**Supplementary Table 2**

**Details of activities and outcomes described in the included interventions**

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<tr>
<th>Brief name</th>
<th>Activities</th>
<th>Outcomes</th>
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</table>
| IDIMak     | Skills training  
Protected time for research for faculty  
New research administration structures  
Improved accountability  
Mentoring | Increased publications, both overall, and with IDI staff as first author. |
| TDR        | Institutional Strengthening Grants support to improve infrastructure and the research environment | Positive impact on all the services analysed. Greatest impact on laboratory facilities and human resources |
| CoMM       | University Research Support Centre set up providing:  
• research grants administration,  
• data management,  
• training and  
• clinical trial support. | New research policies established  
Success is competitive research grants  
Income generated  
Expatriate faculty returned to university |
| KATH       | Course in research methods provided to staff  
Hospital’s research systems strengthened  
Critical mass of research expertise created | Research support office and biostatistics unit established.  
Greater success with grants and publications |
| MozC       | Research capacity development courses  
New research administration structure  
Collaborative research projects with Northern partners  
Substantial investment in bioinformatics  
New Institutional Review Board | Improved research process and outputs  
Increased publications, particularly in English  
Sustainable research partnerships  
"Centre of Excellence" standard laboratory established  
Increased research grants |
| UHon       | Established a locally accredited research MSc  
Provided training for faculty members  
Expanded library provision  
Facilitated partnerships and networks  
Funded new research space  
Built a state-of-the-art research laboratory | All first cohort of MSc students graduated  
Increased publications from faculty and students  
Expanded research networks  
Non-medical research ethics board established  
Biosafety training centre established |
| CHSZim       | Research support centre established  
Training in research methods and research administration  
Investment in ICT including hardware  
Mentorship system set up  
Visiting scholars programme provided international expertise  
Collaborations with national organisation including government | Increased grant income  
Increased publications  
Improved Internet connectivity  
Faculty numbers increased by 36%  
Student enrolment increased by 61%  
Cardiac research laboratory established |
|-------------|--------------------------------------------------------------------------------|
| SJTU        | Recruited new staff and set up research groups with generous government funding.  
Set up tenure-track system with compulsory quality standards and a system of financial incentives for staff | Increased proportion of faculty with PhDs (up from 50% to 85%)  
University revenue doubled  
Competitive research income trebled  
Number of disciplines in ESI top 1% increased from 5 to 14 |
| SACORE      | Training on supervision, mentoring and scientific writing  
Seed funding to support grant applications for junior faculty and postgraduate students  
Travel fellowships to attend conferences and courses for faculty and administrators  
Funded MPhil, PhD, and postdoctoral fellowships  
Supported establishment of research support centres in two partner institutions | Three scholars graduated and connected with future collaborators  
20 articles published in peer-reviewed journals  
Research support centres established in two partner Universities |
| Lmpp        | Financial incentives to staff for getting published and successful supervision.  
Training on research methods, getting published and supervision of postgraduate students  
Supportive research environment established.  
Targeted support for female staff.  
Financial support for staff undertaking PhDs. | Increase in faculty registered for PhDs  
Increase in faculty publications |
| PRIME-K     | Training, including e-learning, support and mentorship  
Improved research administration | Many new research partnerships in-country, in SSA and overseas |
| ARCADE      | On-line and blended teaching resources developed and shared across many institutions in many countries.  
Training in proposal and grant writing.  
Institutional capacity in communications and grant management strengthened | New PhD and MSc proposals written.  
Cross institutional research proposals developed with > 20% were funded |
| WCape       | Protected time for faculty to complete PhDs  
Skills development courses and writing | Increase in proportion of faculty with higher degrees |
<table>
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<tr>
<th></th>
<th>retreats</th>
<th>Increase in number of students graduating</th>
<th>Increase in publications</th>
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<tbody>
<tr>
<td></td>
<td>Co-supervision with Northern partners</td>
<td>New Masters degree established</td>
<td>Three conferences organised</td>
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<tr>
<td>WHSRO</td>
<td>Skills training courses for faculty and students</td>
<td>PhD and some MSc degrees completed in a shorter time</td>
<td>Publications doubled, with 80% of the outputs in ISI-listed international journals. Some initiatives (cadopted by other Schools in the Faculty of Health Sciences</td>
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