Reducing Global Cancer Deaths

Project STELLA

(Smart Technologies to Extend Lives with Linear Accelerators)

30th Anniversary of the TERA Foundation
C. Norman Coleman
Senior Scientific Advisor (NGO)

Project STELLA

A **world class team of experts** has been working on the STELLA Radiation Treatment Technology since 2017 in order to:

- Expand access to high quality cancer treatment globally

- Offer an innovative and transformative Radiation Therapy (RT) treatment system

- Drive down the operating complexity and cost of treatment

- Answer a critical societal need that current manufacturers do not address

The novel treatment system will be:

- More reliable

- 50% lower capital expense

- 40-60% less costly to operate and service
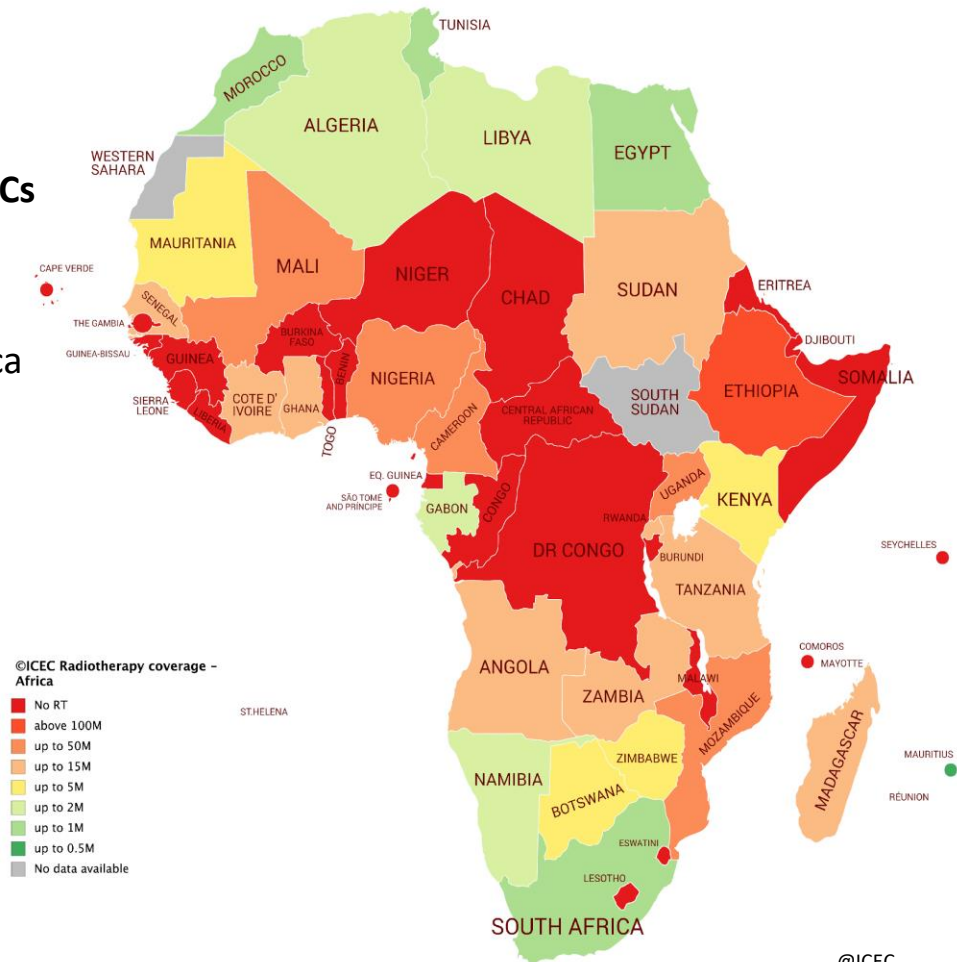
International Cancer Expert Corps · CERN · UKRI Science and Technology Facilities Council · Lancaster University · UNIVERSITY OF OXFORD

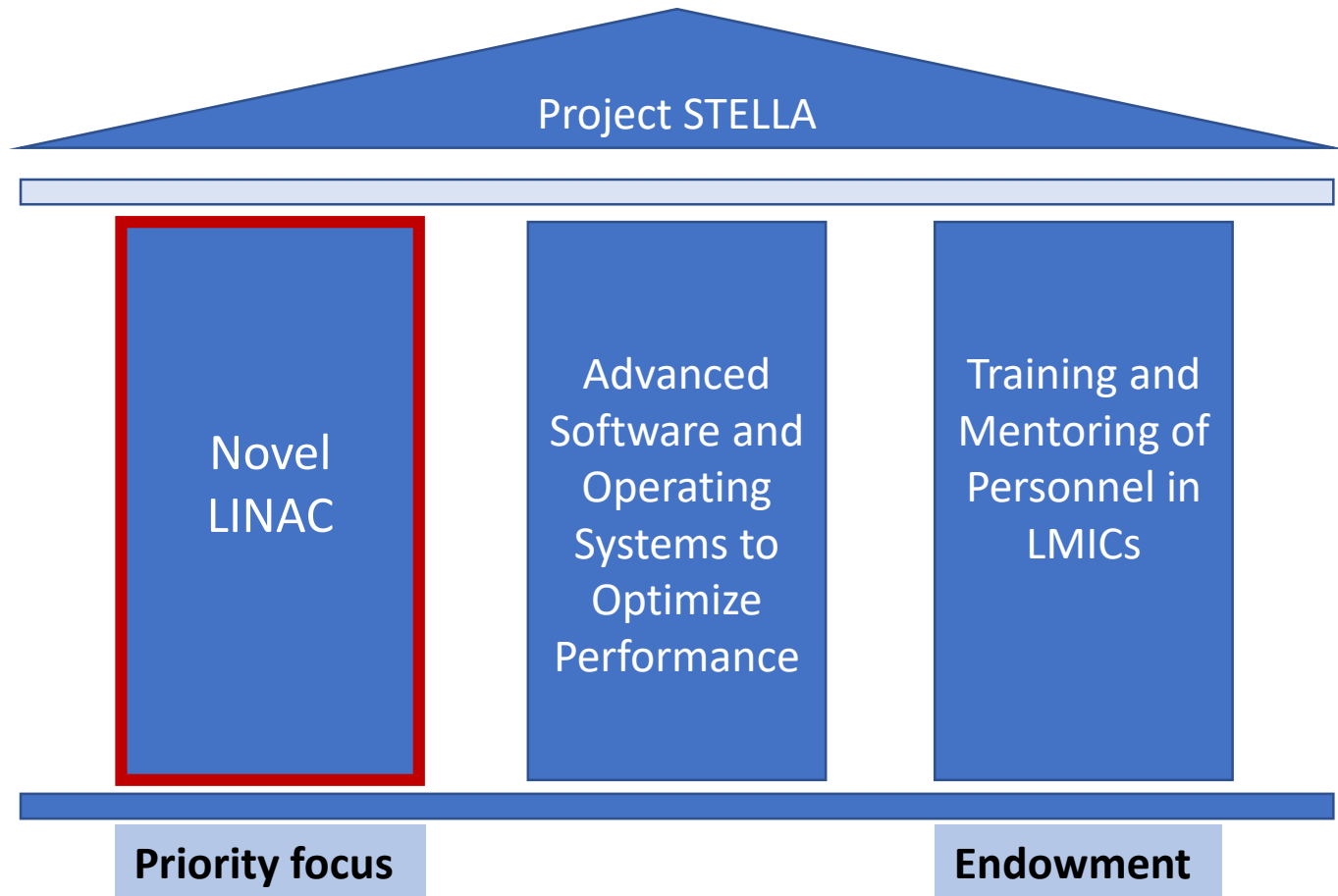# Dramatic Disparity in Access to Radiation Therapy (RT)

- RT **is essential** for most cancers
- **2040 - 27.5 M** new cases and **16.3 M deaths**
- **70%** of projected cancer deaths will occur **in LMICs**
- Only **10% of patients in low-income** and **40% in middle-income countries** have access to RT
- **Current need for more than 3500 LINACs** in Africa alone
- Estimated need for **more than 10,000 LINACs** in LMICS by 2035

Disparity –

- US – 331 Million people – 3827 LINACs
- Ethiopia – 115 Million people – 1 LINAC

©ICEC Radiotherapy coverage – Africa

- No RT
- above 100M
- up to 50M
- up to 15M
- up to 5M
- up to 2M
- up to 1M
- up to 0.5M
- No data available

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Project STELLA Integrated Solution

Project STELLA

| Novel LINAC | Advanced Software and Operating Systems to Optimize Performance | Training and Mentoring of Personnel in LMICs |

Priority focus　　　　　　　　　　　　**Endowment**

Getting the job done: PEOPLE, technologies, knowledge, methods

Botswana 2019 Project STELLA
A Partnership to Transform Global Cancer Care

ICEC Young Investigators' Conference:
Pioneering Action in Global Cancer Care

Manjit Dosanjh

Taofeeq Ige

Healthful aging and mentorship: People-to-people