Innovative telehealth clinical work models

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@dr_igasto @VZazo
The Northern Health Region

- The Northern Health Region - Half of the size of the land area of Sweden
- University Hospital in the Region Västerbotten has the responsibility of the high specialised care for the inhabitant in the whole Northern Region.

The County of Västerbotten

- The Region Västerbotten is as large as Denmark to the surface and extends from the mountains in the north to coastline towns in the south.
- There are three hospitals in the county.

Challenges
- Diverse population
- Long distances

Goals
- Create proximity to and equal care regardless of place of residence

*Sweden is as large as UK, Estonia, Ireland, Denmark and Netherlands combined
Provision of equitable and accessible care, advice and services across all areas/regions.

Staff and clinicians are under great pressure and the health workforce shortage has become a challenge. Opportunity to support clinical teams and utilise technology to improve or change healthcare services.

Growth in expenditure

Increased demand lead to YoY growth in healthcare expenditure. Opportunity to re-design economical models, increase engagement, innovate clinical models to achieve improved services and outcomes.

Dispersed & Diverse

Provision of equitable and accessible care, advice and services across all areas/regions. Opportunity to leverage solutions to provide different services and care in remote or home locations.

ICT & Medical Technology

Increased use of information communication technology (ICT) and an integration with medical technology (convergence). Opportunity to leverage the potential at the intersection of ICT and medical technologies.

Opportunity to transform data to get insights - consumer, decision making and health service outcomes, cost of care, increase consumer and provider satisfaction.

Data Analytics & AI

Future Patients are here

Patient/consumer/family are demanding to be in the center and part of the care team. Opportunity to engage and involve empowered consumers and patients, etc.

Opportunity to improve interoperability and interactions in the ecosystem.

Consumer/Provider/Partner Interactions

Future Patients are here

Opportunity to engage and involve empowered consumers and patients, etc.

Access & communicate information between, specialists, hospitals, primary care, laboratories, insurance, pharmacies, etc.

Ageing Population

Larger population living with chronic disease and disability, which are leading to increased health and care demand.

Opportunity to transform the delivery of care.

Wearables and medical tracking apps, products and devices disrupting the health & care industry.

Opportunity to gain real-time information of customer needs and condition and provide selfcare and treatment.

Evidence based medicine

Political and societal pressures to use research evidence in decision making continue to rise. Opportunity to improve the evidence informed decision making and knowledge translation of evidence based prevention and inventions in healthcare.

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Healthcare Transformation

HOW DO WE OVERCOME THESE EMERGING CHALLENGES?

Competing Pressures

Consumers  External Environment  Partners  Workforce  Decision Makers

Needs

STRATEGY?
Is this the right direction to meet our needs?

CULTURE?
What is the impact to culture? How do we manage change?

PROCESSES?
How are we going to implement new tools, models, and processes?

TECHNOLOGY?
What technique do we need, have? What support is required?

EVALUATION?
How do we know that decisions we make are given the best care?

DELIVER THE BEST CARE

Partners
External Environment
Workforce
Decision Makers

HOW DO WE OVERCOME THESE EMERGING CHALLENGES?

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New governance arrangements for eHealth

To encourage and support the transformation of healthcare, the Region Västerbotten decided new governance arrangements for eHealth and a Chief eHealth Officer was appointed to establish the Department of eHealth with the commission to lead and strengthen eHealth transformation and to develop and implement strategies, in close collaboration with clinicians, for eHealth and ICT necessary to deliver the very best rapidly changing need for the best care.

This commission and responsibility comprised six objectives:

1. Strengthening governance, decision making, operational management and performance evaluation
2. Provide and enhance efficient consumer/patient-safe services and telehealth-/medicine applications and solutions
3. Innovate and renew, develop and invest in clinical care and business support systems
4. Improve interoperability - information structure, integrations and architecture
5. Enhancing the support and delivery, maintenance and robustness of ICT and Medical Technology
6. Achieve the national and the regional objectives of eHealth
+40 clinical telehealth work models

BENEFITS

- Provision of equitable and accessible care, advice and services across all areas/regions
- Convenience for patient – reduced travel time
- Increase patient engagement
- Need to reduce service costs

IMPROVEMENT AREAS

- Generation and dissemination of evidence
- Establishment and spreading of routines and economical models
- Education
- Technology and facilities
- Attitudes and values

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Teledermatology in Västerbotten Insights from a Specialty care setting

- Expanding access to care
- Delivering the highest level of clinical care
- Providing a good experience for the patient
- *Dermatology is uniquely suited for telemedicine because of the largely visual component involved in the diagnosis.*
Healthcare Transformation

- Online consultations - Videoconference
- Store and forward - Digital images – Electronic medical record (EHR)
- Teledermoscopy - Skin cancer screening
- Leadership and supervision at a distance

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Healthcare Transformation

2000

Online consultations 40-50/ month

Specialist shortage – Avoiding long distance travel- Waiting times

Needs

2002

Teledermatologi sparar tid och pengar
Liknande sammansättning bättre, vården bättre lottas

Deliver the best care

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@VZazo
Healthcare Transformation

Store and forward-Digital images EMR

2005

Needs

+ STRATEGY
  + BUSINESS MISSION
  + STRATEGY
  + GOALS
  + ROADMAP

+ CULTURE
  + EMPLOYEES
  + PARTNERS
  + LEADERSHIP
  + ENGAGEMENT

+ PROCESSES
  + PROCESSES & INNOVATION
  + POLICIES
  + FINANCE MODEL

+ TECHNOLOGY
  + TECHNOLOGY TOOLS
  + MAINTENANCE
  + SUPPORT

+ EVALUATION
  + EVALUATE
  + TARGET
  + INSIGHTS
  + LEARNED

= DELIVER THE BEST CARE

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Healthcare Transformation

Equal skin cancer screening model - Teledermoscopy

2014

Reducing surgical procedures/costs

Needs

STRATEGY
BUSINESS MISSION
STRATEGY
GOALS
ROADMAP

CULTURE
EMPLOYEES
PARTNERS
LEADERSHIP
ENGAGEMENT

PROCESSES
 PROCESSES & INNOVATION
POLICIES
FINANCE MODEL

TECHNOLOGY
TECHNOLOGY
TOOLS
MAINTENANCE
SUPPORT

EVALUATION
EVALUATE
TARGET INSIGHTS LEARNED

= DELIVER THE BEST CARE

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Healthcare Transformation

Leadership and supervision at a distance
Brisbane-Sweden (Västerbotten)

2017

Needs

STRATEGY
BUSINESS MISSION
STRATEGY
GOALS
ROADMAP

CULTURE
EMPLOYEES
PARTNERS
LEADERSHIP
ENGAGEMENT

PROCESSES
PROCESS & INNOVATION
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= DELIVER THE BEST CARE

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Conclusion

• Technology as a tool not a goal
• Digital health is not about understanding technology, it’s about understanding people
• Building trust
• To strengthening the governance of transformation of healthcare is essential in reaching the sustainability and well excepted clinical work models
• Telemedicine is an important contribution to a sustainable health system in Västerbotten
Questions?

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Link to the telemedicine survey