LSE-Roche WCLS Event

Barriers and Enablers in Health System Reform

Learnings from a Case Study

19th November 2025

Ms Caitlin Main
Medical Technology Research Group, LSE Health

LSE THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

Project objectives & Methodology

Identify examples of transformation (**case studies**) across 3 key areas in OECD countries

- Highlight common policy **barriers** & **enablers**

Service delivery decentralisation

Effective and early screening, diagnosis & treatment

Health workforce development

Targeted literature review to identify examples of reform

Semi-structured interviews with key stakeholders

Case Study Deep Dive

Service delivery decentralisation

A deliberate shift of healthcare services, decision-making, and resources from hospital-based systems toward primary and community care settings

Telechemotherapy in Queensland

Triggers → Intervention → Implementation → Barriers → Enablers → Impact

Healthcare inaccessibility for rural populations reported as primary trigger

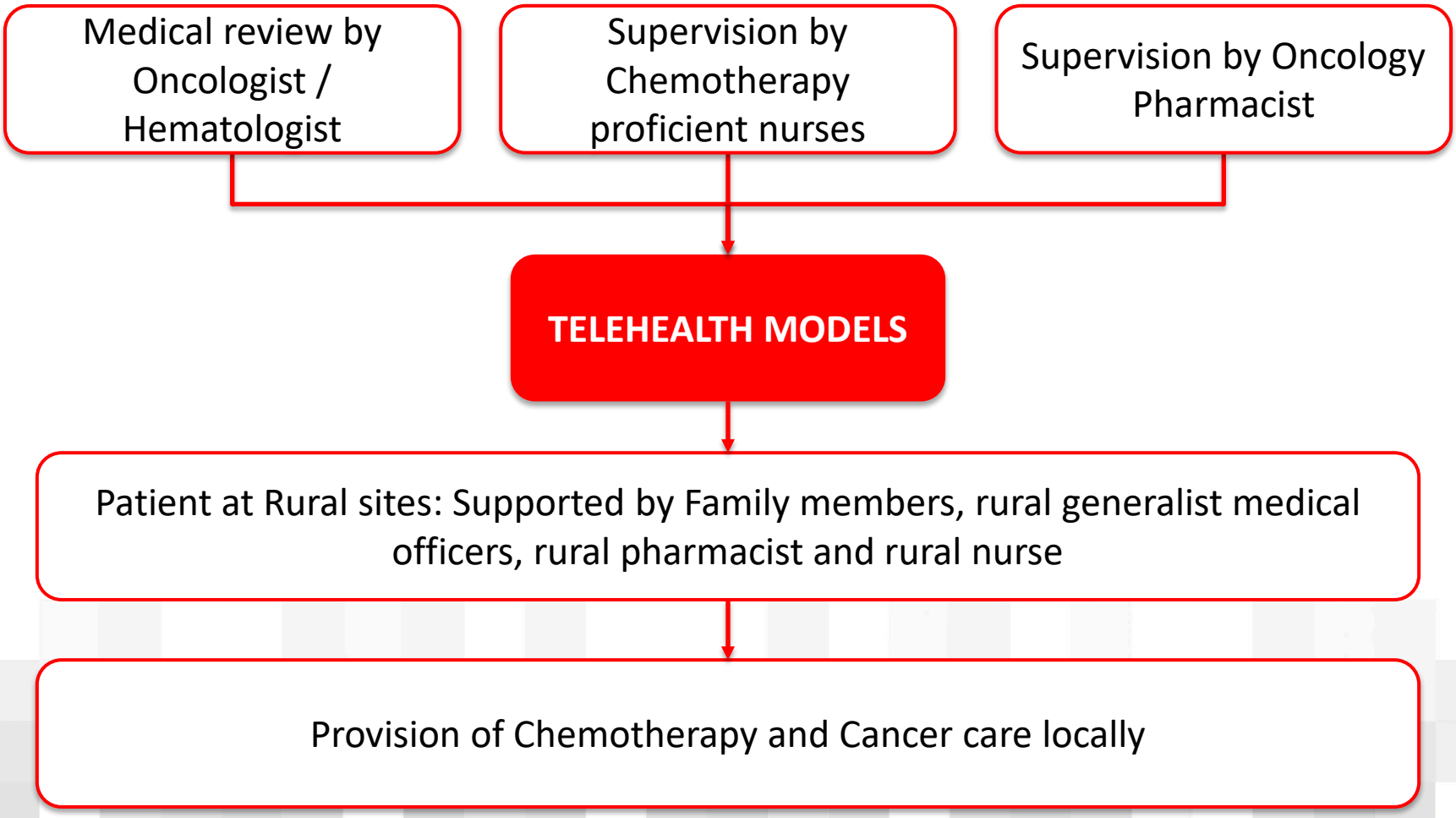
- Access challenges in small rural and indigenous communities
  - Limited access to specialist cancer services due to:
    - Low patient volumes
    - Difficulty attracting skilled workers
    - Inadequate supportive care infrastructure
  - Patients required to travel long distances or relocate for chemotherapy
- Equity of Care
  - Telehealth models are seen as a solution to provide equitable access to safe, quality chemotherapy services **locally**

Queensland Remote Chemotherapy Supervision (QReCS) Model

Purpose: Deliver safe, effective chemotherapy in small rural towns through remote supervision, improving access and equity of care

Core components:

- Rural generalist nurses complete a 3-day clinical training and administer chemotherapy and biologics locally
- Supervision is provided remotely by chemotherapy-proficient nurses from larger centres via a telenursing platform
- Local support from rural generalist medical officers and pharmacists
- First doses are provided in primary centers to test for adverse effects and reactions


Medical review by Oncologist / Hematologist
Supervision by Chemotherapy proficient nurses
Supervision by Oncology Pharmacist
TELEHEALTH MODELS
Patient at Rural sites: Supported by Family members, rural generalist medical officers, rural pharmacist and rural nurse
Provision of Chemotherapy and Cancer care locally

Pilot Launch in Ingham:

- Initiated in Ingham to identify challenges and refine the model before broader rollout

Stakeholder Engagement:

- Doctors, nurses, and pharmacists actively lobbied health service executives and senior managers to support implementation

Securing Funding

- $2.4M AUD secured from Queensland Health
- Funded key roles: Telechemotherapy Coordinator, part-time Medical Oncologist, and two full-time nurses
- Additional infrastructure funding obtained by some rural towns

Implementation Management

- A 20-member team of health professionals and managers from five hospital and health services was formed
- Oversaw implementation, managed funds, and developed a detailed project plan
- Monthly virtual meetings held to monitor progress and address barriers

- **Supply and logistics**:
  - Delays in medication transport due to weather disruption in rural areas
- **Workforce challenges**:
  - High turnover of senior management and nursing staff in smaller health services
  - Loss of continuity and increased burden of training new staff
- **Technology limitations**:
  - Unreliable internet connectivity between primary and satellite sites
- **Training gaps**:
  - Limited chemotherapy-specific skills among nurses at satellite centres
- **Governance constraints**:
  - Lack of formal authority among clinical team members over rural site staff
  - Difficulty maintaining momentum and accountability across sites

- **Strong leadership and multidisciplinary collaboration:**
  - Engagement of health professionals and managers across Queensland
  - Inclusive forums enabled diverse expertise from project conception to rollout
- **Executive support & funding:**
  - Backing from health service chief executives
  - $2.4M AUD secured from Queensland Health Innovation Fund
- **Integrated digital infrastructure:**
  - Common EHRs and telehealth systems across primary and satellite systems
  - Shared oncology information systems with synchronized protocols and care plans
- **Government incentives:**
  - Financial incentives for doctors participating in telehealth
  - Endorsement of a Queensland health guide for consistent methodology across the sites

- Successfully implemented in 6 rural towns (2014-2016)
  - 62 patients received 327 cycles of chemo
- Now integrated into routine chemotherapy services across North Queensland
- Other subspeciality departments used system set-up for different types of medication
- The Clinical Oncology Society of Australia developed the Australasian Teletrial Model on the basis of the experience of QReCS
- System impacts: nurses ‘upskilled’ as a result of additional training and responsibilities; fostered collaboration; patients experienced less crowding, shorter wait times, reduced travel

The Path Forward: From Pilot to Policy

- QReCS proves that decentralised, technology-enabled care models can deliver safe, effective chemotherapy in rural settings
- Its expansion from 6 pilot sites to statewide adoption offers a scalable blueprint for health systems tackling:
    - Geographic inequity
    - Rising healthcare costs
    - Hospital capacity constraints
- Success was driven by:
    - Executive support and funding
    - Strong stakeholder engagement across all system levels
    - Robust digital infrastructure
- QReCS exemplifies how transformative health policy can translate into measurable improvements in access, quality, and system sustainability

Thank You

Jennifer Gill: J.Gill7@lse.ac.uk
Caitlin Main: C.A.Main@lse.ac.uk
Kavyashree Satish: K.Satish1@lse.ac.uk
Danitza Chavez-Montoya: D.L.Chavez-Montoya@lse.ac.uk
Panos Kanavos: P.G.Kanavos@lse.ac.uk