Welcome to London Global Cancer Week

Rwanda Cancer Patient Navigation - A Pathway To Health Equity: Stories From The Field

Marlene Mumukunde

City Cancer Challenge Kigali Project Coordinator

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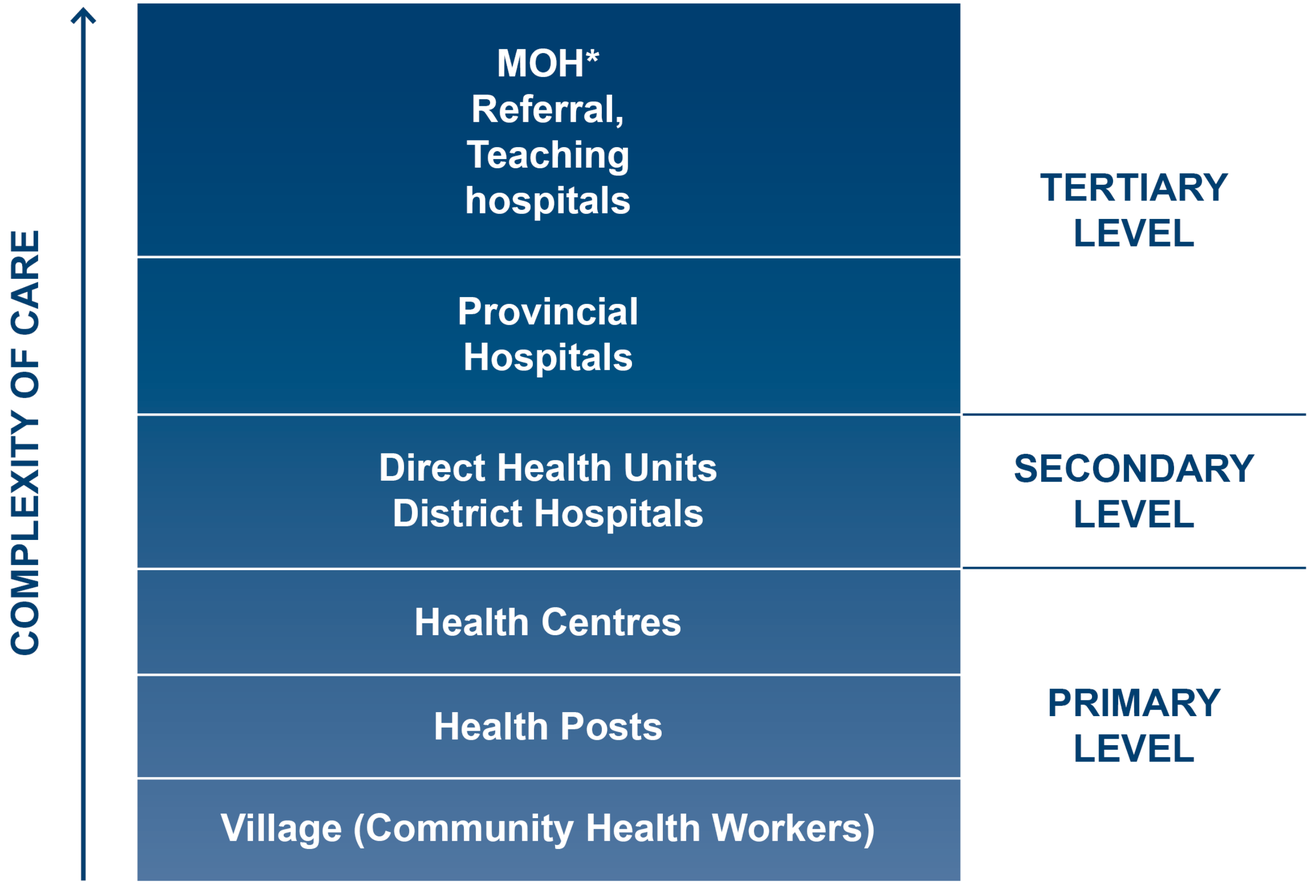
My Name is Mutoni and I am a breast cancer patient…

STORY FROM THE FIELD: THE CASE OF MUTONI

The Rwandan Health System



> *"I went through almost all of the cancer centres in the country. I started at the health center, then district Hospital, and then transferred to a tertiary Hospital…I was transferred to another hospital for a test…I had to be referred again because of financial constraints"* - Patient

> "*The challenge for these patients and cancer treatment in general is that diagnosis and treatment is not in one place. It is done at different centres and facilities in the country. There is pathology at Butaro, treatment and surgery in other centres and patients are often referred from one facility to another depending on the need*." - Clinician

RWANDA PATIENT NAGIVATION A

Key solution in cancer care

Challenges identified during Kigali Needs Assessment

- Referral inefficiencies
- Lack of system integration and data sharing across institutions
- Lack of coordination of multidisciplinary patient care journeys

Objectives of the Patient Navigation Project

- Provide care coordination and patient navigation from cancer suspicion to end of treatment
- Facilitate data sharing and communication around patient cases across institutions
- Increase capacity of cancer institutions through training and CD

LAUNCHED IN 2021

Cancer patient navigation project

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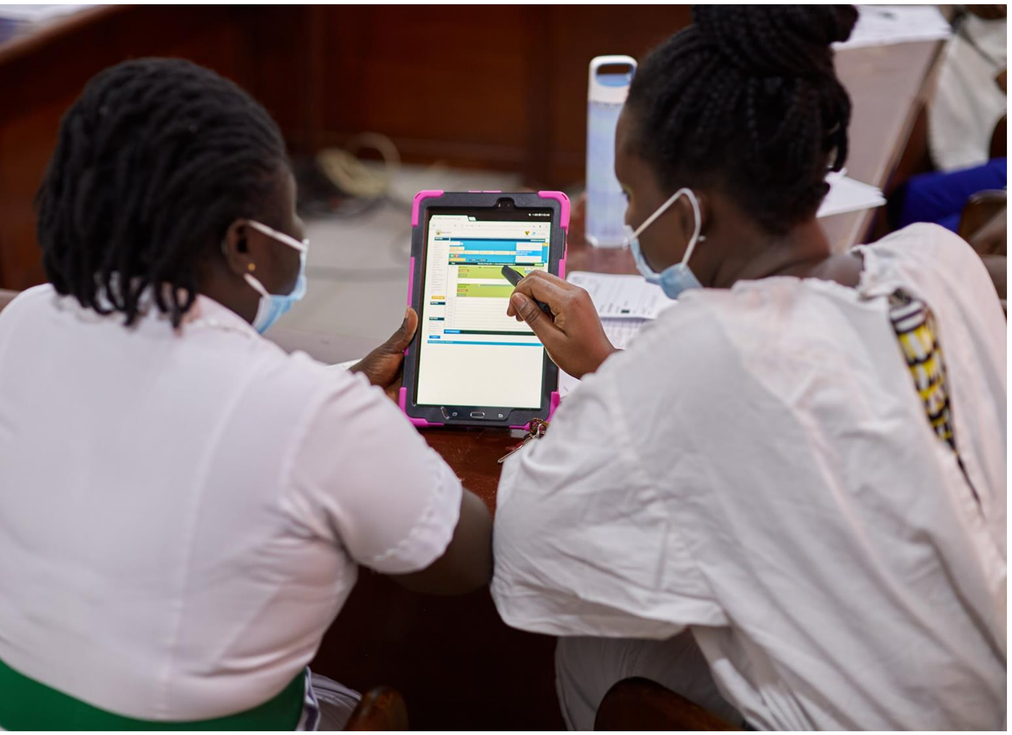
PROJECT PARTNERS

Creating change



Rwanda Biomedical Centre

Project implementing institution

City Cancer Challenge Foundation

Capacity building & resource mobilization partner

All Medical Inc.

Technology partner (Joint Application)

Implemented

In five main cancer centres of the country

THE POWER OF

Partnerships

CAPACITY

Development delivered

Three clinicians conducted a scientific visit to Barcelona to observe principles of MDT care

Rwandan Patient Navigators (PNs) completed a 10 session virtual training on how to set up a patient navigation program

The local PNs also benefited from the scientific visit to Nairobi

Training of trainers provided to 23 healthcare providers at least four from each institution

What does navigation look like?

- Receive referred patients from connecting with other navigators
- Orientation of patients inside the facility

→ Reception →

- Support patients to receive timely diagnosis inside and outside hospital
- Remind patient to collect results (book appointment)

→ Medical consultation ↓

- Orientation and accompaniment
- Counselling

← Oncology ward for chemo/pharmacy ←

- Book appointment for chemo sessions
- Remind patient of appointment
- Patient education and counselling

METRICS

Key project advancements

1,354

Patients benefitting from the service

60

Clinicians registered On the platform

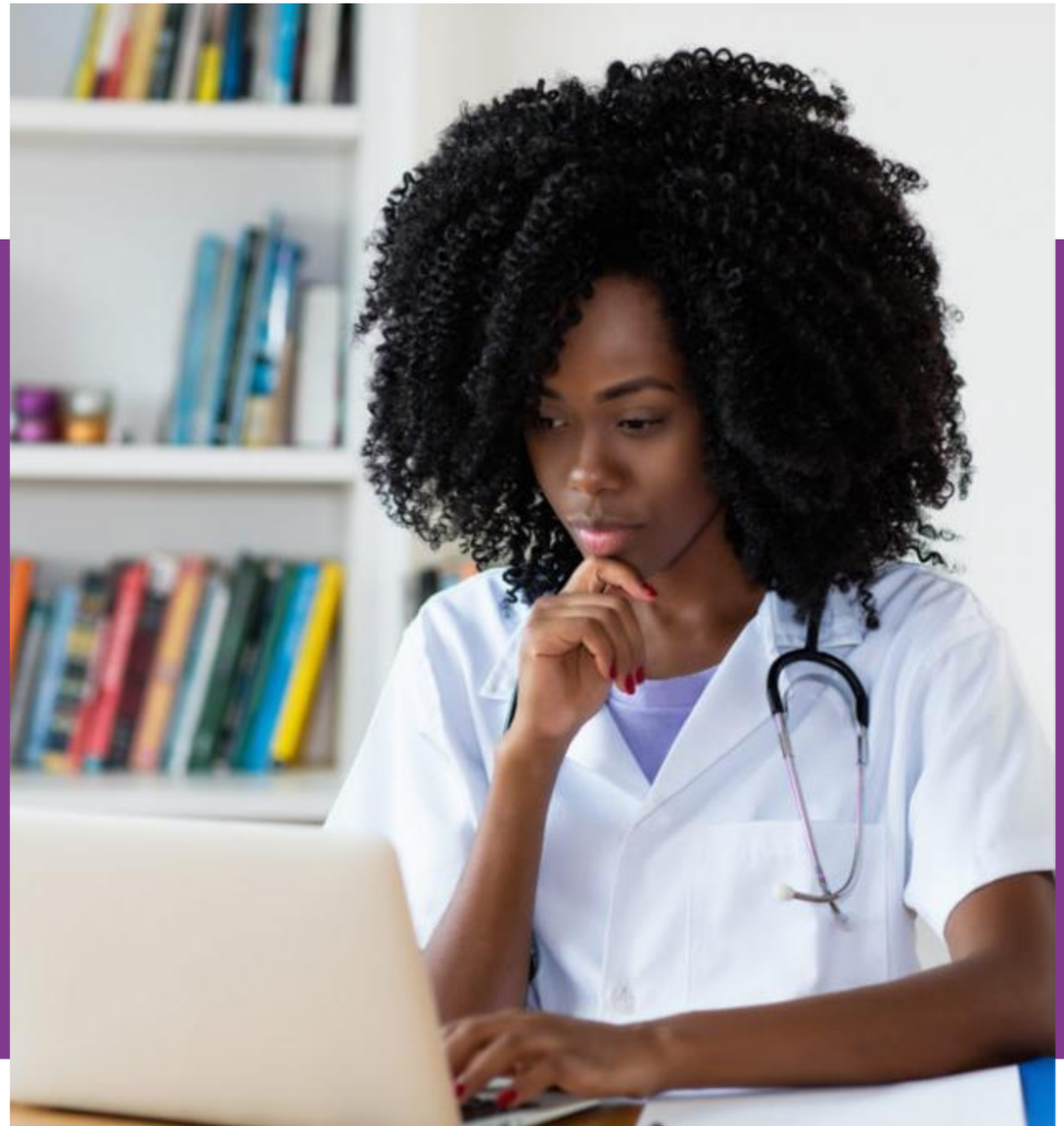
5/5

Cancer centres covered with nurse navigators and digital app

Patients exposed to the project CPN vs those with no exposure to CPN

Indicator	No DCPN N=2115	DCPN N=289	Total
Treatment initiated (%)			
In < = 90 days	66.1	92.0	69.2
In >90 to <180 = days	15.3	6.6	14.3
In >180 days	18.6	1.4	16.5

The project improved the time to initiation of treatment with 92% of patients starting treatment within 90 days after diagnosis.



WHAT CLINICIANS SAY ABOUT

Patient navigation

"To me, the navigator has become a very important part of the cancer programme and helps in a lot of areas. The navigator has been able to help here as well as he can get results on behalf of the patient and communicate with the patient about when to collect results and the next steps. This does greatly reduce the burden on the patient."

- Clinician

"Another area where we have benefited is that treatment initiation is now much faster with the help of the patient navigator. Many of the patients can be lost to follow-up due to several reasons (referrals, financial and psychosocial burdens, stigma)…. so treatment retention is also positively affected."

- Clinician

WHAT PATIENTS SAY ABOUT

Patient navigation

“The navigation makes our treatment process easy. The navigator contacts us to confirm appointment after surgery instead of going and coming back and forth.” Patient

“*The navigator was helping me throughout. I nearly gave up because of financial difficulties, but the navigator linked me with Butaro hospital, where I was able to get help. She even communicated with my husband and daughter to encourage us.*” Patient

“*The navigator is like my own son. If every doctor was like him, people would get cured quickly. I came to get my results at CHUK and the navigator helped me to understand that the disease is a condition that can be defeated. I came to accept my condition and even before seeing the doctor.*” Patient

A SOLUTION IN

Sustainability

- Advocacy for institutionalization of navigation services by MoH
- Expansion to more cancer types and scale up to District Hospital levels
- Speed up the HIE strategic plan
- Publication of findings to inform policy decision in Sub Saharan Africa

THANK YOU

CONTACT

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In Conversation
Marlene Mumukunde, C/Can and Michael Oberreiter, Roche

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Nursing – Innovative approaches to global cancer burden challenges

Margie Hjorth
Icon Group Director of Nursing

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HEALTHCARE

Partnerships

- **Technology**
- **International expertise**
- **Collaboration**

Exchange

- Knowledge
- Experience
- Best practice

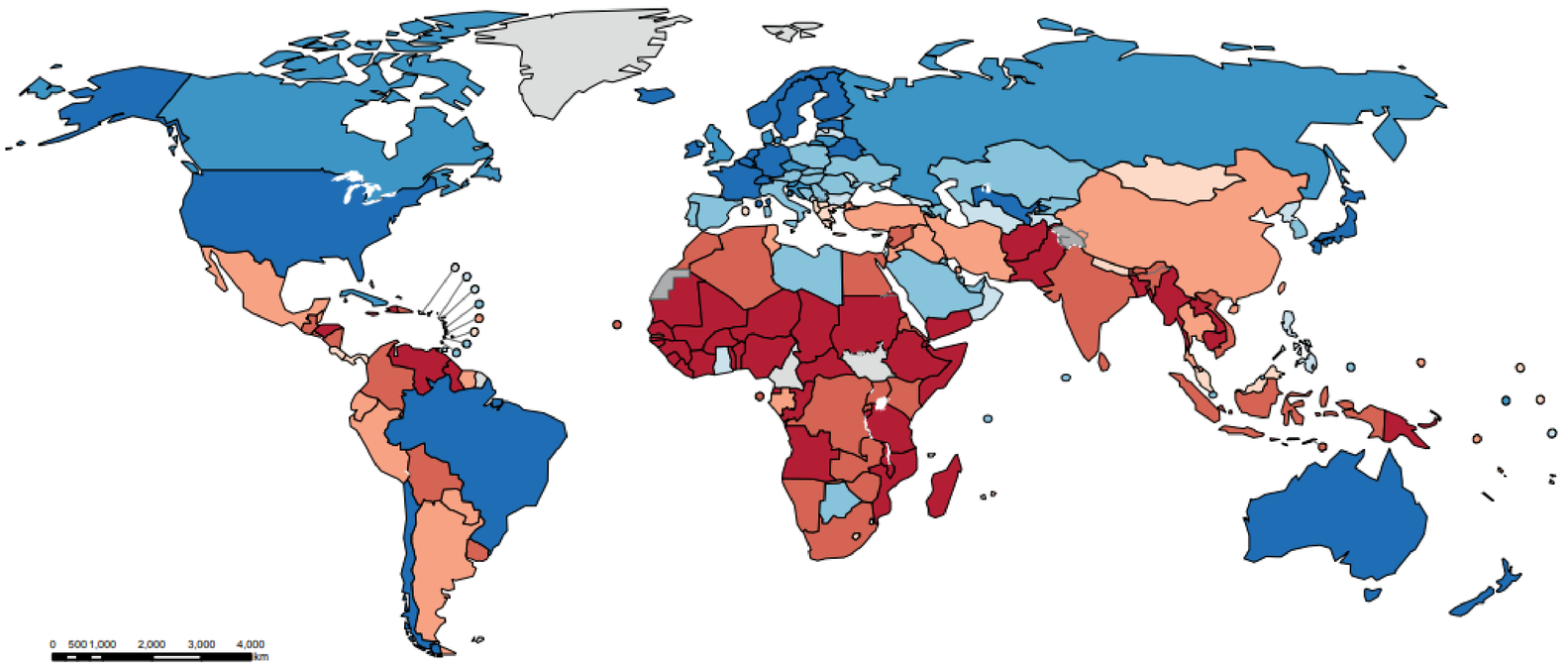
Innovation

- Expand education/training programs
- Influence models of care
- Elevate nursing role

GLOBAL NURSING WORKFORCE CRISIS

A major barrier to cancer care

Figure 1 **Density of nursing personnel per 10 000 population in 2018**



**Includes nursing professionals and associates.*

Source: National Health Workforce Accounts, World Health Organization 2019. Latest available data over the period 2013–2018.

Ways nurse shortages affect cancer care:

- Limited access to care
- Equity in healthcare
- Patient outcomes
- Coordination of care

Tele ECHO programme

- highly interactive, live virtual sessions, international experts
- Develop practical leadership skills
  - Sharing best practice
  - Case-based learning
  - Collaborative problem solving
  - Peer to peer support

Leadership vs Management

- Kumasi – Ghana
- Kigali – Rwanda
- Tbilisi – Georgia
- Yangon – Myanmar
- Greater Petaling - Malaysia

“This programme responds directly to the need identified by every C/Can city to strengthen the capacity and role of oncology nurses as key members of multidisciplinary teams, as patient navigators and as facilitators of quality data collection”

Isabel Mestres, CEO C/Can

RWANDA

Cancer Patient Navigation (CPN) - a key solution to cancer care

✓ The main goal = improve cancer care coordination across the cancer care continuum

✓ Cancer Patient Navigator recruited in Five hospitals:

- Butaro District hospital cancer centre of excellence (BCCOE)
- King Faisal Hospital (KFH)
- Rwanda military hospital (RMH)
- Kigali University Teaching Hospital (CHUK)
- Butare University teaching hospital (CHUB)

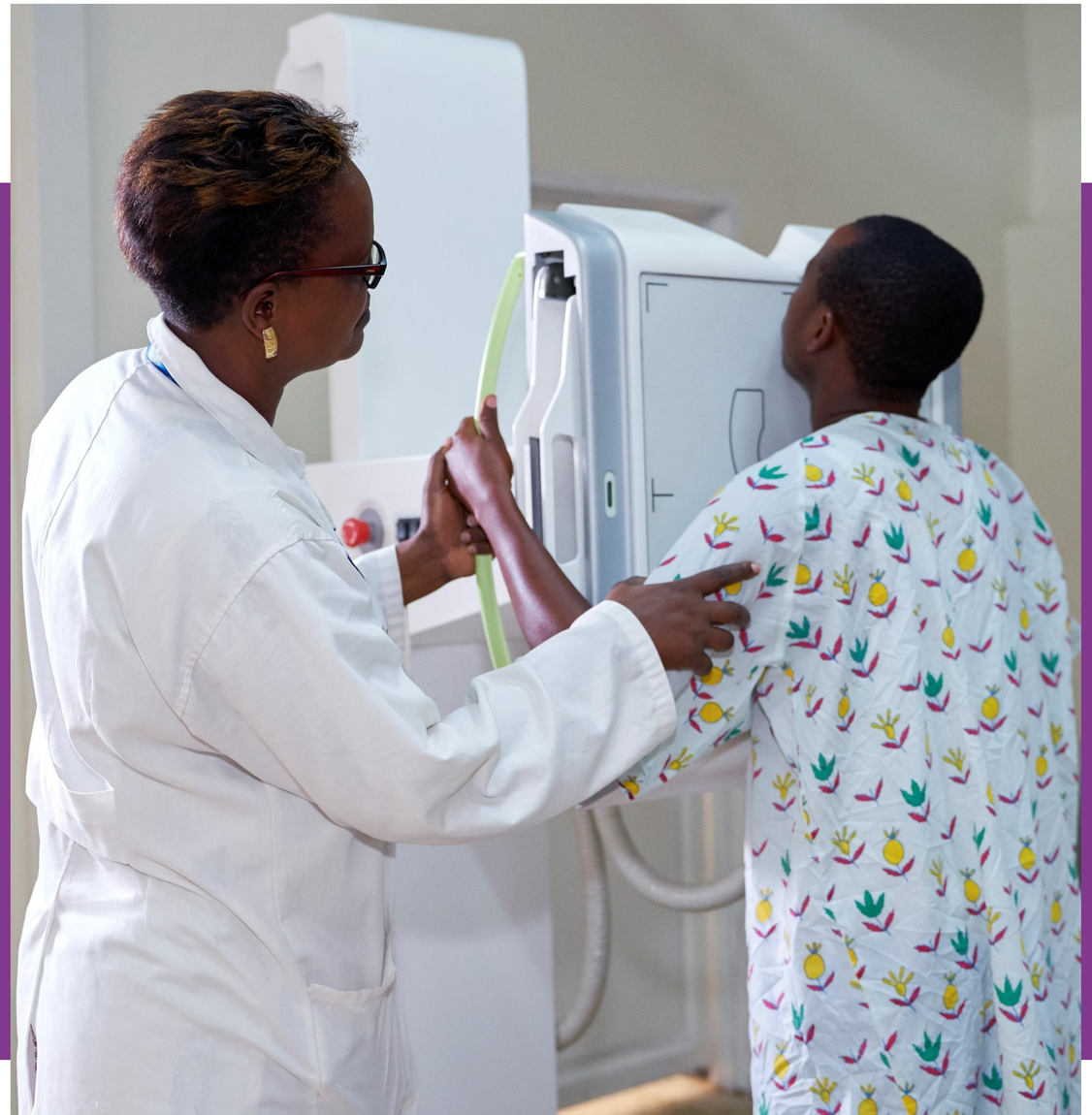
✓ One nurse navigator per hospital

CAPACITY DEVELOPMENT

Education design and delivery

How to Implement a Nurse Navigator Program

- ✓ 10-week virtual program
- ✓ Nurse Navigators in Kigali
- ✓ Key components of the role
- ✓ Promote and communicate
- ✓ Identify patient selection criteria
- ✓ Policies, procedures, guidelines and processes
- ✓ Measure outcomes
- ✓ Education and training = elevate the role = voice of change



WHAT KIGALI NURSES SAY ABOUT

Patient navigation

“The training helped me learn how to communicate better with cancer patients and included strategies to improve communication. Navigation is about providing the right information and knowing the barriers to patient care and allow patients to have trust in you.

It is also important for healthcare providers – I know a patient’s case in more detail, and I can provide that information to hospitals … This navigation is important for the entire healthcare system”

- Hyacinthe, nurse navigator

WHAT KIGALI NURSES SAY ABOUT

Patient navigation

“When we first started this program, everything was new. It was a great experience, we learnt so much from the nurses in Australia particularly the core competency of being a navigator. We have already helped improve care for patients.

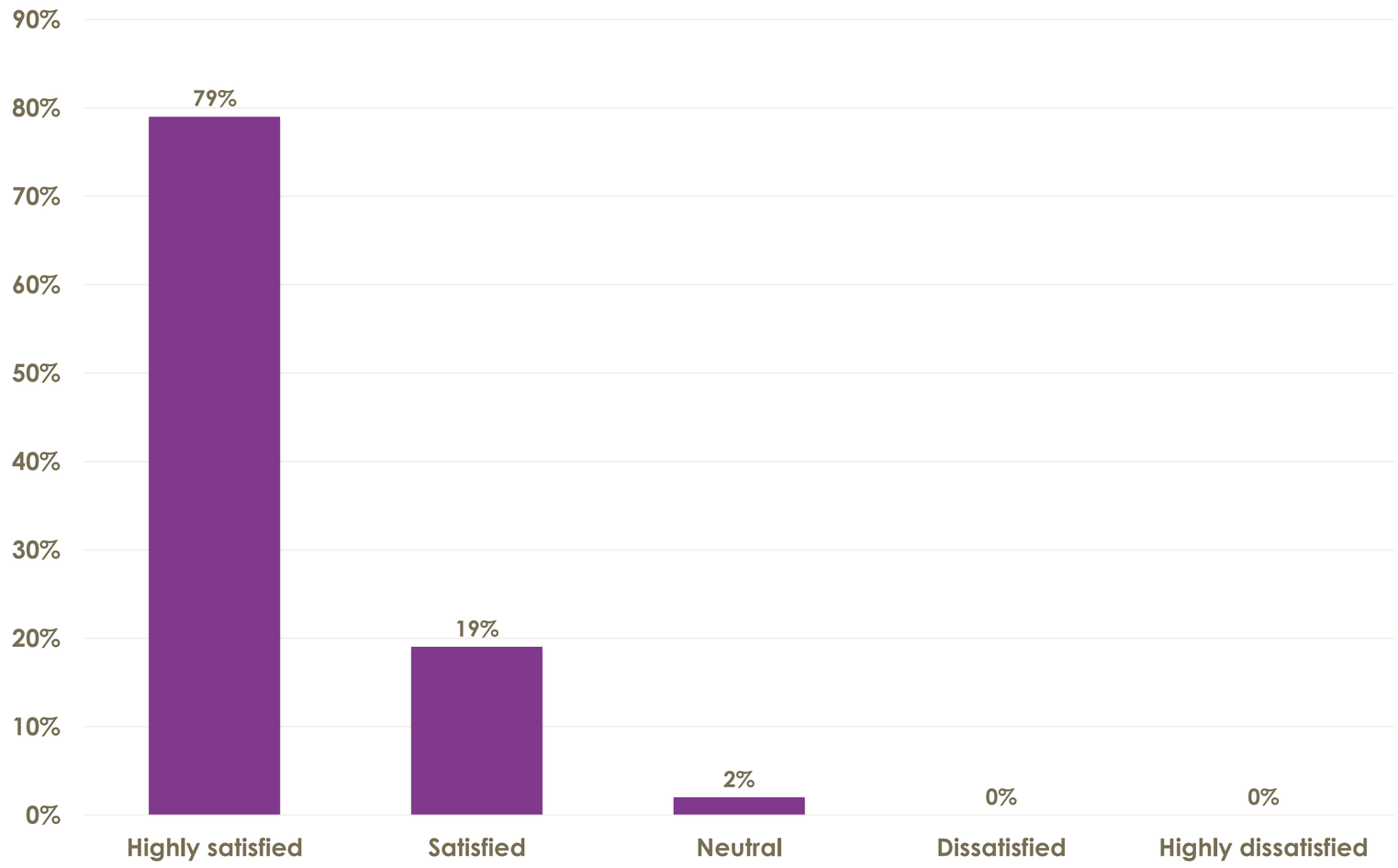
I helped one patient who was refusing to come back for treatment because after completing chemo they suffered severe side effects. The doctors and nurses tried to make her come but through navigation I followed the patient up. I called the patient every day and finally convinced her to keep her treatment. She told everyone it’s because of me that she came back. She is now on chemo and while she is palliative it is improving her life and she is happy. She still calls me to tell me I have changed her life.”

- Marie, nurse navigator

NAVIGATION LEADS TO

A better patient experience

Patient ranking quality of navigation services received (n=370)



RWANDA CANCER CARE

Sustainability and next steps

Continuing to improve patient outcomes

- Train the trainer
- Expand navigation program to more cancer types and district hospital levels
- Increase awareness of cancer and the role of navigation
- Publish findings to inform policy decisions in Sub Saharan Africa

THE IMPORTANCE OF

Innovations and experiences

Technology

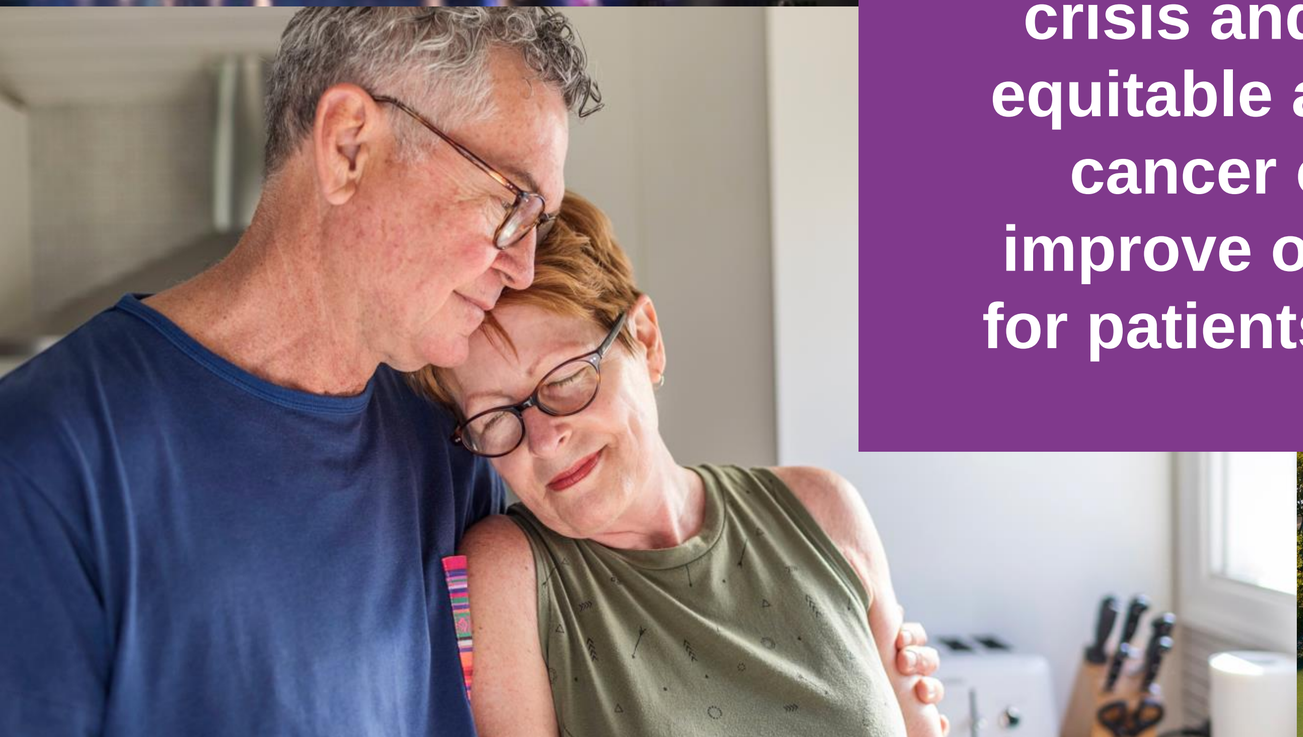
Training

Collaboration

Leverage these approaches to:

- Strengthen healthcare systems
- Improve access to quality care
- Enhance health and wellbeing of communities

Committed to finding sustainable solutions to address the global cancer workforce crisis and ensure equitable access to cancer care to improve outcomes for patients globally



THANK YOU

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Establishing Advanced Radiation Therapy Services - a network solution

A/Prof Matthew Foote

Radiation Oncologist
Icon Group Deputy Director – Radiation Oncology
Co-Director Gamma Knife Centre of Qld – Metro South Health

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General trends in oncology

Australian perspective

- Major cause of illness and death
- Patients are living longer with cancer
  - Early detection
  - Better treatments
  - Ability to treat more advanced disease

Global estimates 2020

- 19.3 mill new cancer cases
- 10 mill cancer deaths
- Burden greatest in developing nations

Impact of COVID-19

- Increase late diagnoses
- Delays in treatment

BACKGROUND TO

Radiation oncology

Radiation therapy:

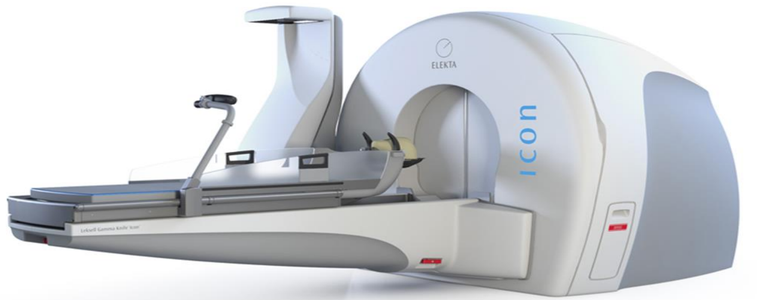
- A highly cost-effective cancer treatment
- Approx 40% cancer patients
- Estimated that 14% new cancer patients do not access
- Can be used in a curative and palliative setting
- Can be used with other treatments – chemotherapy, immunotherapy

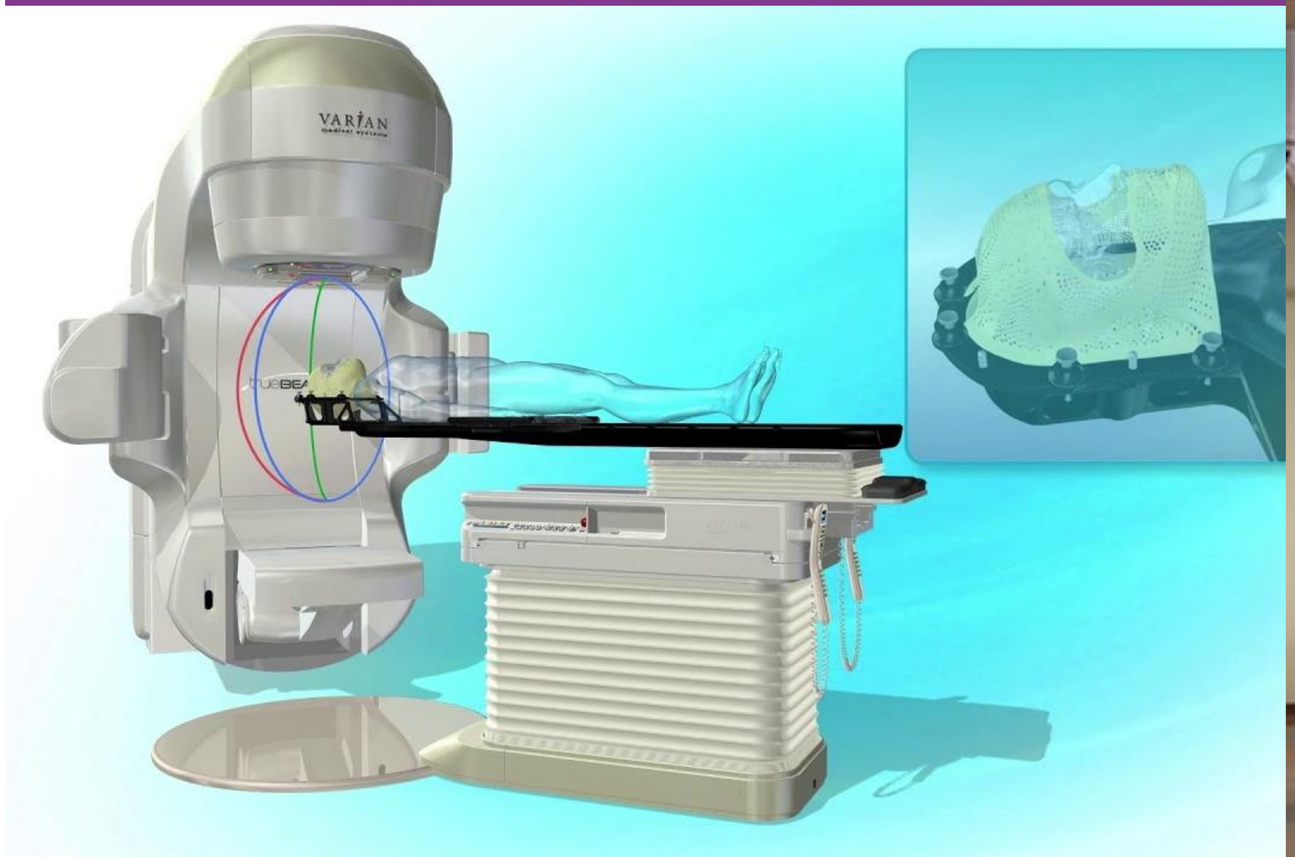
The consequences include:

- Compromised health outcomes
- Premature death
- Inadequate pain and symptom control
- Reduced quality of life and increased suffering

DIFFERENT TYPES OF

Radiation therapy





THE RAPID EVOLUTION OF

Radiation therapy

Evolution of technology

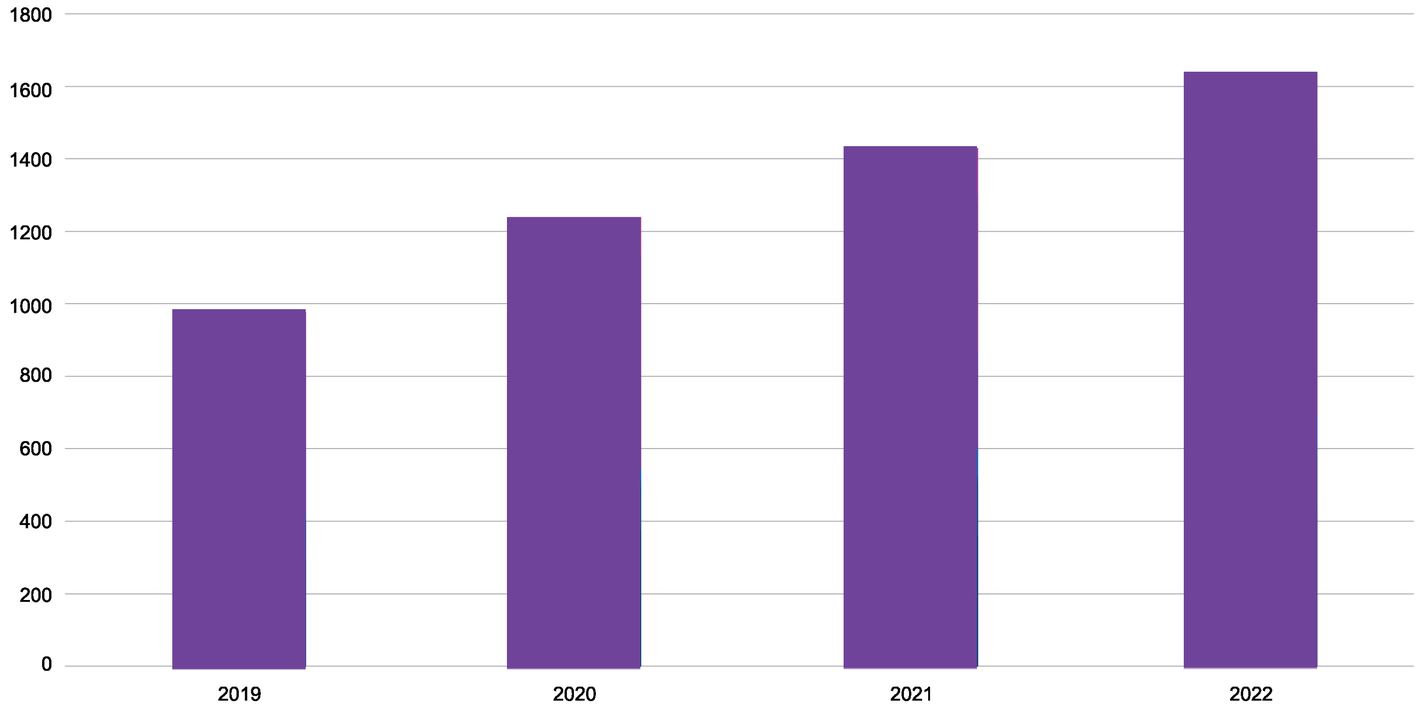
- Higher pin-point accuracy
- Reduced damage to surrounding healthy tissue and organs
- Better tumour control
- Less side effects
- Better quality of life

GENERAL TRENDS IN

Precision radiation therapy

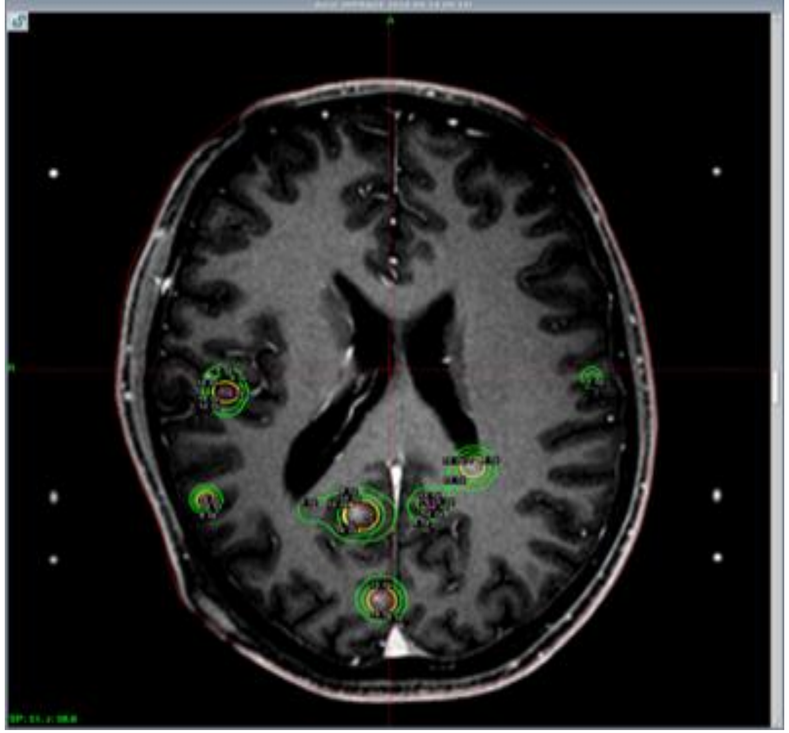
- Improving access to radiation therapy services nationally – regional sites
- Move towards shorter treatment schedules e.g. breast and prostate
- Evolution of ‘precision’ stereotactic treatments

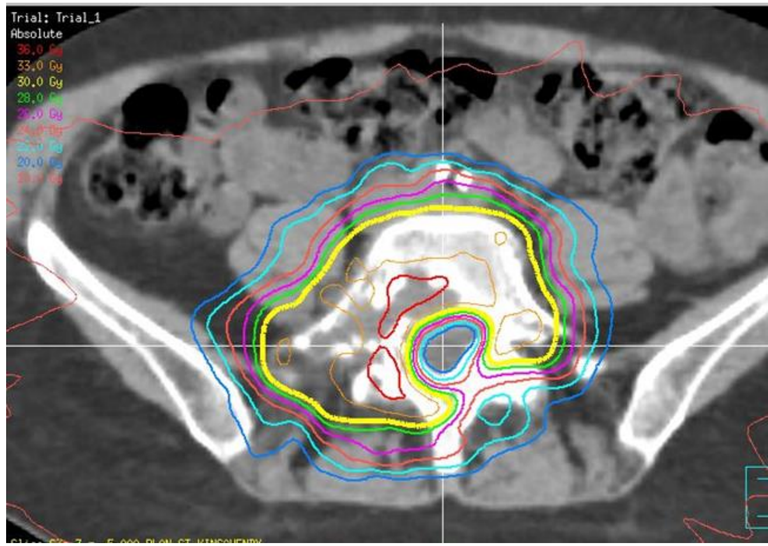
Stereotactic Growth, approx. 20% per year

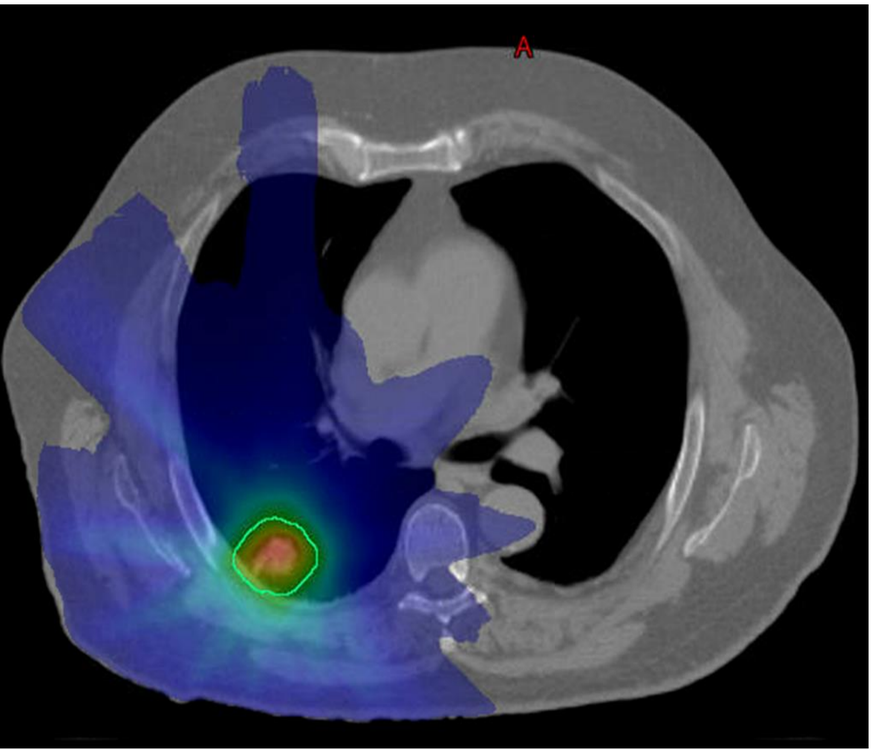


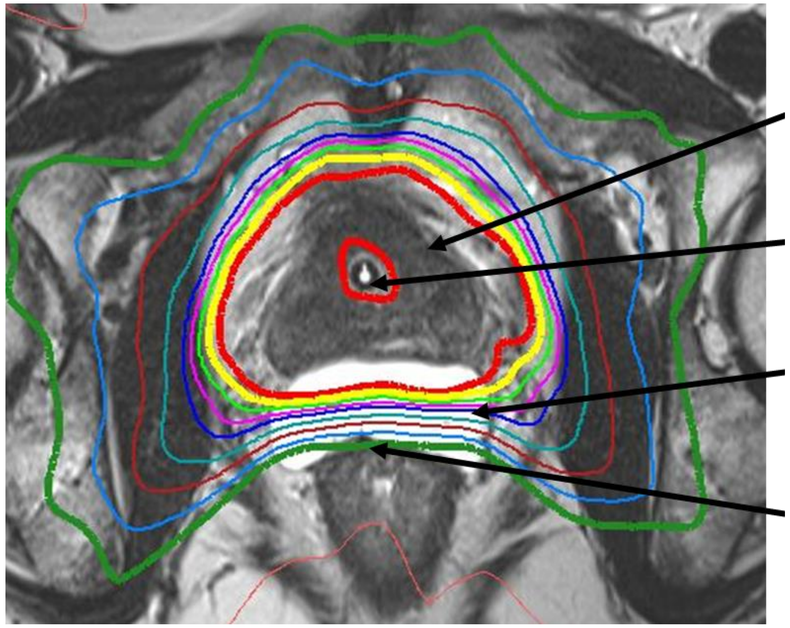
EVOLUTIONS IN
PRECISION TREATMENT

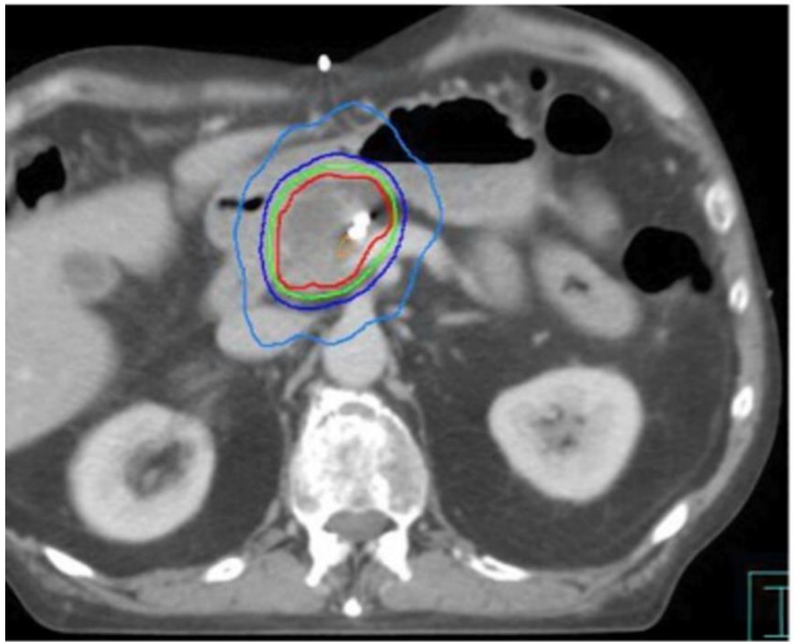
Stereotactic Radiation Treatment











ROLLOUT OF ICON'S STEREOTACTIC PROGRAM

Serves as a model to address workforce shortages

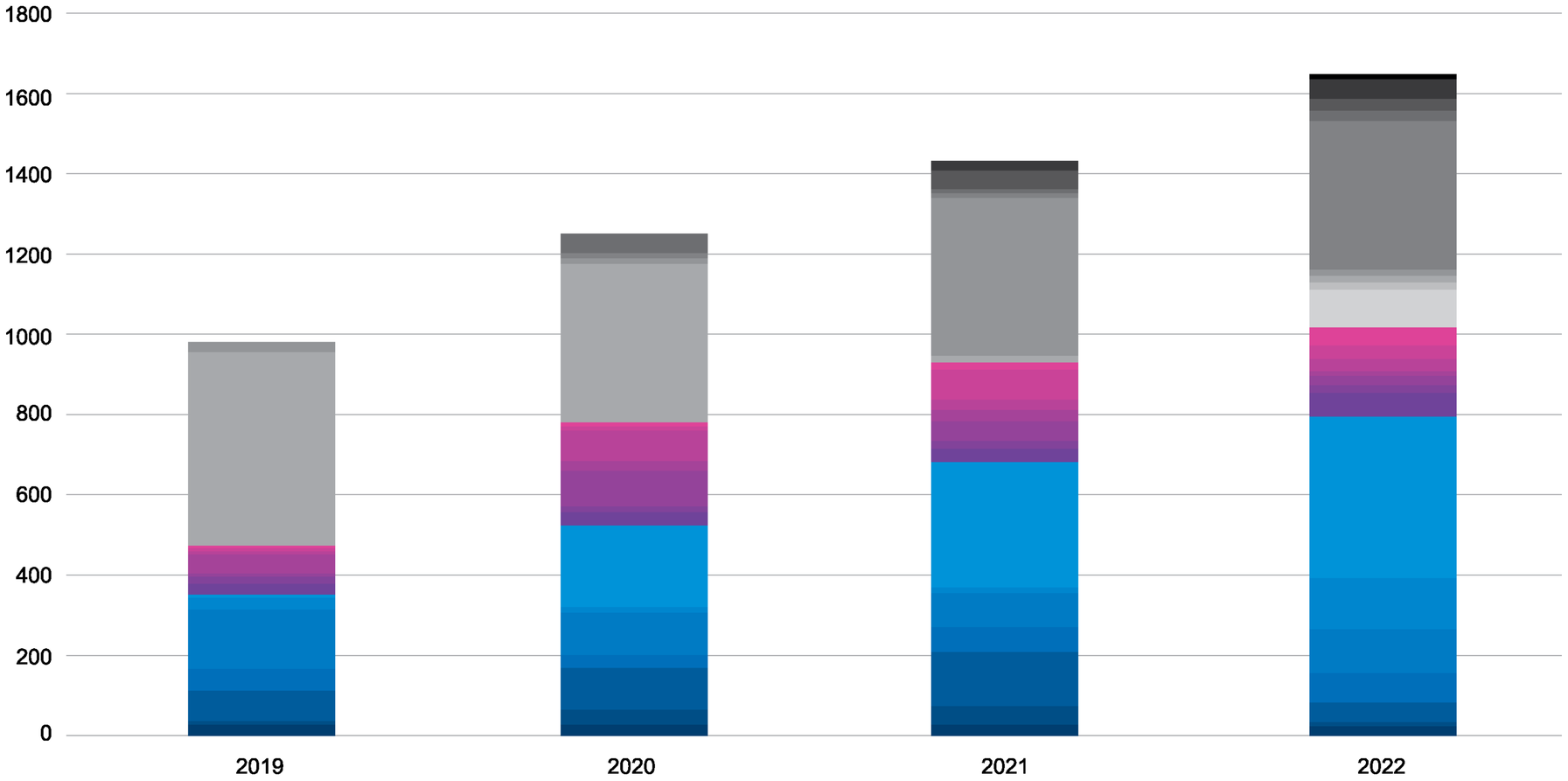
How to dissolve geographical barriers

- Desire to provide personalised stereotactic treatment
  - Safe and effective
  - Low number of treatments
  - Similar staffing/similar time on machine
- Range of technology
- Deliver best standard of care
  - Strong clinical governance
- Runs alongside site, RT, ROMP and nursing streams

MORE CARE

Closer to home

More departments offering more techniques to more patients



Stereotactic treatments

ADDRESSING WORKFORCE SHORTAGES THROUGH A

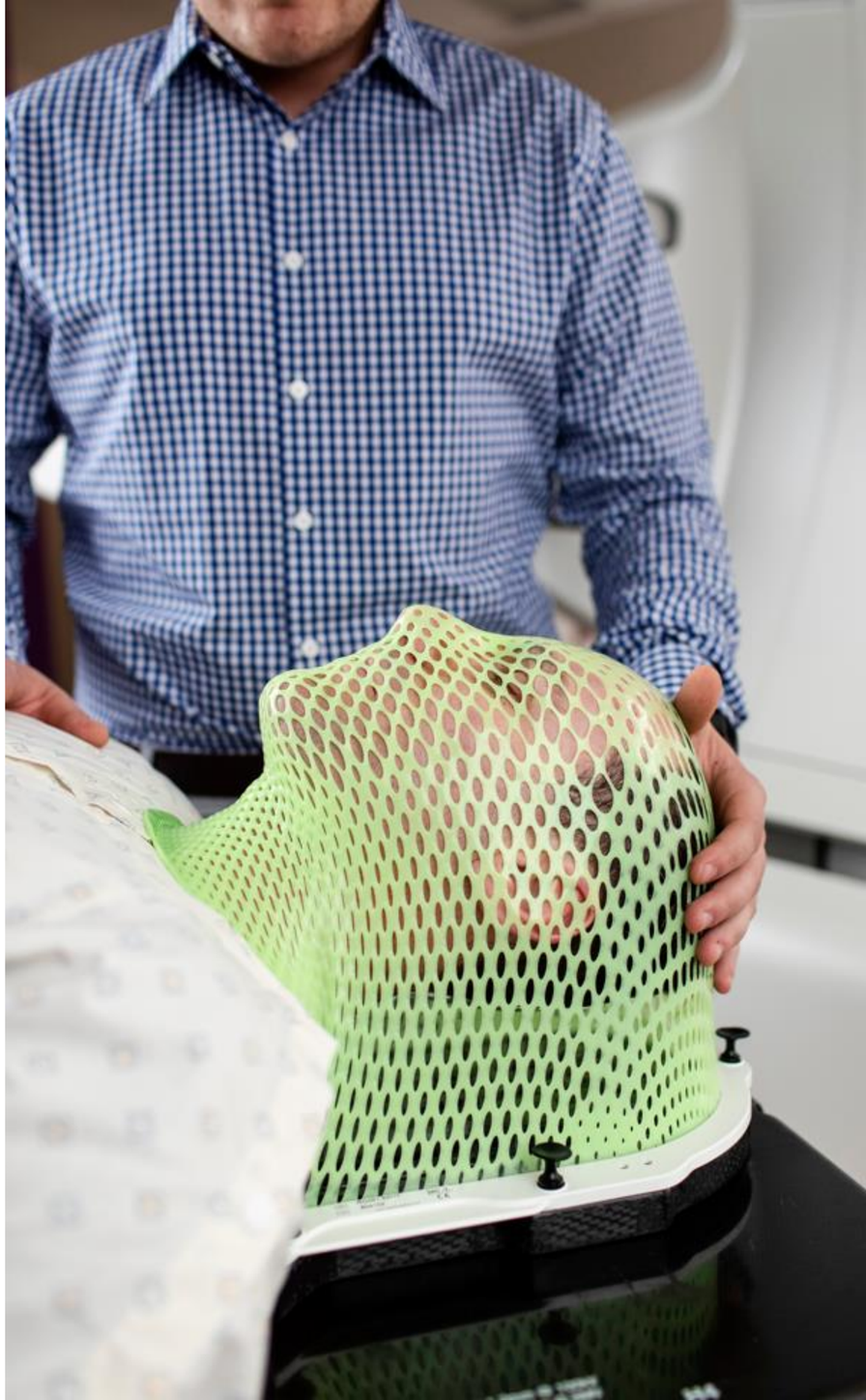
Stereotactic program

ENSURING EXCELLENCE AND QUALITY THROUGH

Stereo governance

Objectives:

- To ensure excellence and quality in stereotactic treatment
- Utilisation of best practice guidelines adapted for range of technology
- To ensure ROs are credentialled or mentored as required to prescribe stereotactic treatment
- To ensure equipment and technology are endorsed and appropriate to prescribing practices
- To improve RT training and to provide support for RT staff during training



IMPORTANCE OF

Mentorship and endorsement

Stereotactic endorsement and oncologist mentorship needs:

- Evidence of 10 treatments for a given site to be endorsed
- Evaluation annually
- Support by a senior oncologist if not reached
- ‘Affiliated activity’ can add to caseloads
  - Dedicated course / conference
  - Attendance in virtual chart rounds

Journal of Medical Imaging and Radiation Oncology **64** (2020) 422–426

RADIATION ONCOLOGY—ORIGINAL ARTICLE

Quality and access – Early experience of implementing a virtual stereotactic chart round across a national network

Rhys Fitzgerald,[1] David Pryor,[1,2] Trent Aland,[3] Lee Anderson,[3] Marcel Knesl,[1] Andrew Fong,[4] Dominic Lunn,[5,6] Andrew Oar,[5,6] James Jackson[5,6] and Matthew Foote[1,7]

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5 Icon Cancer Centre, Gold Coast Private Hospital, Gold Coast, Queensland, Australia
6 Icon Cancer Centre, Gold Coast University Hospital, Gold Coast, Queensland, Australia
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BUILDING A GLOBAL NETWORK AND

Enabling precision capability

Remote monitoring

Enabling capability to ensure quality in regional areas.

Oversee treatment

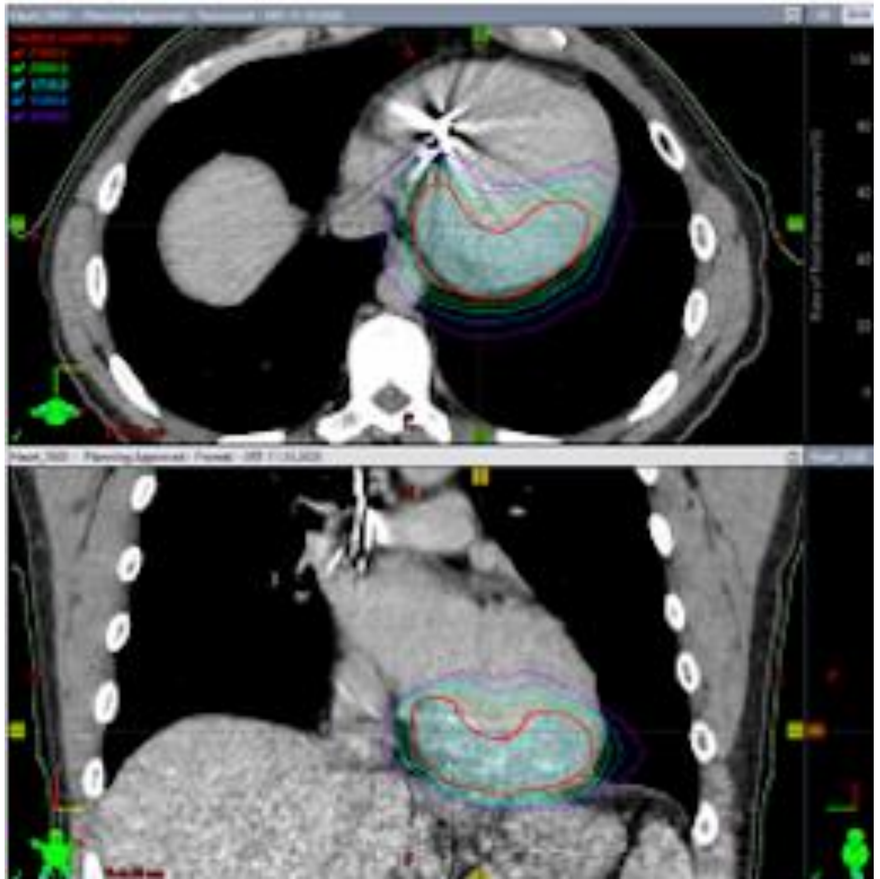
Through utilisation of technology (virtually present)

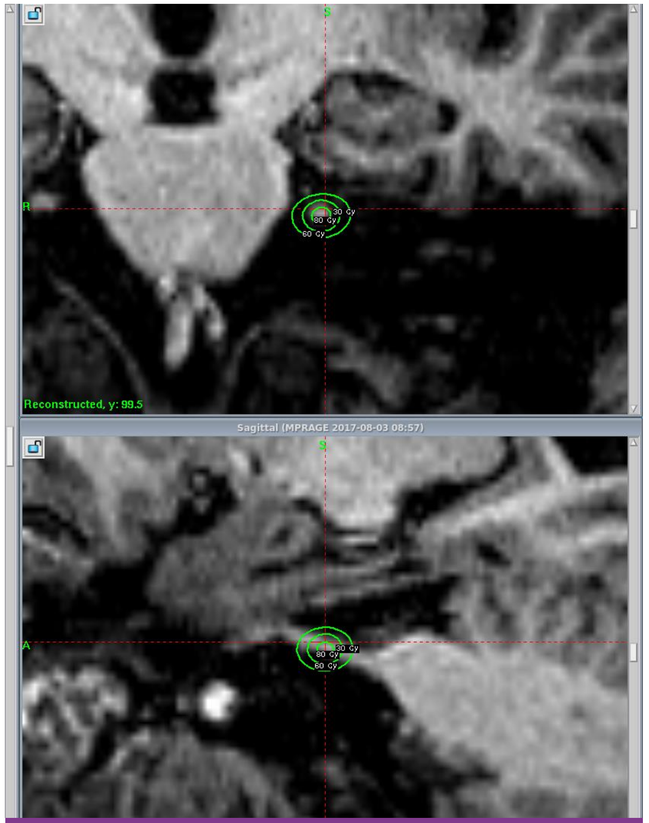
ESTABLISHING A CONNECTED NETWORK AND PROCESSES TO

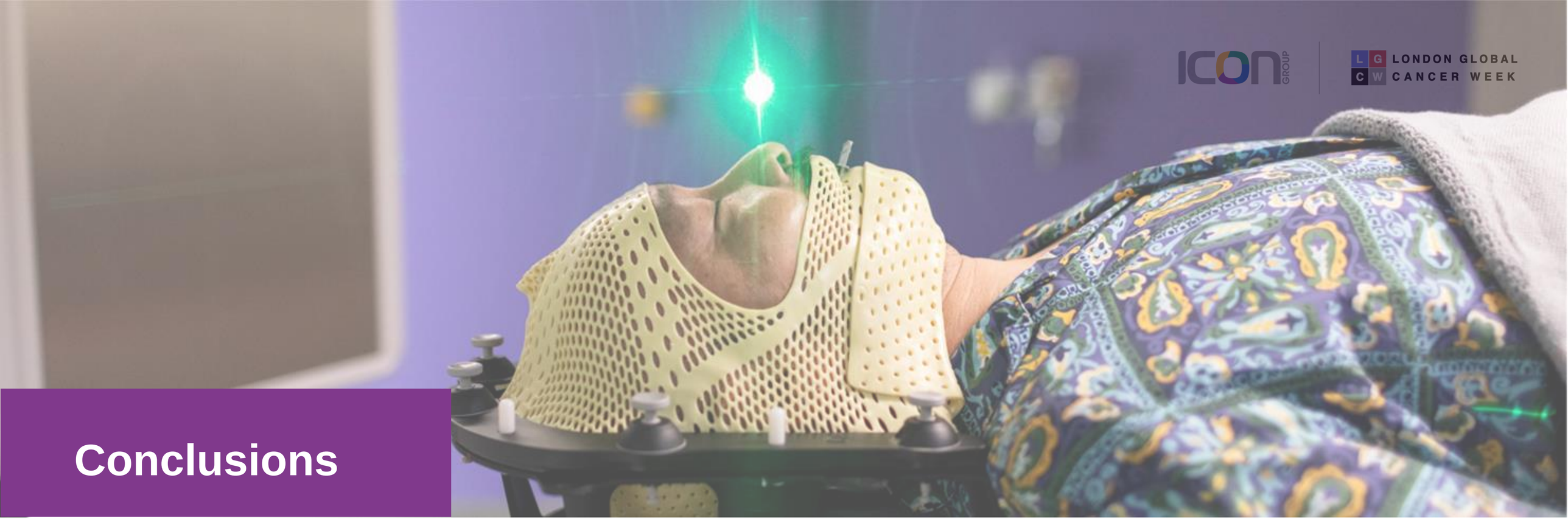
Enable increased capability and more treatments

- **What we need for future state**
  - An established network across a broad geographic region
  - Expand clinical capabilities
    - To treat more indications
    - Ongoing refinement of accreditation and mentoring

- **Future directions**
  - RT to treat new indications
    - Range of benign (non-cancer indications)
    - Pain syndromes
    - Cardiac conditions







Conclusions

PRECISION TREATMENT

Recognise the patient benefits of precision stereotactic XRT

A NETWORKED APPROACH

Strong clinical governance and utilisation of technology to address barriers to care

ONCOLOGY NETWORK

Invest in radiation oncologist mentorship and uptake of new technology

THANK YOU

CONTACT

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Networked Medical Physics services enabling a global workforce

Trent Aland PhD
Icon Group Executive Manager Clinical Care

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Our Medical Physics Network

MAINLAND CHINA

5

1 SINGAPORE

LINACS = 52

HYPERARC ENABLED LINACS = 14

CT SCANNERS = 40+

SGRT = 15

OTHER MOTION MANAGEMENT SYSTEMS = 37

AUSTRALIA

53

1 NEW ZEALAND

TECHNICAL
EFFICIENCIES
THROUGH A

Global integrated network

TECHNICAL
EFFICIENCIES
THROUGH A

Global integrated network

ICON'S CLINICAL

Operating models

Operational

Model covers BAU work at sites

Technical and Clinical Streams

Model cover BAU development, staff competency, and upkeep of all systems and processes

Development and Implementation

Team progresses new technology and techniques, vendor partnerships and collaborations, and projects

A GLOBAL GOVERANCE STRUCTURE

Supporting efficient technical implementation and clinical excellence

Group-wide quality and risk unit
(oversight of clinical governance, incidents, audits, licensing, accreditation)

Radiation Therapy Practice Unit
(oversight of clinical releases)

Technical Sub-Committee

Incident and Audit Sub-Committee

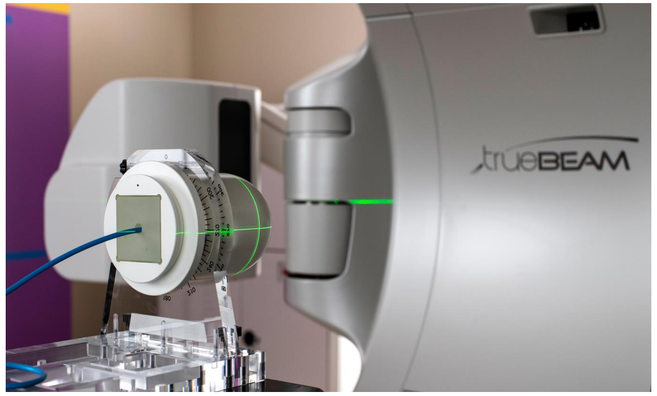
Technical streams

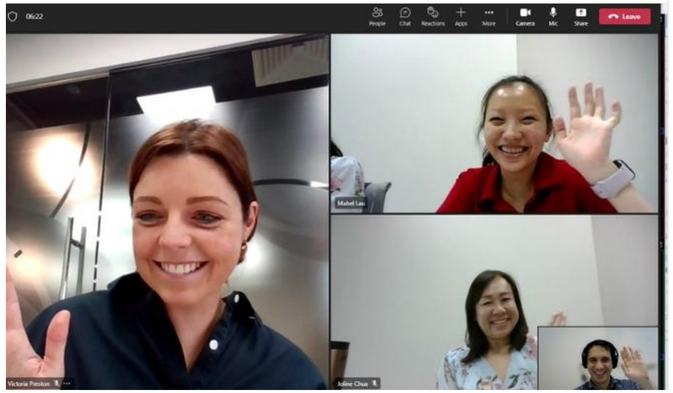
Clinical Streams

(oversight of Radiation Oncologist scope of practice, clinical guidelines, mentorship, chart rounds)

A CASE STUDY IN REMOTE COMMISSIONING AND IMPLEMENTATION

Mt Alvernia, Singapore





Physics commissioning

4 weeks

Installed IMRT | DIBH | CBCT | 6DOF | HyperArc | IDENTIFY SGRT | Gating / 4DCT

Including remote support

Linac RT training

1 week

Remote training Australia, New Zealand and Singapore team

Go Live

1 week post training

Delivered Icon Singapore's first radiation therapy service

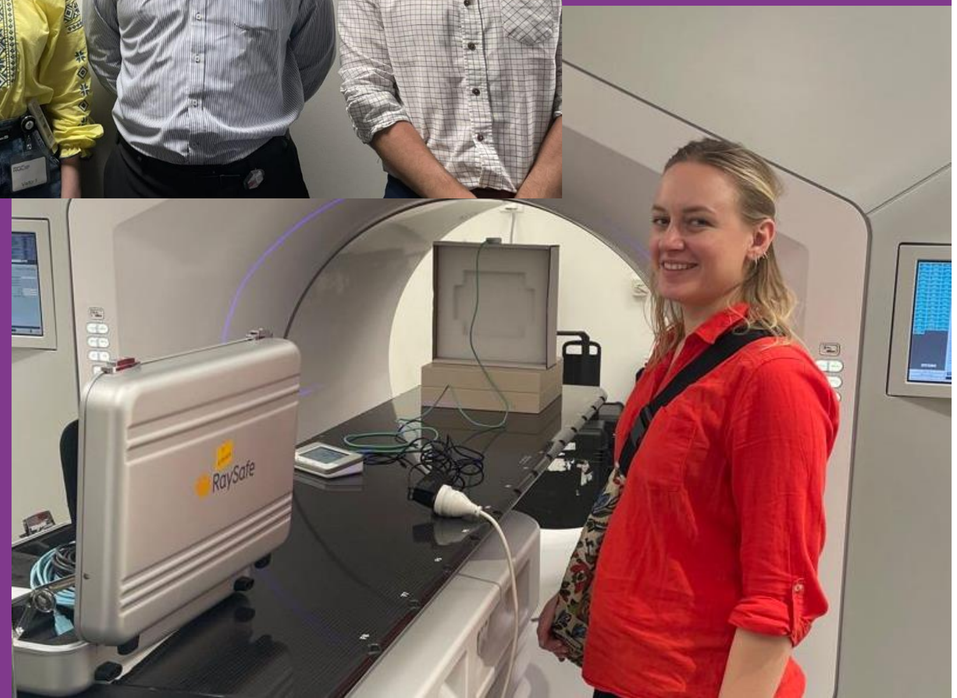
Remote support

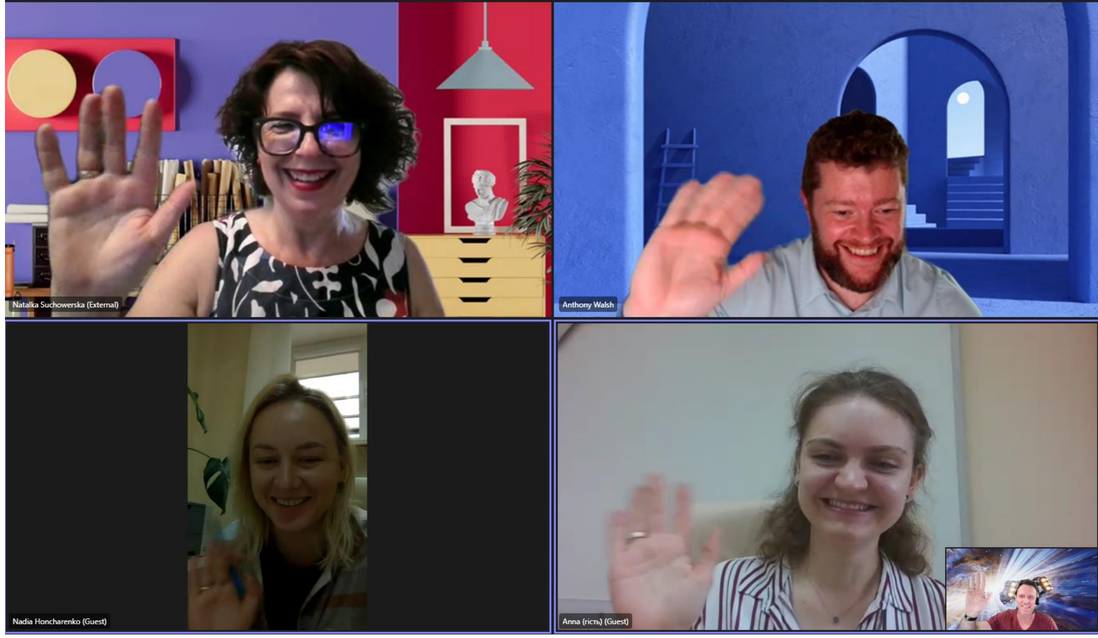
Ongoing

Provide clinical support using RealWear Assisted Reality headsets

HELPING WAR TORN UKRAINE

Remote training and knowledge sharing





- 40% decline in radiation therapy treatments since the start of conflict
- Icon sponsored a four-week observership including site visits, remote radiation therapy planning and the latest techniques
- Developing tailored resources and quality assurance initiatives for ongoing support
- Ongoing virtual training sessions and knowledge sharing processes to build a brighter future

Conclusions

STRONG GLOBAL GOVERNANCE

Ensure quality and safety across a wide geographic network

A CONNECTED NETWORK

Ease of database access globally to support efficiencies, colleagues, commissioning and training

INNOVATION

Engage with vendors and invest in technology and processes to address workforce shortages

THANK YOU

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Radiation Therapist Workload Management and Resourcing Pooling

Claire Smith
Icon Group Director Radiation Therapy

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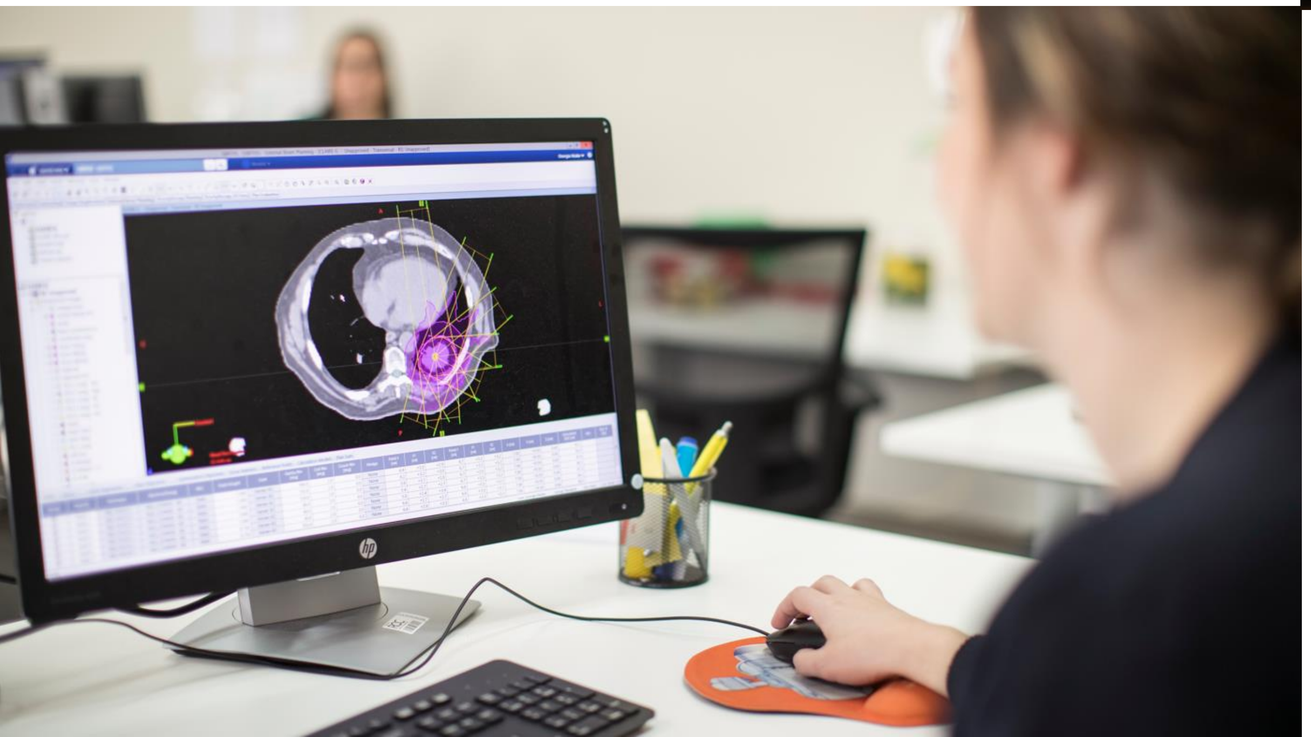
A GLOBAL NETWORK OF

Radiation therapists

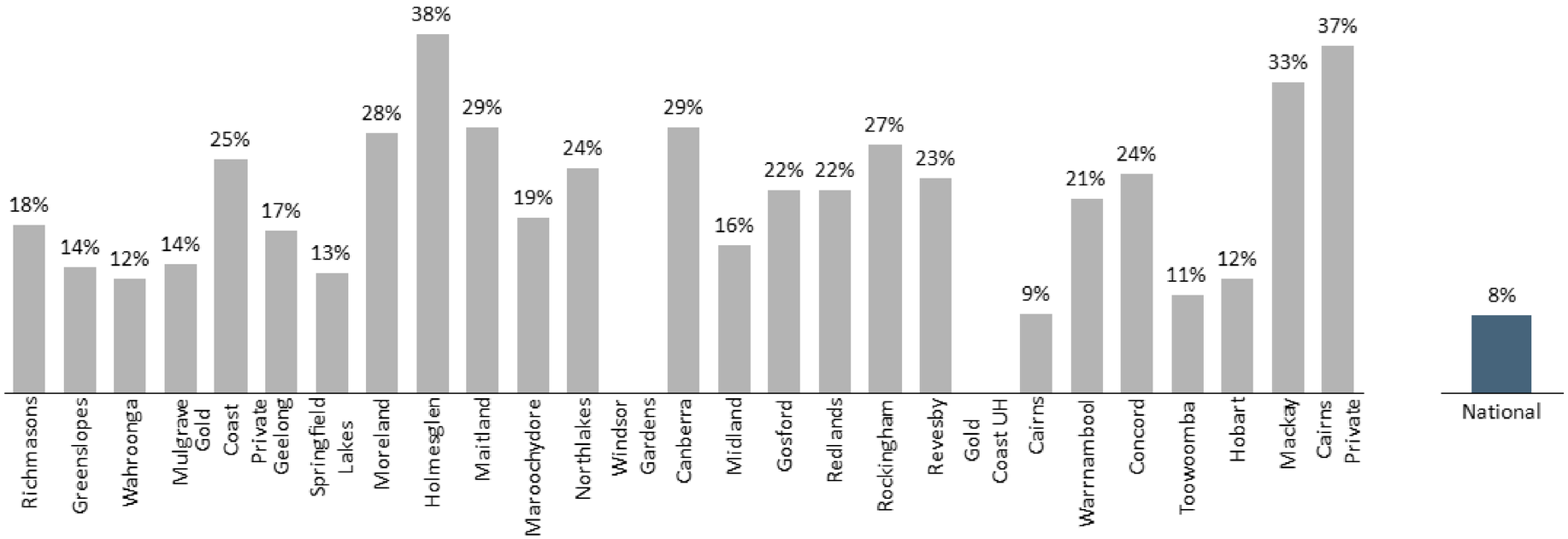
Creating a sustainable approach to radiation therapy and medical professionals



- Icon is a large network of larger and smaller sites
- Technology is generally aligned in our centres with Varian hardware and software
- Approaching 40 radiation therapy departments
- Treatment closer to home for patients means many of our centres are single linac with large distances between sites
- Radiation Oncology patient volume fluctuates
- Our RT workforce is mostly fixed and there is little opportunity for casual or temporary staff to be called upon

Workload Variation

Variation in daily attendance (top quartile vs median) FY21-22

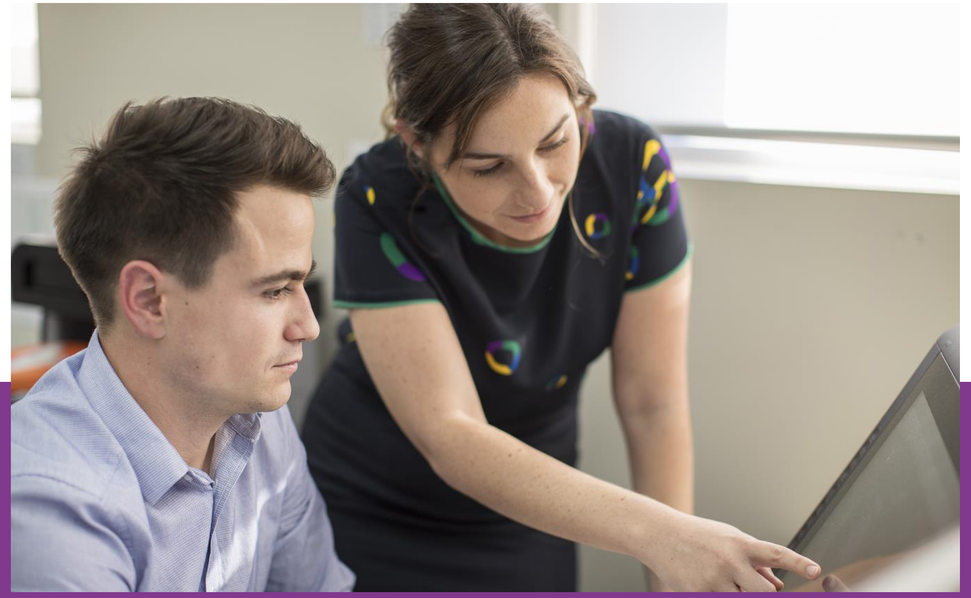


- At a site level workload variation can be significant
- Single linac sites variation is of a greater magnitude than multi linac sites
- Fixed staffing and geographical location means that physical movement of people is not a readily available option (although it does occur)

MAKING THE MOST OF

Variance in workloads

- While there are some macro trends in workload peaks and troughs, centres flux independently of each other
- Icon has begun to measure the workload at sites against the available staffing
- When sites are outside of a defined range, they can utilise the network to get support or support others
- As Icon operates on a digital platform it is easy to pick up tasks for other sites
    - Planning tasks
    - Checking tasks



ESTABLISHING

Transparency and capacity

- This has always been possible, but it wasn’t easy to see who needed support or who had the capacity to support on any given day
- RT Capacity Dashboard was designed to enable convenient review of sites workloads
- **Objectives**
  - Use the network to utilise the capacity across the network and reduce the workload variance experienced by RT’s
  - Enable staff at site the ability to access non-clinical time for training and development
  - Establish workload management practices at a site and network level than enable workload balance for Icon RT’s

A PROVEN

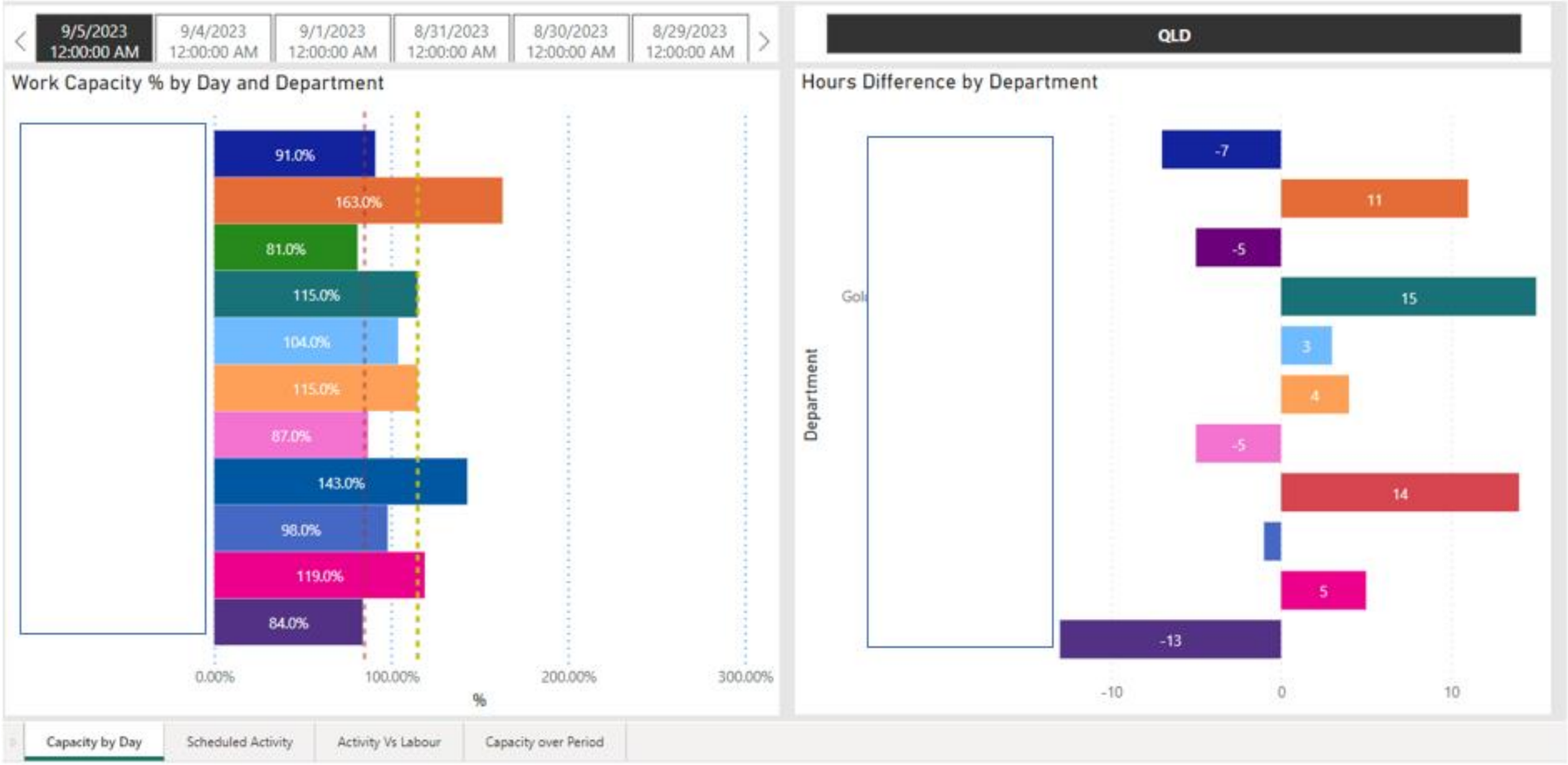
Agile radiation therapy workforce

Demonstrates the workload booked in compared to available clinical RTs across the network

Accounts for all tasks required to plan and deliver treatments and complexity of radiation plans

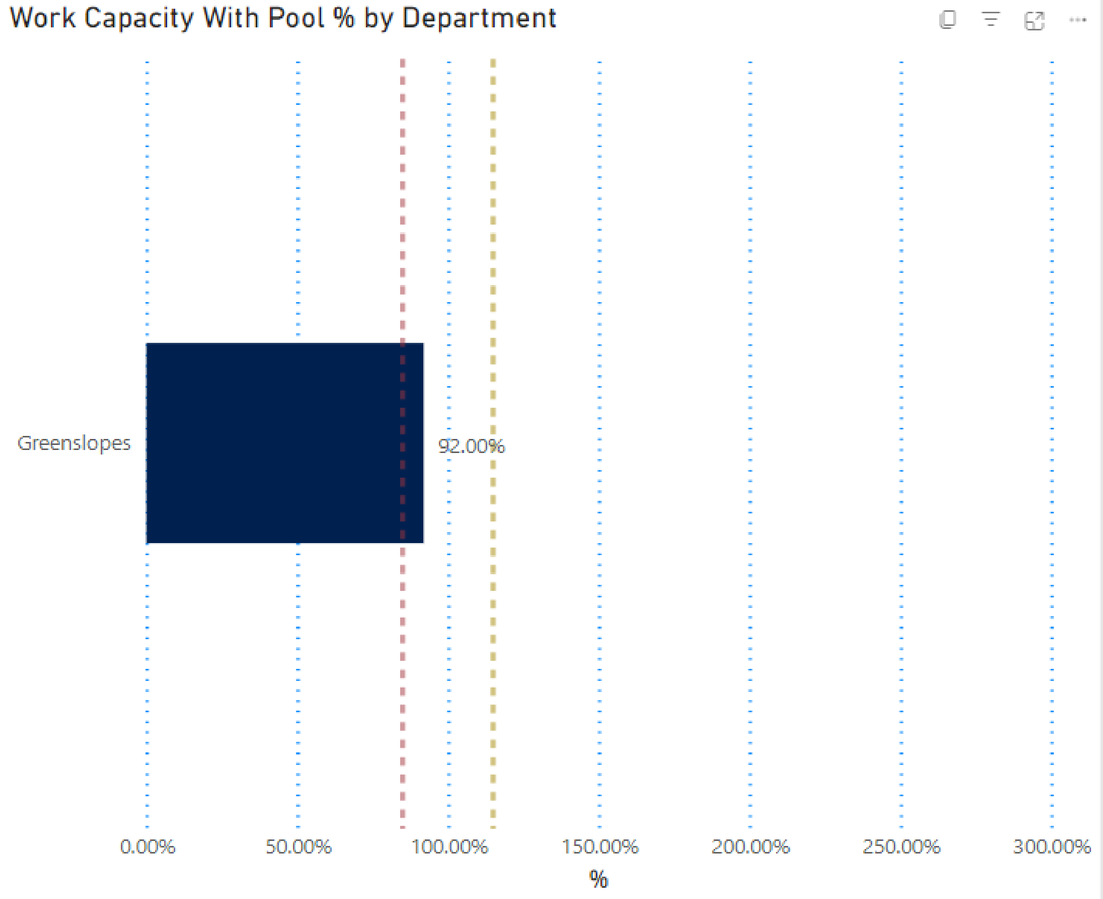
All data is automatically extracted from ARIA – run through the model – displayed for team use

RT Capacity Dashboard (day view)



Workload Breakdown

9/14/2023 12:00:00 AM	9/13/2023 12:00:00 AM	9/12/2023 12:00:00 AM	9/11/2023 12:00:00 AM	**9/8/2023 12:00:00 AM**	9/7/2023 12:00:00 AM



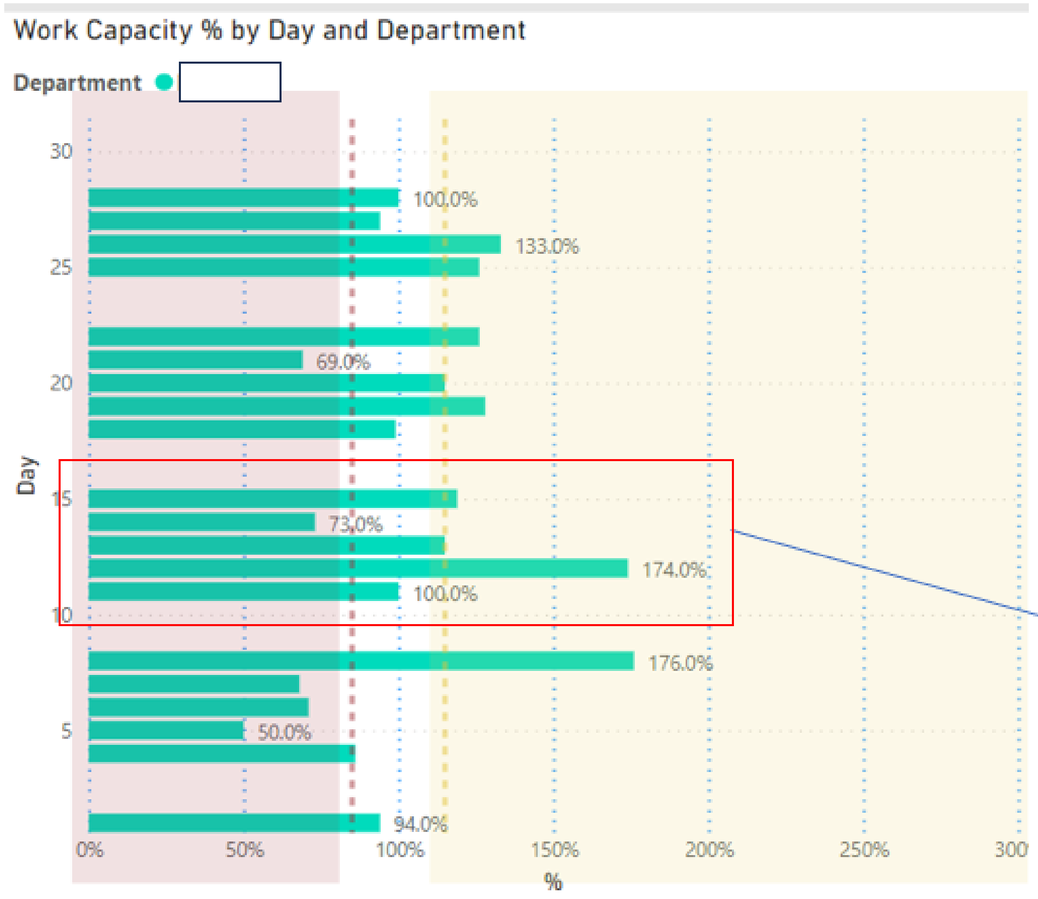
QLD

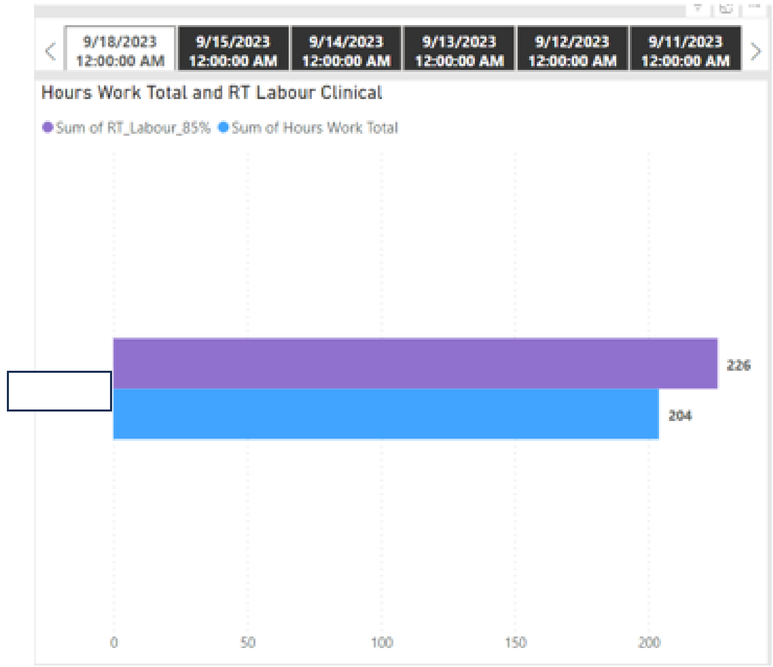
Department	Plans	Plans-Stereo	New Starts	Sims_Scanner-External	Sims_Scanner-Internal
Greenslopes	2.00	3.00	2.00	0.00	5.00
Total	**2.00**	**3.00**	**2.00**	**0.00**	**5.00**

Department	Plans	Attendance_Non_Stereo_Clinac/Elekta	Attendance_Non_Stereo_Halcyon	Attendance_Non_Stereo_Superficial	Attendance_Non_Stereo_Truebeam	Attendance_Stereo
Greenslopes	2.00	0.00	26.00	0.00	24.00	7.00
Total	**2.00**	**0.00**	**26.00**	**0.00**	**24.00**	**7.00**

Workload Hours vs Available RT Hours

Variance – Days vs Weeks

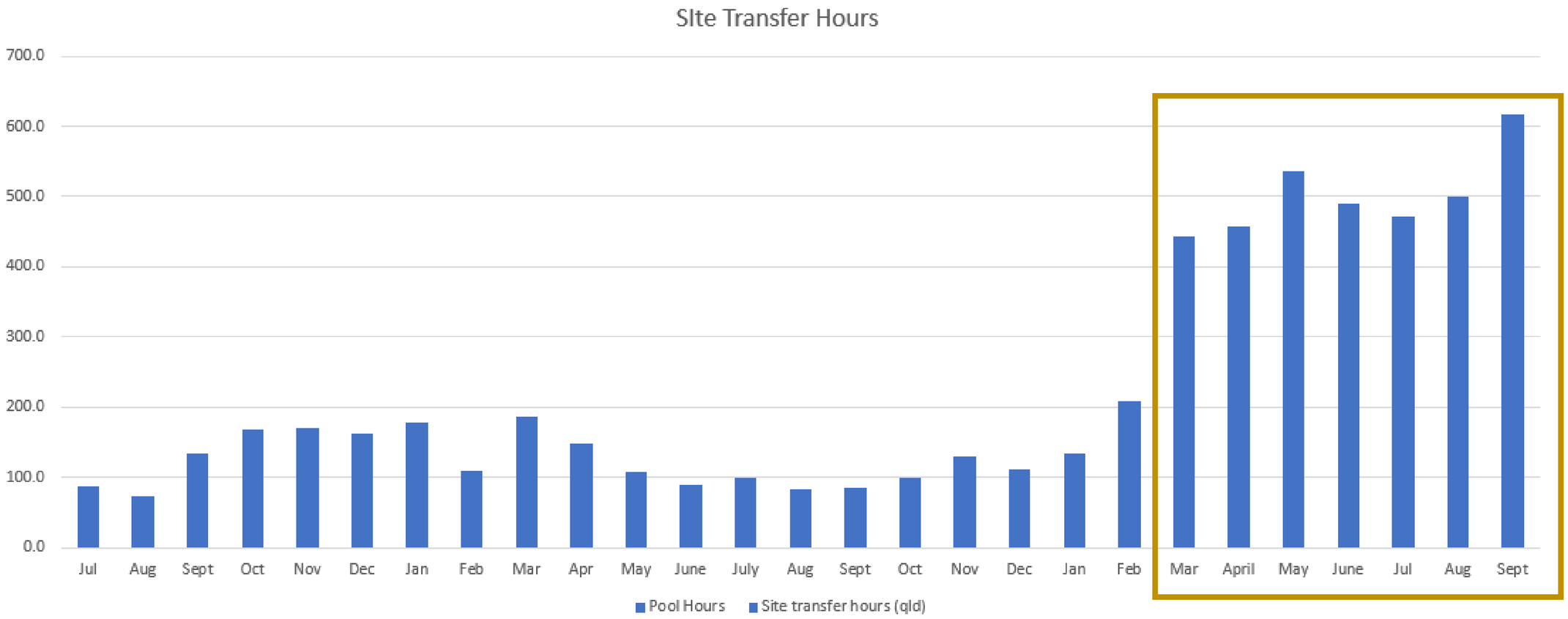




Large variance day to day but across the week a reasonable workload

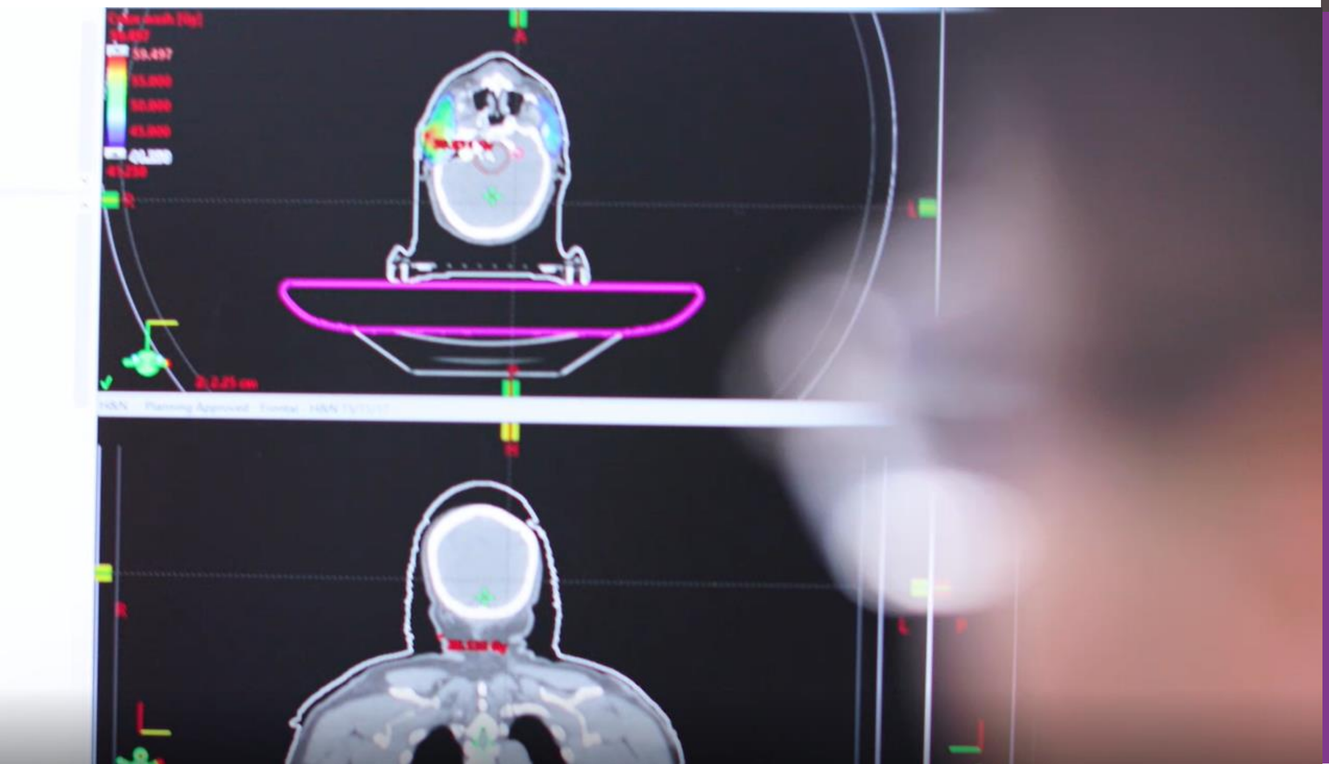
- Impacted by block booking of planning work
- The result are some days that feel extremely “busy” or “behind”
- Overtime which results in fatigue and impacts outside of work life

Increase in across site workload share since RT Capacity Dashboard implementation



APPLYING A GLOBAL LENSE

To increase cancer care capacity



Utilise network to increase capacity and reduce RT workload variance

- Increase in workload share hours between centres

Enable the ability to access non-clinical time for training and development

- Increase in RTs accessing training modules

Establish site workload management practices and network levels to enable workload balance

- Identify site specific workflows and trends, booking bottlenecks, rostering and RT allocation

THANK YOU

CONTACT

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Our Expert Panel


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