumes

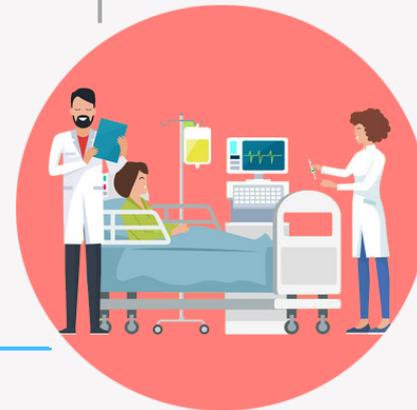
IMPROVING HEALTHCARE INFRASTRUCTURE by Implementing Intelligent Technology

Canada's population has outgrown the current healthcare system both in size and needs, resulting in operational and financial inefficiencies

Traditional Healthcare



Lots of paperwork
Long process time



**Optimal
Healthcare
Solution**

Future of
Healthcare

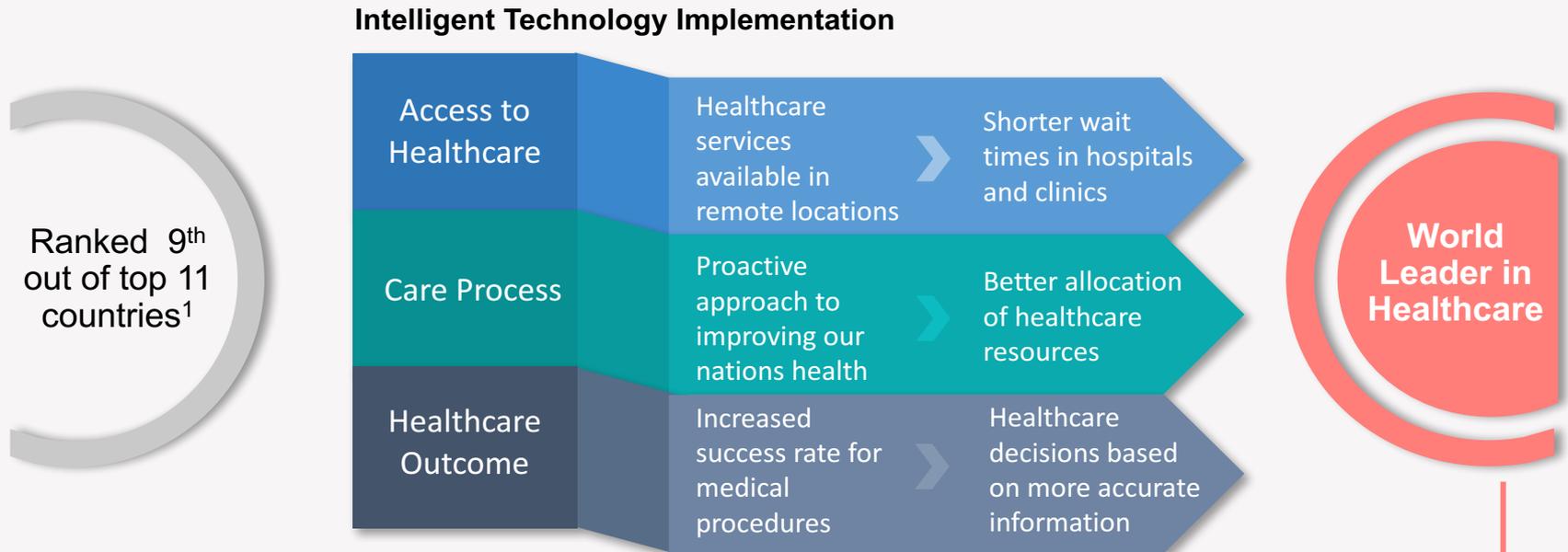
**Intelligent
Technology
Analysis**



Through the implementation of AI, Robotic Process Automation (RPA) and advanced analytics, Canada's healthcare system will be able to provide patients with the level of care that we strive for as a nation.

INTELLIGENT TECHNOLOGY will Transform the Future of Healthcare in Canada

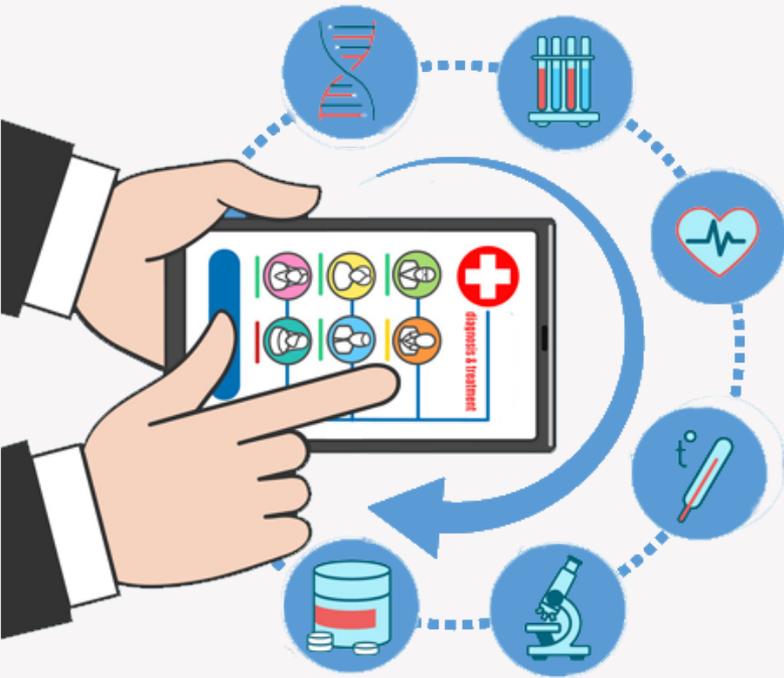
A nation that is thoroughly involved in their personal health, and Intelligent Technology aiding our doctors and nurses will enable Canada's healthcare system to provide a level of care that will be sought after around the world



Our hospitals and healthcare center will be **more efficient** and doctors and nurses can **focus all** of their efforts on the patient's wellbeing

1. [The Commonwealth Fund](#)

Breakdown of **INFRASTRUCTURE INVESTMENT**



Digital platforms

- ❖ Software for patients to input/monitor their health information
- ❖ Standardized reporting output for healthcare professionals



Artificial Intelligence

- ❖ All centralized health data is continually analyzed and reported on by AI
- ❖ Medical decisions would be aided with AI
- ❖ Automated reports and greater availability of healthcare data decreases administrative costs



IMPLEMENTATION



Artificial Intelligence Pilot

- ❖ Densely populated areas (Toronto, Vancouver, Montreal)
- ❖ Teaching / Large-Community Hospitals operating at/over capacity
- ❖ Healthcare centers with state-of-the-art IT infrastructure

Digital Platform Pilot

- ❖ Patients currently receiving chronic care (outside of a hospital setting)
- ❖ Healthcare professionals caring for long term patients (ie. Oncologist and cardiologists)
- ❖ Schools

Full Application of SkyNet Health Solutions

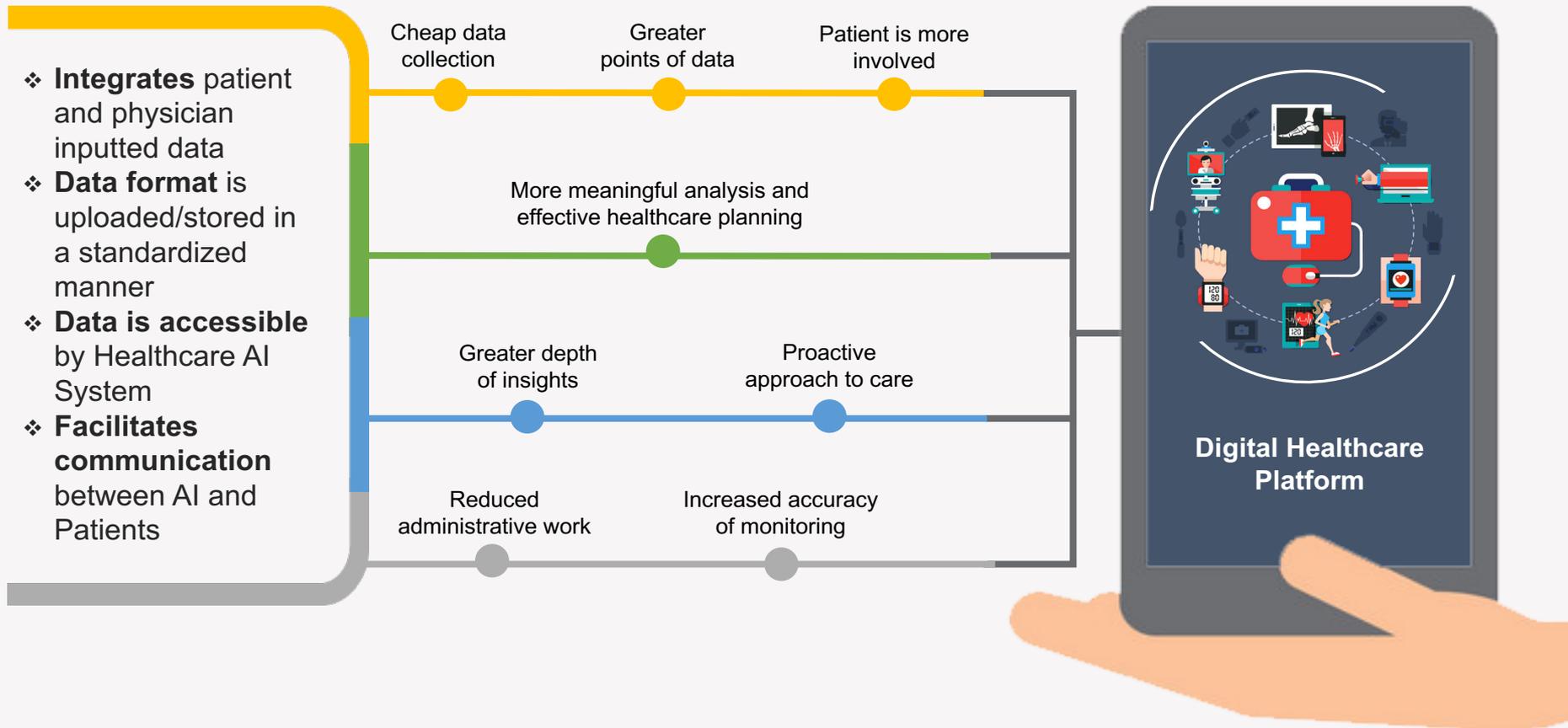
- ❖ Expansion of artificial intelligence to all hospitals and healthcare centers
- ❖ Full rollout of digital platform for use by all Canadians
- ❖ Continuous analysis of health data by artificial analysis





DIGITAL PLATFORM

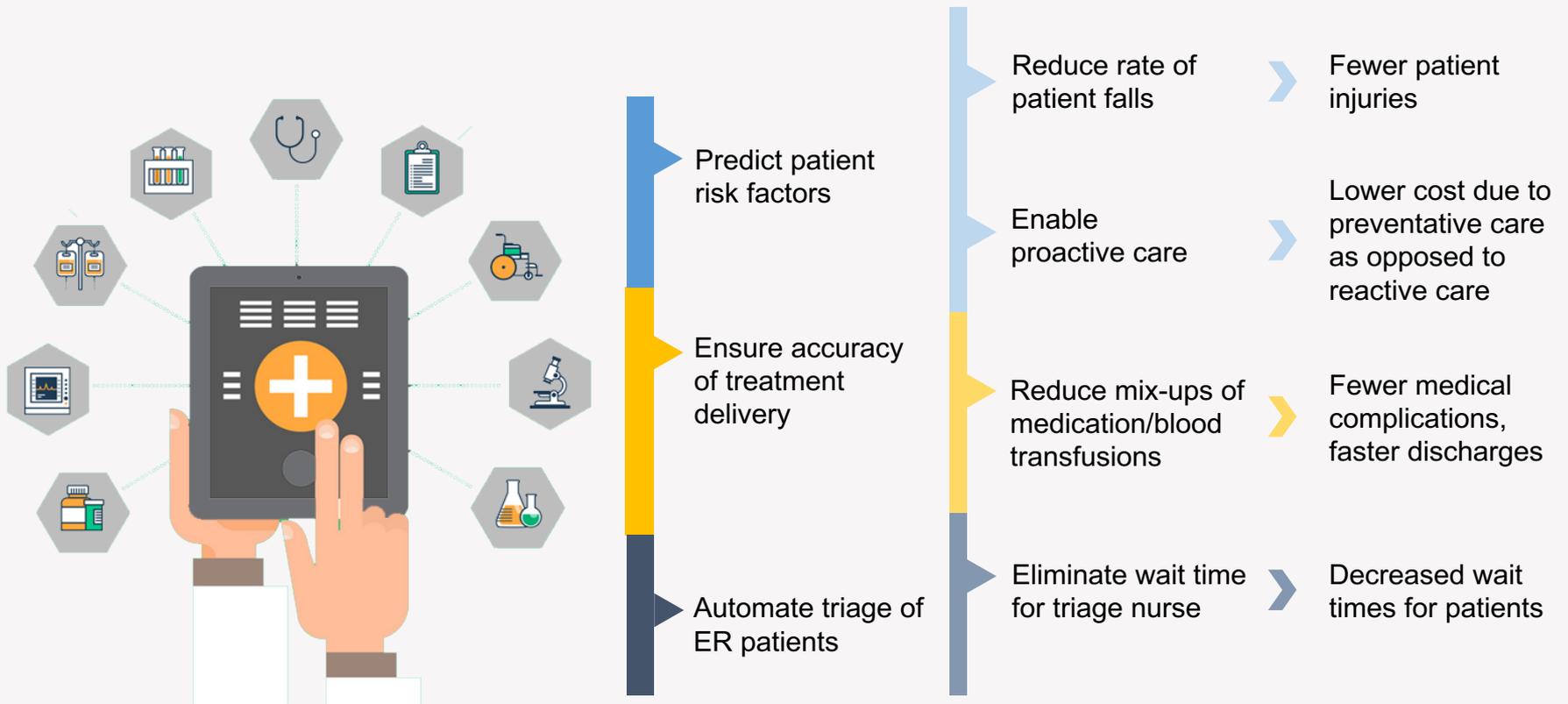
An **easy-to-use, interactive** online/mobile app will bridge the gap between patients, technology, and physicians





ARTIFICIAL INTELLIGENCE

Artificial intelligence will actively communicate between patient and physicians to **provide key insight** in patient health



KEY ENABLERS & CHALLENGES

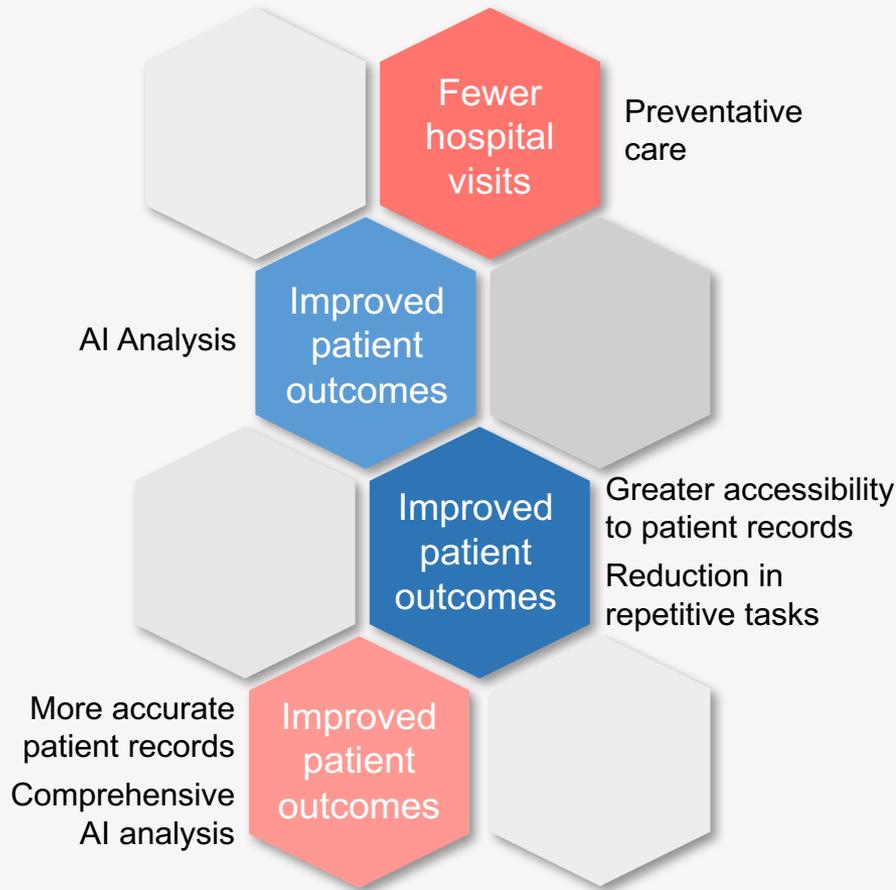


Key Enablers

- ❖ Clear communication regarding benefits of new developments in the healthcare system
- ❖ Buy-in from healthcare professionals
- ❖ Building on provincial electronic health record systems
- ❖ Fiber optic internet to support timely data transfer
- ❖ Data centers throughout Canada to store information

Challenges	Mitigation Tactics
Healthcare is regulated by provincial bodies	Wearable/automated technology streamlines collection of health information
Collecting health data	State-of-the-art cyber security technology to encrypt information
Concerns over privacy of personal data	Pilot technology to early adopters for proof of concept
Resistance to adopting new technology	

IMPACT TO HEALTHCARE



- ❖ Reduce **wait times** at hospitals
- ❖ Increase number of people getting **next day appointments** after visiting the emergency department
- ❖ Decrease the **length of time** it takes to see a specialist and receive treatment

RPA & AI implementation
will lead to faster patient
on-boarding, more efficient
allocation of medical resources,
and better care for all