Preparing the Clinical Research Workforce through Education Partnerships

Dr Lynn Kilbride
Edinburgh Napier University
Edinburgh Napier Facts

- Named after John Napier, 16th century mathematician and inventor of logarithms.
- Founded in 1964, achieving University status in 1992 – one of Scotland’s modern universities
- Over 12,000 students, of which over 2500 are international students.
- Three faculties: Engineering, Computing and Creative Industries; Health, Life and Social Science; and the Napier University Business School.

Clinical Trials in the Asia Pacific Region

- Global figures for clinical trial recruitment highlight a dramatic shift away from the United States and toward Asia Pacific.
- In 2002, 53 percent of patients recruited globally were in North America; in 2008 that figure was down to 32 percent. Asia Pacific saw an increase from 6 percent to 11 percent over the same period.
- Experience varies from country to country, Singapore 15 years plus, India 5 years
Clinical Trials – What is Pharma Seeking?

- Development of safe and effective drugs for a wide range of diseases and conditions
- Markets which can start and recruit trials faster which save costs
  - Improved regulatory approvals times
  - Available patient populations for research
- Robust Clinical Data
- Opportunities for Cost Saving

Reasons for Growth

- Large Patient Populations with diseases of both the developed and developing world
- Evolving IP Protection Legislation
- Commercial Market Potential
- Reliable Data Quality
- Opportunities for Cost Saving
- Availability of Clinical Staff
What Singapore can offer

- Approval times
  - Parallel submission for ethics and the regulatory approval from the Health Sciences Authority = improved approvals times
  - Average 2 months
- The quality of Clinical trials are of an international standard.
- Good protection of Intellectual Property (IP)
- Accessibility to Asia’s large patient/population base
- Good infrastructure developed over time

By 2015 - Singapore

Currently

- Biomedical Sector accounts for 4% of Singapore GDP (2010)
- Manufactures $20 billion worth of medicines and devices
- Around 630 ongoing research development projects

2015

- Achieve $25 in manufacturing output
- Biomedical Services Hub (Sing Health Investigational Medicine Unit)
Clinical Trial Delivery - Singapore’s workforce

- Highly trained medical workforce
- Excellent medical/research facilities
- Investigators with mandatory research training which ensures compliance with regulatory and ethical framework
- Ideally placed within Asia for Contract Research Organisations (CROs)

Problem

- Lack of trained staff demand for trained staff is outstripping supply

Preparing the Workforce

WDA Announced the Commission of 2 new courses

- Research co-ordinators – Nanying Polytechnic
  - patient recruitment, screening skills, medical record retrieval and electronic data entry skills
- Clinical Research Coordinators – Edinburgh Napier University
  - Covers everything from research methodology, ethics, GCP, data collection, trial site selection
Importance of Education for Staff, Companies and Organisations

- Meeting infrastructure needs of global clinical trials
  - Legislation
  - Procedural differences
  - Language/cultural barriers
- Attracting Pharma companies/CROs to work in new markets
- Recruitment and Retention of Staff
- More competition for a limited group of prospective subjects
- Ensuring that there is a skilled workforce in place
- Creating a career framework for clinical research staff

MSc in Clinical Research & WSQ Clinical research qualifications

- Launched in June by Minister of State for Manpower and National Development, BG Tan Chaun-Jin
- 3 year Government funded programme to increase Clinical Research Associate workforce
- Mapped to competency framework devised in Singapore
- 70% of course fees paid for by Government
- Employers financially supported to send employees on course
- Flexible entry/exit points
News

Govt injects $6m to train locals in clinical research industry

SINGAPORE — In an effort to groom more locals in the clinical research industry, the Government is investing $30 million to develop a Workforce Skills Qualifications (WSQ) framework. Launched yesterday, it will allow professionals to attain a postgraduate clinical research degree — the first of its kind in Singapore.

With global pharmaceutical companies increasing their research activities in Asia and more clinical trial centres being set up here, the Government anticipates an increased demand for clinical research assistants (CRAs), Senior Director of Industry Skills & Planning at the Workforce Development Agency (WDA), Dr Andy Tan, said. “We have about 400 CRAs but many of them have actually acquired their skills on the job. We are going to train another 300 in the next three years.”

Programme Aims

To provide students with knowledge and skills that will enable them to respond effectively in a rapidly changing health arena that is strongly influenced by healthcare trends and local, national and international legislation. The Programme aims to:

• Support and challenge students in the development of their knowledge and skills to enable them to enter and / or continue more effectively in the professional practice of clinical research.

• Encourage students to utilise their skills and knowledge to influence the developing field of clinical research

• Provide students with the opportunity critically explore the complexities of conducting clinical research in the current healthcare and legislative environment

$6m boost for courses in clinical research

The Government is pouring in $6 million into a new series of courses in clinical research to support its growth.

The 24-month Workforce Skills Qualifications (WSQ) framework, launched yesterday, includes the master’s programme in clinical research, which will aim to give formal training and also develop clinical research capabilities.

“Much of the focus here is on the science, pharmacy and nursing graduates who pick up skills on the job,” the Programme Director, a special clinical research and a policy officer, said. “The courses will be taken part-time for up to six weeks.”

Students can also take off three years progressively for a year full-time, produce a dissertation, and receive a certificate. The courses are a collaboration between the University of Edinburgh and Scotland’s Edinburgh Napier University, Singapore’s Nanyang Technological University and the Edinburgh Napier University Campus in Singapore.

“IRT is essential for the industry to increase its overall operational efficiency in the way clinical trials are conducted,” he said.

The Workforce Development Agency will be introducing 70 per cent of the courses for Singaporean and permanent residents.

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The programme

<table>
<thead>
<tr>
<th>Course Fee Support</th>
<th>Grant Component for Programme</th>
<th>Funding Rates</th>
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<tbody>
<tr>
<td>70% of Course Fees capped at $8400 per trainee per WSQ qualification but each trainee can take up to 3 WSQ qualifications</td>
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<tr>
<td>70% of salary capped at $1400 per month (subject to WDA approval)</td>
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<tr>
<th>Course Title</th>
<th>Full Course Fee</th>
<th>WDA Subsidised Course Fee</th>
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<tbody>
<tr>
<td>WSQ Diploma in Clinical Research</td>
<td>$12,000</td>
<td>$3,600</td>
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<tr>
<td>WSQ Specialist Diploma in Clinical Research</td>
<td>$12,000</td>
<td>$3,600</td>
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<tr>
<td>WSQ Graduate Diploma in Clinical Research</td>
<td>$12,000</td>
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NB: All fees are subject to the fee protection scheme dependent on payment dates.
Course Fee Subsidy
- Terms and Conditions

• Applicant MUST be employed in clinical research related industry

• Applicant MUST be sponsored by Employer

• Subsidy is per WSQ Diploma, not per module

• Employer has to go online to submit via Skills Connect

Applicants not employed in CR area/unemployed and / not sponsored by Employer could sign up for the programme at full fee

The Programme Team

Gordon Hill MSc, PGCE, BA, RGN ACTA (Singapore) - Gordon is a Lecturer in the School of Nursing Midwifery and Social Care. He is the Programme leader for the Post Graduate Certificate in Clinical Research Associate training, Under and Postgraduate Certificates in clinical Research. He took up this post in 2006 having previously held a post of Nurse Manager in the Clinical Research Facility in Edinburgh and a held a number of research posts prior to that.

Dr Lynn Kilbride PhD, MSc, PGCE, BA (hons), RGN ACTA (Singapore) - Lynn undertakes an active teaching and research role as a Reader in the SNMSC. She is chief investigator in a number of research and knowledge transfer projects in the area of diabetes and neurosciences. Previously Lynn undertook a research nurse role and this experience, combined with her chief investigator role, has provided her with the knowledge and expertise to actively contribute to the clinical research education that is offered within Edinburgh Napier University.
Outcomes

- A larger Clinical Trial workforce in Singapore
- Highly trained CRAs capable of efficiently and effectively facilitating large, international clinical trials
- Increased Clinical Trial activity in Singapore
- Increased access to novel investigational drugs for Singaporean population (e.g. in Oncology)
- Increased recognition of Singapore’s central role in the Clinical Trial Industry

Any Questions?

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