



**DIGITAL HEALTHCARE**  
**Patient Engagement and**  
**Global Care**

July 17<sup>th</sup> 2018

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Vice Chairman  
Global Patient Services  
Cleveland Clinic









SUNDAY  
STOP

FOREIGN COUNTRIES REPRESENTED  
IN REGISTRATION.

1924

	<u>1922</u>	<u>1923</u>	<u>1924</u>
Africa.....			1
Australia.....		3	4
Austria.....		1	1
Bahrein.....			1
Belgium.....		1	2
Canada.....	24	20	6
China.....	4	3	2
Cuba.....		1	
Czechoslovakia.....		3	
Denmark.....	1		2
England.....	7	6	4
France.....		2	2
Germany.....		1	2
Holland.....	2		
India.....	1	1	
Ireland.....	2		
Japan.....	5	2	1
Korea.....			1
Mexico.....	1		
New Foundland.....		1	
New Zealand.....	3	2	2
Norway.....	1		
Persia.....	1		
Poland.....	1		
Porto Rico.....		1	1
Scotland.....	3	2	1
South America.....	5	4	1
Sweden.....	7		2
Switzerland.....	2	1	1
Tasmania.....	1		





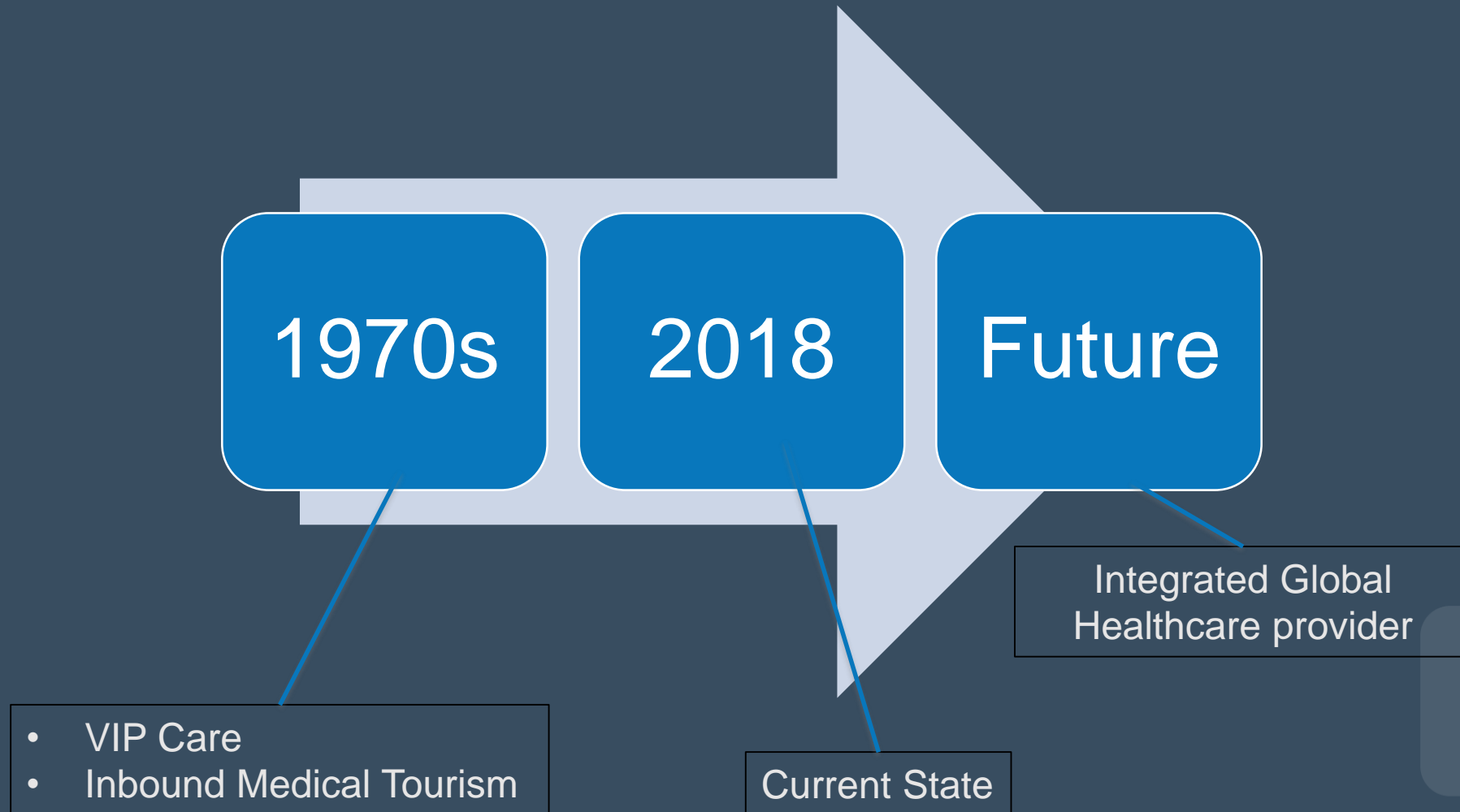




Cleveland Clinic  
Sydell & Arnold Miller Family Pavilion



# Evolution of the Cleveland Clinic Model



# Patients Traveling

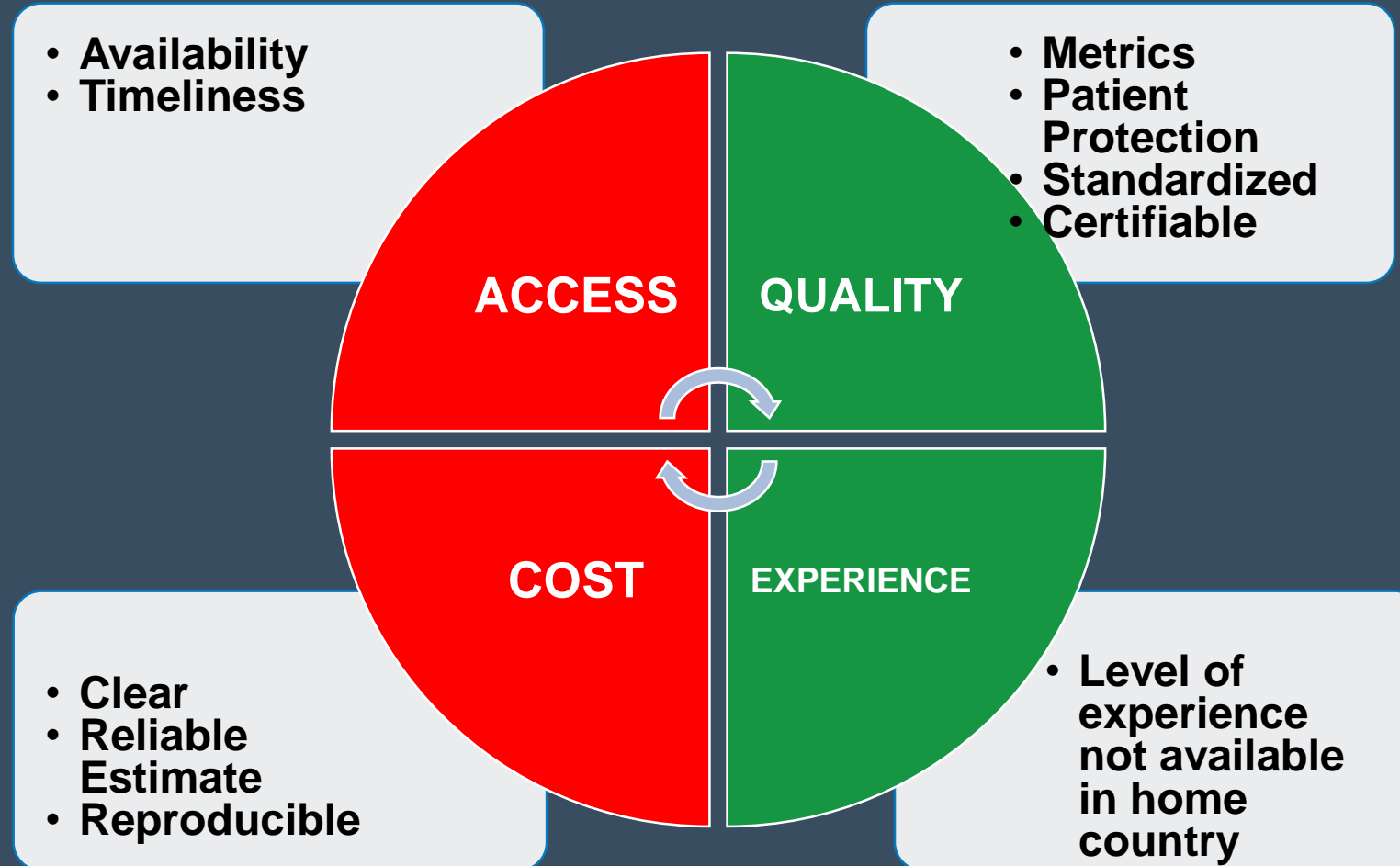




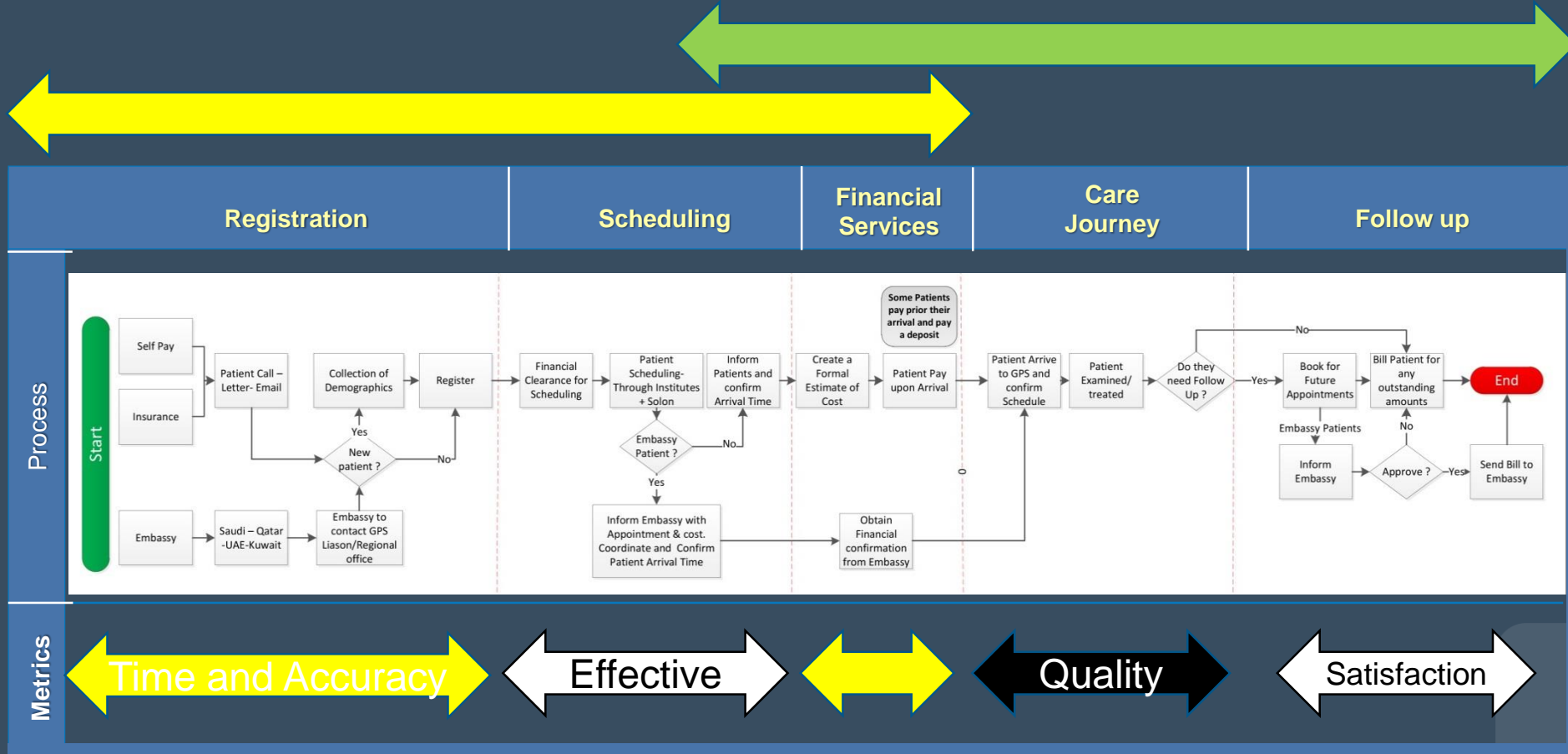


# International Patients

## Opportunities and Challenges







# Current Challenges

Definition

Archiving

Digital Format

Instant Access

Instant Access

Cyber Security

Financial Estimation

Regulatory

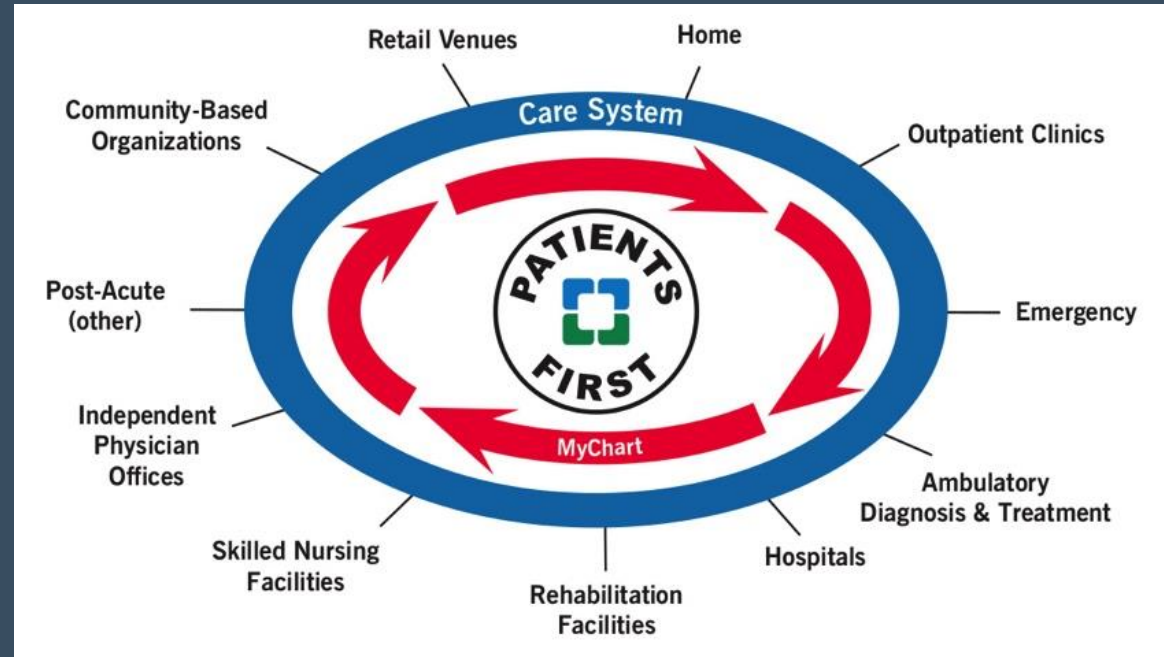


# Meeting the Patients





# Patient Centered Integrated Health Care Model















كلينيك كليفلاند أبو ظبي  
Cleveland Clinic Abu Dhabi







# GLOBAL PATIENT SERVICES | CY2017

*Top countries | Volume*

GPS  
IMPACT  
TO  
CCF








**Cleveland Clinic  
North America**  
(Cleveland, Nevada, Florida, Toronto)

**600+ million**



**Cleveland Clinic  
London**

**1.2+ billion**

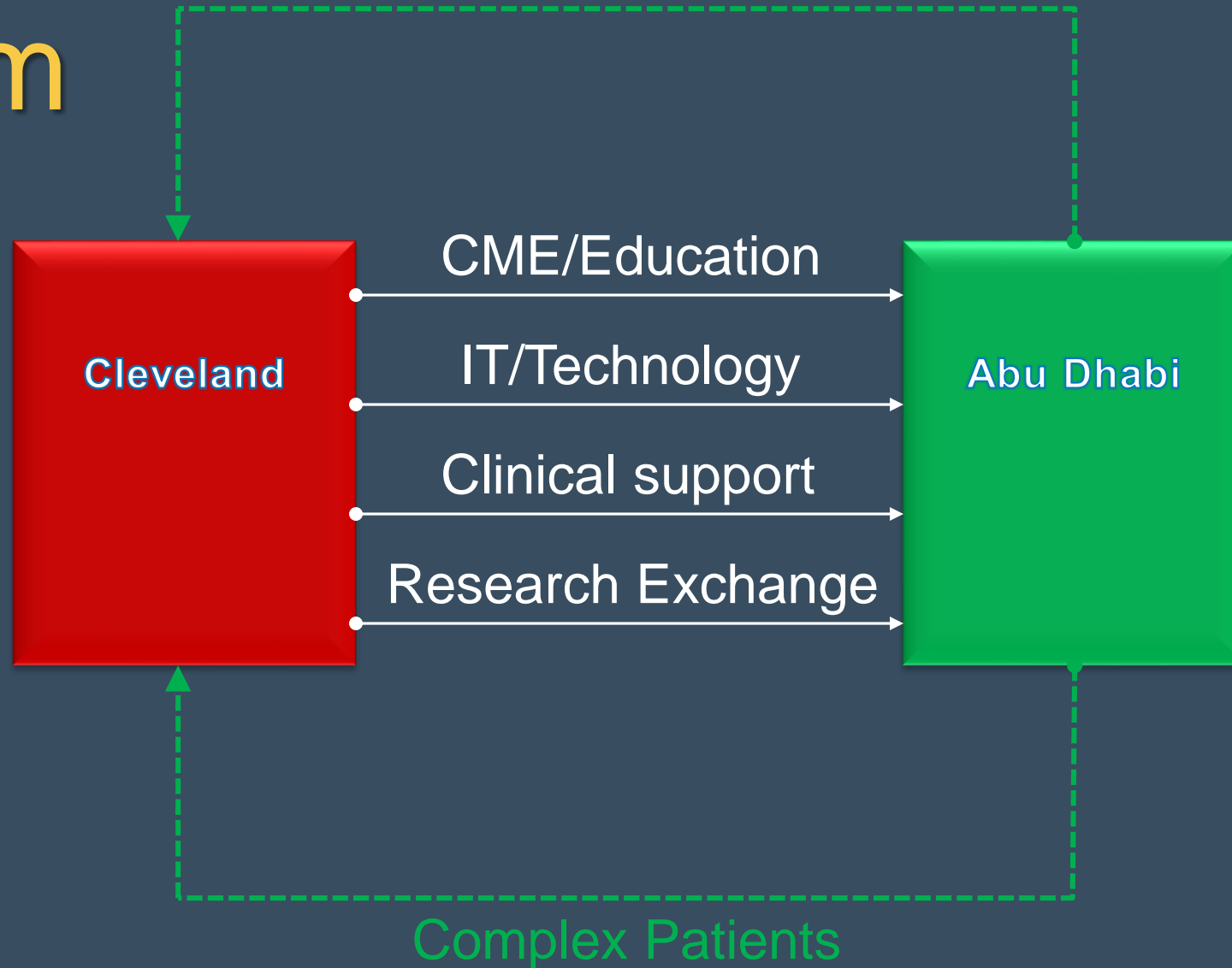


**Cleveland Clinic  
Abu Dhabi**

**2.9+ billion**

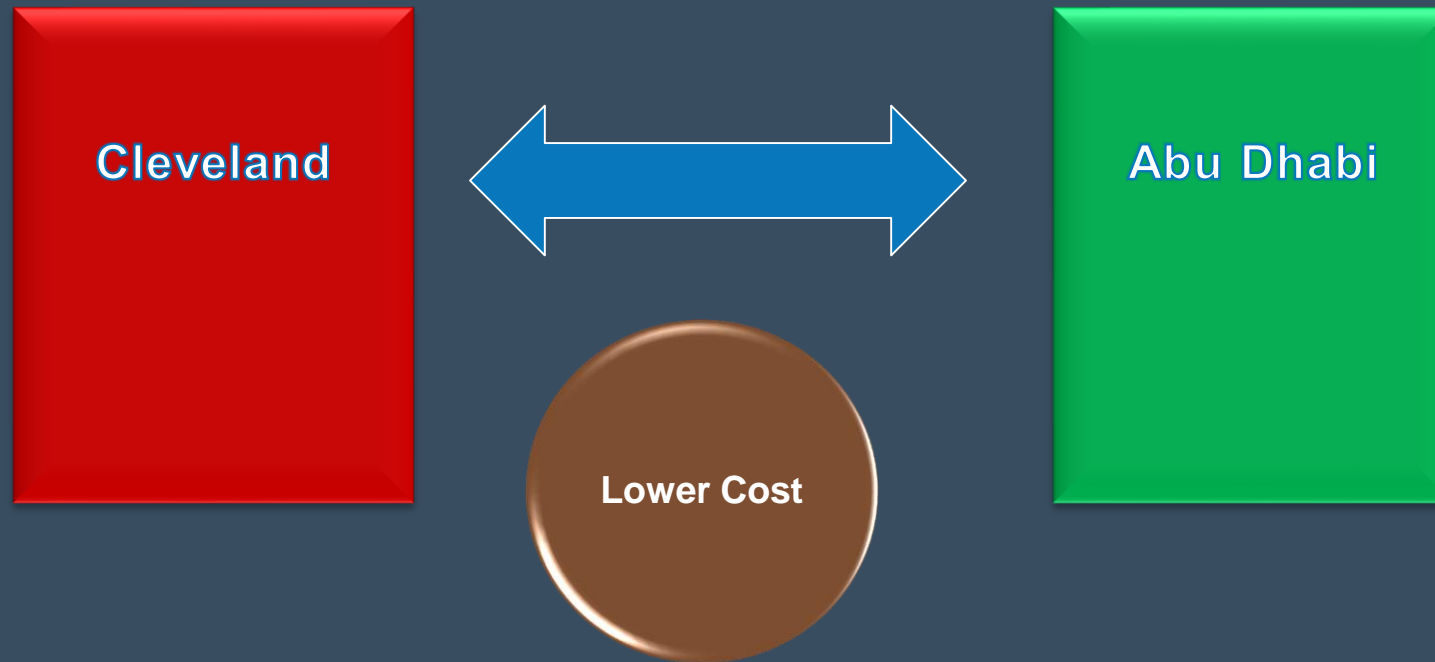


# Global System



# CCAD Experience

- US-trained physicians and care team (cultural sensitivity)
- Use of evidence-based clinical guidelines
- A satellite facility of world-renowned US hospital
- Care coordination after returning home

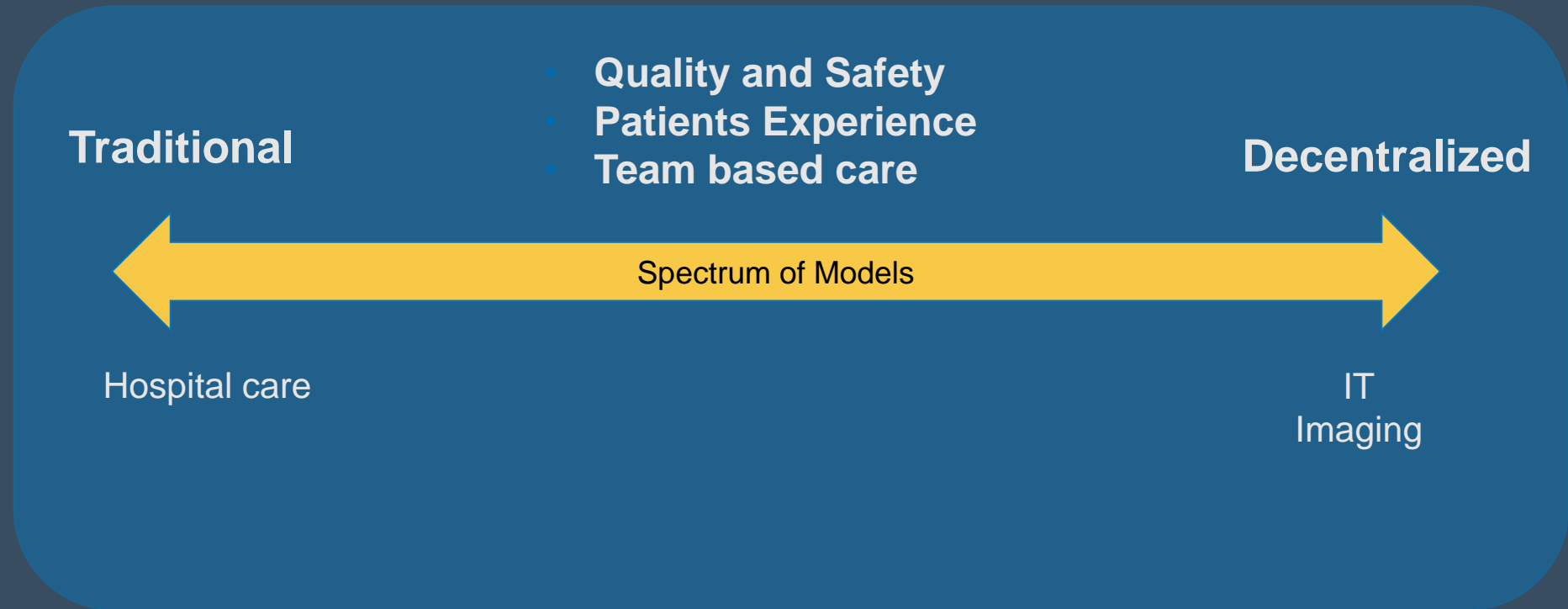




# The Future



# Care Model Design



Assumptions:  
Team Based  
Preservation of Identity, Brand

# DIGITIZATION EFFORTS IN PROGRESS

TECHNOLOGY

Mapping current  
state

Designing future  
state

Exploring tools/  
technologies for  
decision support,  
automation,  
transparency

- EPIC workflows
- Salesforce.com
- CyraCom
- Executive/Ops  
Dashboards



# Distance Health

	Real Time “Synchronous”	Store and Forward “Asynchronous”
Visits	<b>Virtual Visits</b> Live Audio / Visual connection with patient (branded Express Care on Line)	<b>eVisits</b> Structured online patient self-history and provider response  <b>Chronic Disease Management</b> Collect patient home-biometric information
Consults	<b>Virtual Consults</b> Live Audio / Visual connection to Care Team (Virtual Rounding)	<b>MyConsults</b> 2 <sup>nd</sup> opinions requested by outside providers/patients  <b>eConsults</b> PCP to specialist

# MyConsult Online 2nd Opinions

**1,400+** medical/ surgical  
diagnoses

Access to **425+** specialists

Patient report within 14 days

Delivered in 50 States, and  
over 115 Nations to date

## Most-requested diagnoses:

1. Coronary artery disease
2. Atrial fibrillation
3. Prostate cancer
4. Urology Tumors
5. Mitral regurgitation
6. Breast cancer
7. Aortic stenosis
8. Epilepsy
9. Lumbar disc Herniation
10. Degenerative Spine

# eVisits

- Common acute problems
  - Back Pain, Sinus Symptoms, UTI, Cough, Vaginal Yeast Infections
- Chronic Care
  - Dermatology, POTS, Hypertension
- More under development

The screenshot shows a patient's eVisit for Back Pain. It includes sections for medication and allergy updates, and a table of answers to questionnaire questions.

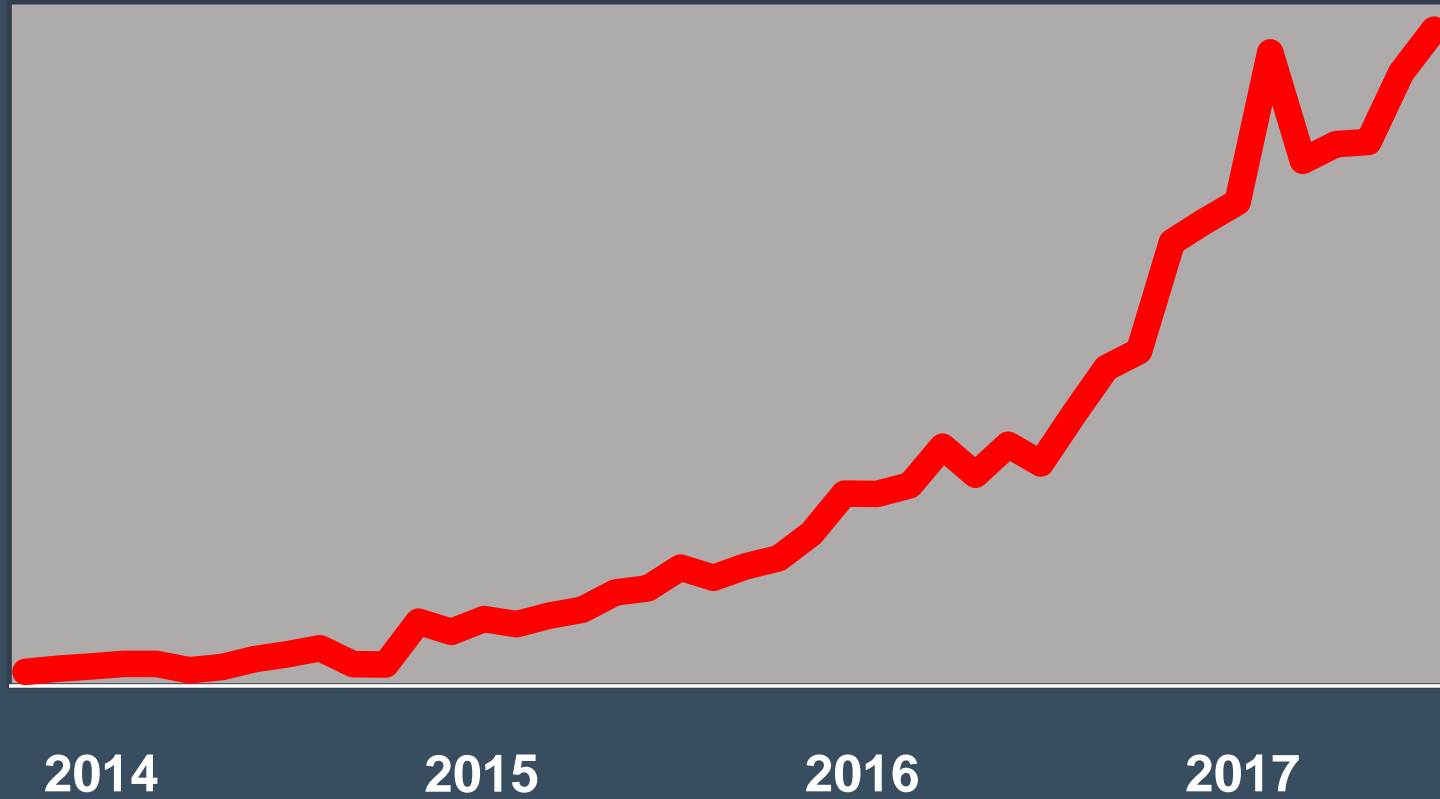
Question	Answer
Are you currently in the State of Ohio as you complete this questionnaire?	Yes
Where are you having pain	Middle Back
Does the pain extend into your legs?	No
How bad is the pain?	The pain is mild
Did you have an injury that caused the pain?	No, I cannot remember an injury
How long has the pain been present?	More than 2 days but less than 1 week
Have you had back pain in the past?	Yes, I have many times had pain similar to this before
Please list any medications you have previously taken for back pain.	None



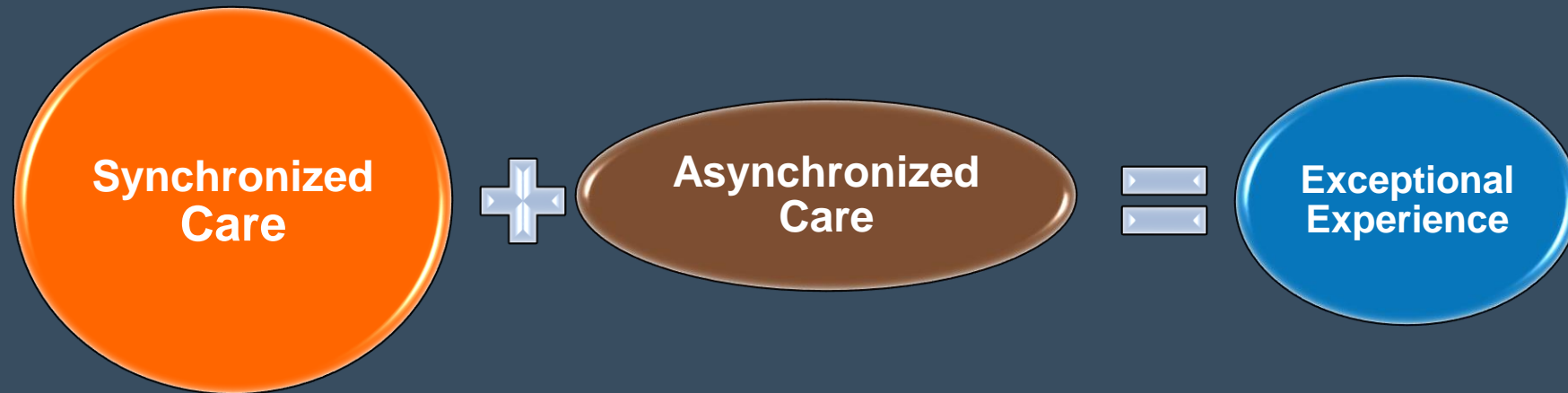
# Care Online

# Outpatient Virtual Visits

**2,110**  
per month



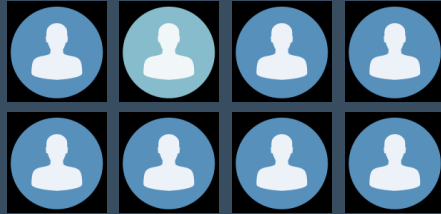
# Providing An Exceptional Experience



# eHospital

The Hospital of the “Future”

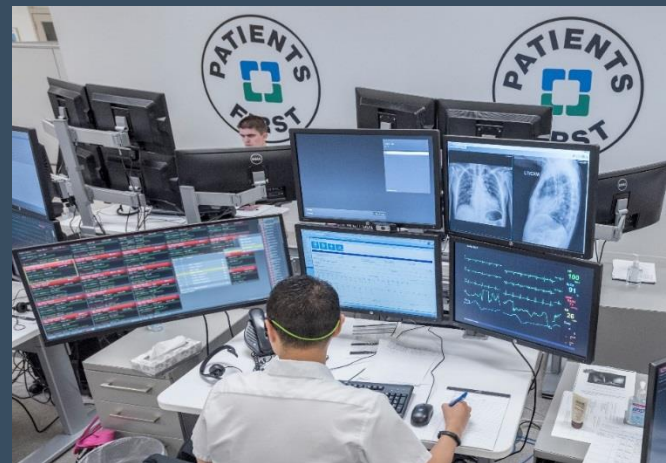
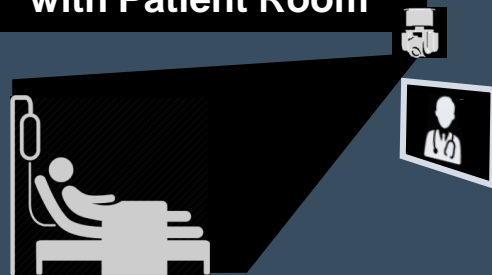
Population Health  
Risk Prioritization



Access to All  
Available Patient  
Information



Video Communication  
with Patient Room





# eHospital – Nocturnal eICU

- 300 beds
- Context sync'd EMR access
- Image and waveform view
- A/V conference
- Decision support
- Risk stratification



# International Challenges

- Regulatory/Legal
- Infrastructure Compatibility
- Cost
- Human Factors
- Time Zones
- Cultural/ Expectations



- CME
- Administrative Education
- Leadership Development

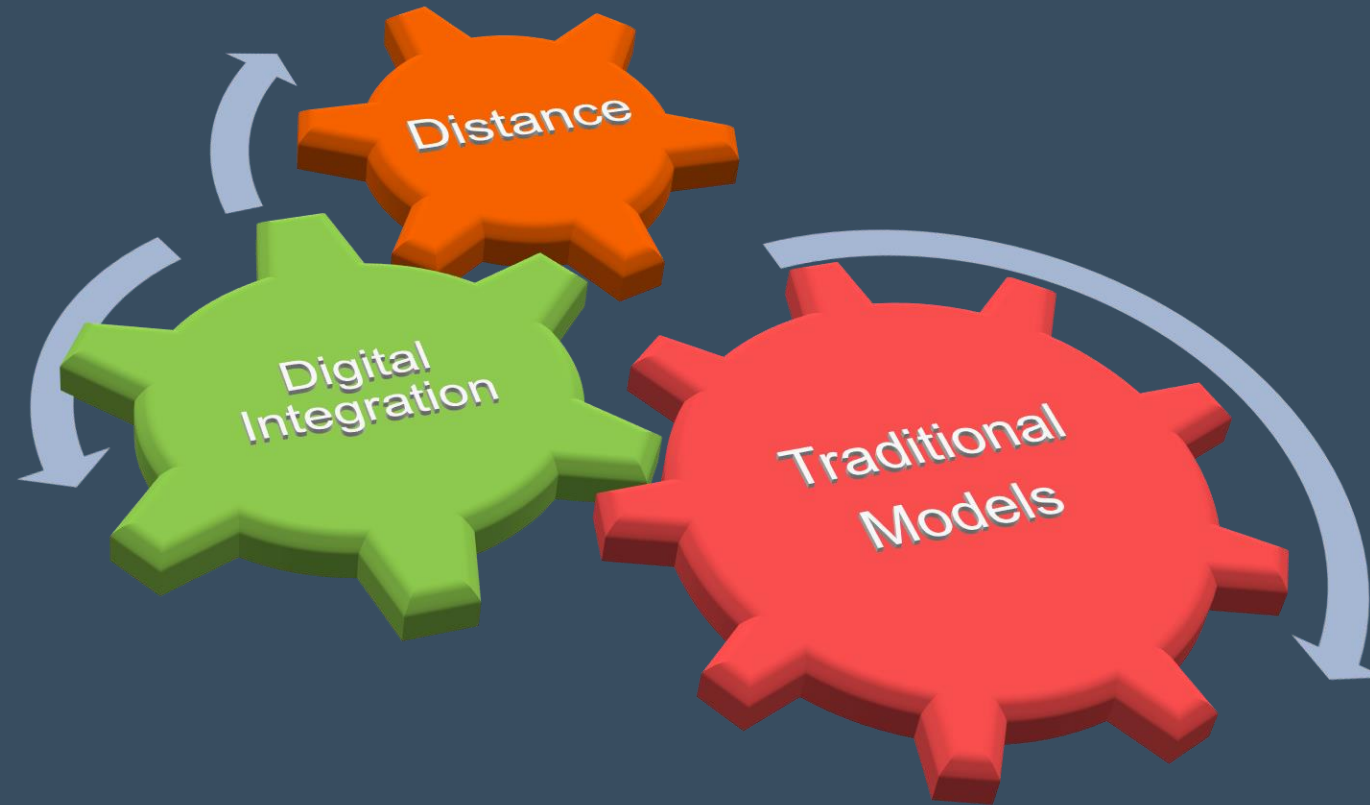
- Local Hospitals
- Weston
- Toronto
- CCAD 2015
- London 2020/2022



- Care and Delivery Pathways
- Human Resources

- Digital Integration
- Connectivity
- Patient Connectivity

# The Aim











**Every life deserves world class care.**