Clinical Research Coordinator (CRC)
Career Development Pathway
Roles of CRC

- Feasibility Study
- Grant Application
- Finance, Budgeting
- clinician (PIs/CS)
- Clinical Trials Report
- SAE reporting
- Regulatory (IRB/HSA)
- Data Collection
- Patients

INNOVATION IN CLINICAL RESEARCH FOR THE NATION
Why do we need CRC? How important are CRCs to Clinical Research?
“It is understatement that Clinical Research Coordinator (CRC) serves a critical role in running clinical studies. Principal Investigator (PI) and CRC are close partners that cannot do without each other.

If I may use a clinical analogy that PI is like the consultant in charge of the ward who plans and decides on treatment. CRC is like the Medical Officer of the ward who knows every patient in details and executes the treatment plans. Can we achieve best treatment or study outcome without either one? The answer is clearly NO.”

Professor Leo Yee Sin
Director, Institute of Infectious Disease and Epidemiology; Clinical Director, Communicable Disease Centre; Senior Consultant, Tan Tock Seng Hospital
“The CRC forms an indispensable part of the trial team - clinical trials are each complex endeavours and with multiple studies it is impossible for me to keep track of everything that is going on.

I find having a good CRC is essential for optimising study recruitment, maintaining patient motivation and retention and for ensuring that the data collected are of sufficient quality to be credible. In short, the CRC can make the difference between a good study and a great study!”

Professor Nicholas Paton
Department of Medicine
Yong Loo Lin School of Medicine
National University of Singapore
“……the effective execution of any clinical trial is highly dependent on the quality of the CRCs on the ground. And this pertains to all trial related activities from recruitment to fidelity to protocol to closure. Good CRCs enhance the quality of a trial. Equally, poorly trained CRCs can crash a trial however good the protocol may be……..”

“…..CRCs are the backbone of any clinical trial…."

Professor Pierce Chow
Senior Consultant Surgeon, National Cancer Centre and Singapore General Hospital
Course Director, Duke-NUS Medical School,
Senior Clinician Investigator, National Medical Research Council
Challenges of CRC in Singapore
CRCs – Challenges

- High Turnover
- Low Retention
- Not the Core Focus
- Lack of Formal Training
- Variance of Funding
- Nature of Term Contract

Issues
Research Staff Career Development (RSCD) Joint Committee
RSCD Joint Committee

• Established in November 2008 with representatives from Research Office, Clinical Trial Units, Clusters’ HR, MOHH and SCRI.

• Objective: To recommend a nation-wide, harmonized career path for CRCs with appropriate training

• Proposed a career path with training recommendations to BMS Exco.
Clinical Trials Implementation Committee (CTIC)

- In 2014 MOH commissioned the Clinical Trials Implementation Committee (CTIC) chaired by DS(P). CTIC comprises of Research Directors from all clusters, ED, NMRC and CEO, SCRI.

- Objective: to identify ways to improve the operational efficiency of clinical trials in Singapore.

- One of the areas identified was training and career path for CRCs.
Training and Career Path Framework for CRCs
Summary of Career Path Framework for CRCs

CRC Manager (Admin Focus)
- Degree with 4 yrs supervisory experience
- Certification by Professional Organization

Lead CRC (Clinical Focus)
- Degree/Diploma with 2 yrs Snr CRC experience
- Certification by Professional Organization

Senior CRC
- Degree with 3 yrs CRC experience
- Diploma with 6 yrs CRC experience
- Certification by Professional Organization

CRC
- Degree in life science/ nursing/ pharmacy
- Diploma with 3 yrs experience

Asst CRC
- Diploma in life science/ nursing/ pharmacy
Career Progression: Nursing Track

Director of Nursing

**Clinical Track**
- Assistant Director of Nursing
  - Senior Nurse Clinician
  - Nurse Clinician

**Management Track**
- Assistant Director of Nursing
  - Senior Nurse Manager
  - Nurse Manager
  - Senior/Staff Nurse
  - Senior/Assistant Nurse

**Education Track**
- Assistant Director of Nursing
  - Senior Nurse Educator
  - Nurse Educator
Career Progression: Allied Health Professionals Track

**CLINICAL ADMIN TRACK**
- Deputy Director Allied Health (HOD)
- Senior Principal AHP / Senior Manager (HOD)
- Principal AHP/Manager

**CLINICAL SPECIALIST TRACK**
- Consultant AHP Specialist
- Senior Principal AHP Specialist
- Principal Specialist AHP

**CLINICAL EDUCATOR – RESEARCHER TRACK**
- Consultant AHP Educator – Researcher
- Senior Principal AHP Educator – Researcher
- Principal AHP Educator – Researcher
## Training programs for CRCs

<table>
<thead>
<tr>
<th>Academic Qualifications</th>
<th>Provider</th>
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<tbody>
<tr>
<td>MSc in Clinical Research</td>
<td>Edinburgh Napier University via CSM Academy International</td>
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<tr>
<td>WSQ Diploma, Specialist Diploma, Graduate Diploma in Clinical Research</td>
<td>Edinburgh Napier University via CSM Academy International</td>
</tr>
<tr>
<td>Specialist Diploma in Clinical Trials Management</td>
<td>Nanyang Polytechnic</td>
</tr>
<tr>
<td>Postgraduate Certificate in Clinical Trial Management</td>
<td>NUS Academy of GxP Excellence (NUSAGE)</td>
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<tr>
<th>Institutional Training</th>
<th>Provider</th>
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<tr>
<td>Manage Clinical Trial Essential Documents</td>
<td>NHG/ SingHealth</td>
</tr>
<tr>
<td>Perform Recruitment and Retention of Subjects in Clinical Trials</td>
<td>NHG Research &amp; Development Office</td>
</tr>
<tr>
<td>Various Workshops &amp; Courses</td>
<td>SingHealth Academic Medicine Research Institute (AMRI) / NHG Research &amp; Development Office</td>
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National Training & Certification for CRCs

Clinical Research Practice

Institutional Based Learning

Monitoring/DM/PM Electives

Therapeutic Electives

Core Base Modules
What are You Building?

Three Stonecutters were asked: “What are you doing?”

I’m cutting stones!

I’m building a cathedral.

I’m earning a living.
Thank You