Global Health
Clinical Consortium
Impact Report

SEPTEMBER 2016
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## PDP LIST

- **Aeras** - Aeras
- **DNDi** - Drugs for Neglected Diseases Initiative
- **FIND** - Foundation for Innovative New Diagnostics
- **GATB** - Global Alliance for TB Drug Development
- **IAVI** - International AIDS Vaccine Initiative
- **IDRI** - Infectious Disease Research Institute
- **IPM** - International Partnership for Microbicides
- **IVI** - International Vaccine Institute
- **MMV** - Medicines for Malaria Venture
- **PATH** - PATH
- **Sabin** - Sabin Vaccine Institute
About the GHCC

The Global Health Clinical Consortium (GHCC) is a collaboration initiated in 2009 and draws together leaders from 11 Product Development Partners (PDPs). Focused on combating diseases that particularly affect the poorest, these organizations are involved in over 132 ongoing and planned clinical trials to develop vaccines, microbicides/preventatives, therapeutic products, and diagnostics. In addition to the customary challenges of conducting clinical trials, the PDPs face complexities working within resource-limited settings including new manufacturing partner relationships; dangerous political environments; challenges with electricity, hygiene, and connectivity; inadequate facilities and equipment; and working with vulnerable populations.

MISSION PURPOSE

The GHCC is charged with leading the thinking on collaboration opportunities, gathering input from stakeholders, and proposing recommendations to realize synergies through joint effort.

OBJECTIVES

► Achieve continuous, targeted improvements in speed, quality, and cost of clinical development.
► Enhance communication, partnership, and coordination among PDPs and streamline interactions with key partners.
► Understand and leverage collective capabilities and expertise to share and follow best practices.
ORGANIZATION AND MANAGEMENT

GHCC Leadership Team (LT): The LT consists of 7 members from various PDP organizations who provide strategic input, endorse proposed initiatives, and coordinate these with the GHCC working groups. This is done in concert with a dedicated Bill & Melinda Gates Foundation Program Officer who also provides essential project management.

GHCC Working Groups (WG): Include a cross-section of PDP representatives. A lead is identified for each WG to assist with guidance and direction. Timelines, outputs, and deliverables are determined by the PDPs at the annual convening. The working groups meet periodically via teleconferences throughout the year to meet these objectives.

Full GHCC Membership: Each PDP is represented on joint quarterly “All Clinical” calls. These provide updates from the GHCC WGs and LT. The GHCC meets face-to-face annually.

WHERE WE WORK

Geographic Regions and Number of Patients for Ongoing and Planned Studies

<table>
<thead>
<tr>
<th>Number of patients</th>
<th>Number of studies</th>
</tr>
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<tr>
<td>&gt;5000</td>
<td>29</td>
</tr>
<tr>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

Countries with highest number of studies:
South Africa (29), United States (16), Bangladesh (10), Kenya (10), Democratic Republic of the Congo (8), Uganda (8)

Countries with the highest number of patients:
Bangladesh (211,038), Democratic Republic of the Congo (47,416), Kenya (24,672), Ghana (22,613), India (15,872), South Africa (13,092)
**PDP Networking**

**BACKGROUND**
GHCC PDPs are a diverse group with distinct missions, organizations, and approaches. While each PDP has its own areas of expertise, strengths, and challenges, they are united in the common goal of developing products (drugs, vaccines, preventatives, and diagnostics) to solve the most pressing challenges to global health.

**GOALS**
- Create a forum for sharing information about, and expertise in, the planning and execution of clinical trials.
- Leverage the collective capabilities of GHCC PDPs.
- Collaborate with other groups to promote synergy and create change together.

**RESULTS**

- **GHCC Convenings:** Annual meetings serve to strengthen relationships, foster improved collaboration, and enable experience sharing across PDPs and preferred providers (PP). These have led to successful knowledge sharing on key challenges, such as site capacity management, risk-based monitoring, quality management, vendor management, trial master file maintenance, and data management.

- **PDP Pipeline:** GHCC members maintain a comprehensive listing of the status of PDP clinical trials. This data informs planning and resource management efforts for PDPs and PPs.

- **Strategic Partnership with the Global Health Network (GHN):** The GHN provides access to information, training, and network opportunities for clinical research sites and researchers, particularly in Low-Middle Income Countries (LMICs). The GHCC has successfully partnered with the GHN to develop SiteFinder, a multi-module GCLP eLearning course, and a GCP trainer online communication resource.

- **Strategic Partnership with the Multi-Regional Clinical Trials Center (MRCT) at Harvard and Brigham and Women’s:** Through this partnership, the GHCC members and associated sites can access training that addresses specific gaps in LMIC clinical research. Current offerings include AE/SAE causality assessments and DSMB membership.

- **Shared Site Knowledge:** Site selection is a critical factor in the success, cost, and time to initiate clinical trials. PDPs invest significant resources to train and build the necessary infrastructure to conduct high quality studies in LMICs. Sharing information about site availability and capabilities promotes site sustainability and leverages efficiencies. Site knowledge is shared in three ways: a Clinical Trial Site Intelligence database maintained by the GHCC, SiteFinder, and informal networking.

- **PDP Expertise:** Case studies and Q&A sessions have enabled PDPs to share lessons learned and best practices across the GHCC. Examples include the “Ask the Data Manager” series, a case study on lessons learned in a Phase 3 pivotal trial, and a Good Participatory Practice workshop.
MEMBER SURVEY

In August 2015, the GHCC surveyed its membership to assess its impact on PDP clinical activities and identify areas of highest interest and impact for future initiatives:

Survey results indicate that networking and knowledge sharing provide the greatest benefits to most members. Resources generated through the GHCC are used and rated highly by some but not all members, reflecting the diversity of needs as well as GHCC membership.

<table>
<thead>
<tr>
<th></th>
<th>critical</th>
<th>important</th>
<th>of some importance</th>
<th>not important</th>
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<td>Laboratory</td>
<td>0</td>
<td>4</td>
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<tr>
<td>Awareness/knowledge sharing</td>
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<td>8</td>
<td>2</td>
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<td>Networking</td>
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<td>14</td>
<td>5</td>
<td>0</td>
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<tr>
<td>Site utilization</td>
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<td>6</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Site costing</td>
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<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Shared tools/resources</td>
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<td>12</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Vendors/preferred providers</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RFP process</td>
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<td>Regulatory requirements database</td>
<td>1</td>
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</table>
CRO Preferred Provider Initiative

BACKGROUND

Strong partnership with contract research organizations (CROs) is critical to the successful planning, execution, and analysis of clinical trials. GHCC members identified several key challenges impacting PDP success in identifying and securing services, including:

- Service rates of CROs with excellent reputations are prohibitively expensive for nonprofit budgets.
- Small size of PDPs may not attract larger CROs with broad capabilities.
- PDP clinical trials are complex and conducted in uncertain and remote environments with limited CRO coverage.

GOAL

Identify a limited number of CROs with appropriate clinical trial experience, a broad range of service offerings, an acceptance of a GHCC–determined evaluation process, and a willingness to provide services at a discounted rate.

RESULTS

Six PPs were selected in 2011 and service level agreements were established to govern the relationship between the GHCC and PPs.

The number of studies using PP services has increased due to an increase in the number of PDP studies and an increased use of PPs. A variety of services is required, as shown on the right (PP services, 2014).
Annual evaluations are conducted allowing PPs and PDPs to share feedback on services, staff assignments, and other performance measures. Results are compiled and shared, providing collective feedback on performance across studies and PDPs. The process establishes an effective feedback loop and enables shared oversight of PPs. Feedback from the PPs also benefits the PDPs and has led to improved processes and optimized vendor management.

With PP agreements expiring in 2017, the GHCC PP WG began an in-depth evaluation of the current mix of PPs to ensure that the services and geographic coverage continue to meet the diverse needs of PDPs. Additional PPs with complementary expertise have been selected and invited to join the network.

FUTURE PLANS

Key Performance Indicators (KPIs) will be jointly selected and included in the 2017 Service Level Agreements with each of the PPs. These KPIs will identify risks and performance issues in real time, facilitating joint oversight and partnership.

Individual PDPs will sponsor evaluations of PP capabilities using an agreed upon plan. Results will be shared across the PDPs.

The GHCC will utilize the five year experience to conduct a comprehensive lessons learned exercise to identify PDP best practices working with PPs.
Laboratory Working Group

BACKGROUND

Laboratory endpoints are critical to clinical research. Standardized laboratory selection, qualification, training, monitoring, and auditing are crucial and LMIC laboratory personnel face many challenges in meeting Good Clinical Laboratory Practices (GCLP) standards for clinical trials. The GHCC Lab WG consists of subject matter experts who co-develop tools for laboratory selection, evaluation, and quality oversight.

GOALS

- Strengthen PDPs’ ability to manage quality and risk through developing standardized tools to evaluate and audit laboratories, establish minimum lab auditor qualifications, and enable open-access to Good Clinical Laboratory Practices (GCLP) training for clinical laboratory personnel.

- Reduce duplicative effort and cost through sharing non-study specific lab audits across the GHCC and enabling a primary PDP contact for specific labs to more efficiently manage quality and lab relationships.
RESULTS

- Standardized audit reporting templates developed, tested, and in use by multiple PDPs.
- Minimum qualification standards established to inform evaluation and selection of auditors.
- In collaboration with the Shared Training WG, provided GCLP training to 89 clinical laboratory personnel in Africa, India, and South America.
- Where laboratories are used by more than 1 PDP, a primary PDP point of contact has been identified to gain agreement on sharing of audit reports across the GHCC.
- Peer-reviewed introductory GCLP eLearning module and the first of 6 in-depth modules launched. Combined, these modules have been taken by more than 4,000 lab personnel in LMICs.

FUTURE PLANS

Identified as one of the highest priorities within the GHCC, the Laboratory WG will remain as an invaluable resource to support PDPs’ continuous improvement of laboratory performance.

The GCLP eLearning effort will continue over the next several years until the remainder of in-depth modules have been released.

The Lab WG is developing a Lab Planning Tool leveraging the lessons learned from PDP experiences in LMIC settings to support informed planning and laboratory risk identification and mitigation.
Shared Training Working Group

BACKGROUND

Recognizing that each PDP was investing time and resources in GCP and GCLP training for more than 300 sites collectively and had limited ability to measure impact and skills application, the GHCC determined there would be value in joining efforts to standardize content and deliver training.

GOAL

In collaboration with a GHCC PP, offer low-cost or no cost GCP and GCLP training opportunities to clinical research and PDP staff in resource limited settings focused on developing effective problem-solving skills, establishing a community of practice, and measuring training impact and skills application.

RESULTS

The PP Initiative provided a unique opportunity for PDPs to partner with a PP. The PP donated staff time and offered open access to their high quality training material. Through joint funding amongst PDPs, the GHCC was able to develop and execute three GCP/GCLP training courses and two GCP train-the-trainer (TTT) courses:

<table>
<thead>
<tr>
<th>Date</th>
<th>Training Type</th>
<th>Location</th>
<th># of participants (GCP/GCLP)</th>
<th># of sites</th>
<th># of countries</th>
<th># of PDPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN. 2012</td>
<td>GCP/GCLP</td>
<td>Johannesburg, South Africa</td>
<td>142 (96/46)</td>
<td>45</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>APRIL 2012</td>
<td>GCP/GCLP</td>
<td>New Delhi, India</td>
<td>63 (44/19)</td>
<td>13</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>JULY 2013</td>
<td>GCP/GCLP</td>
<td>Belo Horizonte, Brazil</td>
<td>62 (33/24)</td>
<td>10</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>SEP. 2013</td>
<td>GCP TTT</td>
<td>Entebbe, Uganda</td>
<td>44</td>
<td>30</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>OCT. 2015</td>
<td>GCP TTT</td>
<td>Cape Town, South Africa</td>
<td>90</td>
<td>37</td>
<td>23</td>
<td>10</td>
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</table>
Participant feedback was collected through informal survey processes and a standard evaluation instrument. GCP/GCLP training conducted in a group setting and independent of any particular study allowed major principles and practices to be covered in depth. It encouraged substantial group discussion and problem solving. Participants were able to reflect on their local site practices, to pose situational questions to colleagues familiar with resource-limited setting constraints, and to evaluate the effectiveness of existing practices. This led to increased confidence in applying GCP/GCLP principles and adopting a quality mindset.

Most participants agreed or strongly agreed that the trainings enhanced their overall effectiveness, with positive impact on knowledge retention, teamwork and productivity, employee retention, leadership effectiveness, and relationships with research participants and external stakeholders. Participants attending the GCLP training indicated a greater impact than those attending the GCP and train-the-trainer sessions. GHCC members attributed this to the limited availability of classroom-based GCLP training in resource limited settings; laboratory personnel participants may have had very limited prior exposure to GCLP concepts.

The impact of the two GCP train-the-trainer sessions is being evaluated against objectives to increase the depth and transmissibility of in-region GCP trainer expertise.

Evaluate usefulness of an online community of practice launched with the most recent training effort. Its purpose is to enable peer-to-peer outreach as well as identification of GCP trainers that could be contacted when GCP training needs arise.

Online training opportunities offer significant advantages in cost and convenience. The working group will assess opportunities to develop additional training in collaboration with the Global Health Network.
**Cost and Budget Working Group**

**BACKGROUND AND GOALS**

While a number of benchmarking tools support cost estimation for clinical trials, few have sufficient data from clinical trials conducted in LMICs. Study cost projections are often prepared using PDP historical data and CRO budgeting tools. The Costs and Budgets WG set out to evaluate whether standardization of an RFP template and access to industry benchmarks would increase their ability to provide accurate costing for clinical trials.

**RESULTS**

An RFP template was developed and implemented by the Costs and Budgets WG with PP participation. This tool has benefited both PDPs and PPs. For PDPs, it has eliminated the time-consuming exercise of mapping variable budget formats and facilitates comparison across multiple vendor proposals. Variability of assumptions across vendors remains a challenge though this is minimized through PDP specificity in the study-specific customization of the RFP template. For PPs, establishment of a consistent template has translated to consistency in expectations for budgeting for GHCC trials, with a single mapping reference from their own systems to the GHCC’s designated format.

PDPs work with many of the same clinical research sites and there is benefit to both PDPs and sites to adopt efficient approaches to the contracts negotiation process. The Costs and Budgets WG developed a standard unitized study budget template with the goal of reducing cycle time to both final negotiated site budgets and time to contract modifications. While seen as valuable to both PDPs and sites to increase transparency and accuracy in budgeting practices, this unitized budgeting approach has had limited uptake with LMIC clinical research sites who are more comfortable with FTE (time and materials) budgeting practices. In addition, unitized budgeting makes it more challenging to justify heavy investment in capacity building and infrastructure maintenance, which is an adverse outcome for clinical study sites that rely heavily on PDP support to remain financially and technically viable.

Medidata Grants Manager is a commercial benchmarking tool currently being piloted by 5 PDPs using a representative sampling of 10 clinical studies. There are three primary goals: (1) lend support to LMIC clinical research sites to adopt unitized budgeting practices, (2) determine if benchmarking data enables PDPs to more accurately estimate actual trial costs, and (3) increase the availability of LMIC clinical trial site cost benchmarking data.
Following a comprehensive evaluation of the utility of Medidata Grants Manager, PDPs participating in the pilot will make a formal recommendation about whether this is valuable against the three original goals. If valuable, the GHCC will evaluate what is possible and practical for continued access to the tool.

Conclusion

An approach of continuous feedback and applying lessons learned has contributed to the success of this collaboration effort. Key factors for success include:

- Clearly defined objectives to focus the consortium’s efforts.
- A Leadership Team to represent the PDPs and support initiative strategies.
- Commitment to meet annually to assess areas for collective benefit, gaps, feasibility, and level of impact prior to engaging in initiatives and throughout.
- Lead/facilitator role is critical to drive initiatives forward.
- Recognition that timelines are often slower than anticipated.
- Communication is key both to the GHCC and internally within PDPs to reinforce the work, enable the greatest benefit from activities, and minimize duplicative efforts.
- Set realistic expectations and deliverables.
- Be flexible through the evolution of the collaboration.