EURO HEALTH GROUP

UNITAID

WHO Diagnostics Prequalification Project (DxPQ) and WHO Medicines Prequalification Project (MPQ) Mid-Term Evaluation

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FINAL REPORT

Euro Health Group evaluation team:

Jennifer Lissfelt
Julie Pasquier

Euro Health Group A/S
Tinghøjvej 77
DK-2860 Søborg
Tel: +45 3969 6888
Email: ehg@ehg.dk
Web: www.ehg.dk

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ABBREVIATIONS AND ACRONYMS

API	Active Pharmaceutical Ingredient
ART	Antiretroviral Therapy
BMGF	The Bill and Melinda Gates Foundation
CDC	US Centers for Disease Control
CE	European Community
CHAI	Clinton Health Access Initiative
CPQ	Certified PQ document initiative
CRM	Customer Relationship Management
CRO	Contract Research Organization
DFID	(UK) Department for International Development
DPQ	Diagnostics Prequalification Project
dx	Diagnostics
EID	Early Infant Diagnosis
EMA	European Medicines Agency
EMP	Department Of Essential Medicines and Health Products (Of WHO)
EOI	Expression Of Interest
EQA	External Quality Assessment
ERP	Expert Review Panel (Of Global Fund And WHO)
ERPD	Expert Review Panel for Diagnostics (Of Global Fund And WHO)
EU	European Union
FDA	(US) Food And Drug Administration
FDC	Fixed-Dose Combination
FIND	Foundation for New Innovative Diagnostics
FPP	Finished Pharmaceutical Product
GAVI	Global Alliance for Vaccines and Immunization (The Vaccine Alliance)
G6PD	Glucose-6-Phosphate Dehydrogenase
GF	Global Fund to Fight AIDS, Tuberculosis and Malaria
GMP	Good Manufacturing Practice
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
ICH	International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use
IDMA	International Diagnostics Manufacturers Association
IFPMA	International Federation of Pharmaceutical Manufacturers Associations
IMDRF	International Medical Devices Regulatory Forum
IPC	International Pharmaceutical Coordination Group

IVD	In Vitro Diagnostic
KPI	Key Performance Indicator
LMIC	Low and middle-income countries
MCAZ	Medicines Control Authority of Zimbabwe
MDR-TB	Multidrug-Resistant Tuberculosis
MPP	Medicines Patent Pool
MPQ	Medicines Prequalification Project
MSF	Médecins Sans Frontières
NAFDAC	National Agency For Food and Drug Administration and Control of Nigeria
NGO	Non-Governmental Organization
NRA	National Regulatory Authority
PEPFAR	US President's Emergency Plan for AIDS Relief
PIC/S	Pharmaceutical Inspection Convention/Pharmaceutical Inspection Co-Operation Scheme
POC	Point-Of-Care
PQ	Prequalification
PQDx	Prequalification of Diagnostics
PQM	Prequalification of Medicines
PQP	Prequalification Programme
PQT	Prequalification Team
PSC	Programme Support Cost
PV	Pharmacovigilance
QA	Quality Assurance
QC	Quality Control
QCL	Quality Control Laboratory
QMS	Quality Management System
RDT	Rapid Diagnostic Test
RHT	Regulation Of Medicines And Other Health Technologies Department (of WHO)
RSS	Regulatory Systems Strengthening (Team Under RHT at WHO)
SAV	Safety And Vigilance (Team Under RHT at WHO)
SII	Serum Institute of India
SOP	Standard Operating Procedure
SRA	Stringent Regulatory Authority
TA	Technical Assistance
TB	Tuberculosis
UNICEF	United Nations Children's Fund
VFM	Value for Money
VL	Viral Load
WHOPES	WHO Pesticide Evaluation Scheme

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EXECUTIVE SUMMARY

UNITAID is a global health initiative providing funding for innovations and solutions in the global response to HIV/AIDS, tuberculosis (TB) and malaria. The institution was founded in September 2006, and works with implementing partners including the World Health Organization (WHO) to finance procurement of medicines and diagnostics for developing countries, and to address gaps or barriers to health solutions in the fight against the three diseases, including ensuring the quality of essential health products. Since 2006, UNITAID has provided support to WHO's Prequalification (PQ) Programme as a key cross-cutting issue within UNITAID's projects portfolio, and is the largest funder of this programme. The current Medicines Prequalification Project (MPQ) was authorized for funding by the UNITAID Board in July 2014, with a ceiling of USD 38.13M for January 2014 through Dec 2016. The Diagnostics Prequalification Project (DPQ) was authorized for the same period with a funding ceiling of USD 12.16M.

Objectives

The aim of this evaluation is to assess progress made towards the overall objectives of the WHO PQ medicines and diagnostics projects funded by UNITAID by evaluating the objectives and indicators, achievements to date, and where possible, impacts. As the current UNITAID grant period ends at the end of 2016, UNITAID requested a "forward looking" review to assess what has been done under the grant, current activities and challenges, and potential future challenges and priorities, to help inform decisions around design of a potential next grant to begin in 2017.

Methodology

Conducted in March-May 2016, this evaluation entailed extensive documents collection and review; meetings and interviews in Geneva with UNITAID, WHO PQ and others; phone/Skype interviews of other key respondents from UNITAID, WHO, partner organizations, manufacturers, and countries (some 75 individuals from over 30 organizations); and data analysis and triangulation of findings. The EHG evaluation team examined the project's objectives, targets, and key performance indicators (KPIs) as stated in project documents and logframes, and measured PQ's performance to date against these indicators. The evaluation also assessed the project's alignment with UNITAID's strategic objectives; the relevance, effectiveness and efficiency of project measures and their implementation; and project impact (where possible). The evaluation also reviewed recommendations made in previous evaluations, to assess progress made on these recommendations. Information from various sources was triangulated to avoid bias or errors.

Findings

Although not a regulatory body, WHO PQ plays a vital role that regulatory bodies such as US FDA and the European Medicines Agency (EMA) cannot perhaps play as well – in focusing on products destined for developing country markets and being the global voice for public health. WHO PQ activities are central to UNITAID's strategy to combat HIV, Malaria, TB, and Hep B and C in assuring that quality medicines and diagnostics are on the market for procurement by donor organizations and country governments. The beneficiaries and persons affected by PQ's work (patients, regulatory authorities, manufacturers, donors/partners, procurement agencies, etc.) are diverse and wide ranging.

This evaluation categorized the findings on the PQ project in accordance with the project's:

- Harmonization with UNITAID strategic objectives – project is well harmonized with UNITAID strategies

- Progress made on recommendations from previous reviews – PQ has made numerous improvements and changes since the 2013 evaluation of PQDx and other reviews; some activities including the search for a new financing model are still under way
- Progress against project indicators and targets – PQ largely met their indicators and targets (where targets were set) for the period, although some timeline targets and some activities (e.g. work with countries, diagnostics EQAs) had delays
- Impacts on the market – PQ impacts the market in enhancing availability of QA'd products and suppliers, encouraging competition and price reductions, and improving product quality. The numbers of products PQ'd continue to grow, and the volumes of patients being served with these products globally also grows as countries expand their programmes. Other PQ work, including work with NRAs and QC labs to build capacity and streamline market access is appreciated by countries and suppliers (according to respondents to this review), and also affects the market. There is potential for substantial further impact in helping to coordinate and set global standards for quality assurance of diagnostics, which lags behind QA of medicines globally.
- Implementation and Management - The project has made progress in implementation, but there have also been organizational challenges at WHO and UNITAID. Most challenges seem to be due to management and communications issues, exacerbated by staffing challenges and turnover on both sides. WHO's challenges include turnover in top personnel, uncertainties about future structure and strategy, bureaucratic processes and difficulties in adapting to change, and inefficiencies and overlaps as full integration of PQ teams continues. UNITAID challenges include staff turnover and restructuring leading to communications issues with PQ, reporting requirements, changes in indicators and logframes, and the need to transition (as agreed) from funding parallel QA efforts (for which there was a previous need), to integration of these into PQ (these are a source of some tension among teams at WHO).
- Harmonization with Global QA Efforts - PQ is integral to global efforts to provide quality-assuredmedicines and diagnostics to combat HIV, TB, and Malaria. PQ partners closely with UNITAID, the Bill and Melinda Gates Foundation (BMGF), the Global Fund, MSF, US CDC, national governments, the Clinton Health Access Initiative (CHAI), initiatives such as the Global Diagnostics Taskforce (GDT) working to harmonize regulatory frameworks, and others. There is a broad consensus about the very high value that PQ provides. WHO PQ is almost fully funded by donor organizations presently.
- Financial Data and Trends – PQ had underspending under its UNITAID grant in both 2014 and 2015 due to grant start-up delays, HR delays and inefficiencies, savings achieved, scheduling difficulties, other funding sources received for some budgeted activities, programmatic delays, and staff work on the Ebola outbreak crisis. Efforts to improve operational efficiency in the PQ process have contributed to increased value for money.
- Sustainability and new PQ Financing Model discussion - PQ sustainability without the current over-reliance on donors has been studied for some years, most recently in a 2014 study led by McKinsey consultants and followed up by stakeholder consultations and deliberations. Various models were examined, including up-front fees, fees as a percentage of sales of PQ'd products through major procurers, procurement agency support, and combination models. The short-term aim is a sustainable, balanced (and easily managed) system to provide at least 50% of the estimated USD50M per year cost of the RHT/PQ programme, without deterring manufacturers or negatively impacting the market. A new model is slated to begin in 2017.
- Performance against the Key Research Parameters/questions (relevance, effectiveness, efficiency, etc.) - PQ is highly relevant and effective, could become more efficient and streamlined, and has significant impact globally. Lessons learned, and programme improvements could be better

shared and publicized, and risks more proactively managed. Implementation of a new financing model should be helpful in building longer-term PQ sustainability.

Recommendations:
The evaluation team proposed a number of recommendations (and potential actions) to address the observed and reported challenges to the PQ project, and/or to help a potential future grant to WHO PQ further contribute to UNITAID's stated objectives. Recommendations are grouped in eight categories, as follows, with several recommended actions for each:

1. **Improve alignment across grants & programmes**
2. **Develop consistency and continuity at UNITAID, enhance relations and communications with PQ**
3. **Enhance UNITAID Communication and visibility around QA**
4. **Consider broader support for continuum of QA efforts, including post-PQ**
5. **Consider expanding the scope of product areas with PQ support, to address global needs**
6. **Support improved WHO PQ communications to stakeholders**
7. **Support to WHO PQ to address management and structural challenges**
8. **Consider expanding support and TA for country activities that show real impact for QA**

1 INTRODUCTION

UNITAID is a global health initiative providing a sustainable source of funding for medicines and other health products used in the global response to HIV/AIDS, tuberculosis (TB) and malaria. The institution was founded in September 2006 by the governments of Brazil, Chile, France, Norway and the UK (but now includes some 29 country members and one foundation, and is largely financed by new and creative financing mechanisms, with half of its funding coming from a special fee on airline tickets. The airline tax was originally implemented in European countries, but now includes Cameroon, Chile, Congo, France, Madagascar, Mali, Mauritius, Niger and the Republic of Korea (while Norway contributes part of its Co_2 emissions tax from airline flights to UNITAID). Launched initially as a new effort to provide sustainable funding for HIV/AIDS, TB and malaria efforts, UNITAID works with implementing partners (including WHO, of which UNITAID is technically a part – as a division within the HIV/AIDS, TB, Malaria and Neglected Tropical Diseases area) to finance procurement of quality-assured medicines and diagnostics for developing countries, and to address gaps or barriers to health solutions in the fight against the three diseases. UNITAID works by "fast-tracking introduction of new health solutions by overcoming intellectual property barriers, lack of evidence, inadequate delivery, **sub-standard quality**, and high prices" (*UNITAID web site*). UNITAID does not have its own programmes to combat the three diseases, but supports programmes run by its implementing partners including WHO, the Clinton Health Access Initiative (CHAI), the Stop TB Partnership, Médecins Sans Frontières (MSF), the TB Alliance, the Medicines for Malaria Venture, and others.

With a growing number of donors, UNITAID's cumulative revenue was reportedly over USD 2.4B through 2014. Since 2006, UNITAID has provided support to WHO's Prequalification (PQ) Programme "as an investment in the improvement of quality medicines and diagnostics globally," as a key cross-cutting issue within UNITAID's projects portfolio. UNITAID notes that it funds more than 80% of the WHO Prequalification programme for HIV, TB and malaria medicines and diagnostics, with support to the **medicines PQ** programme totalling some USD104.2M since 2006. The UNITAID Project Support for Quality Assured **Diagnostics** programme began in 2009 and totals USD22.6M in funding through 2016.[1]

The current Medicines Prequalification Project (MPQ) was authorized for funding by the UNITAID Board in July 2014, with a ceiling of USD 38.13M for January 2014 through Dec 2016. The Diagnostics Prequalification Project (DPQ) was authorized for the same period with a funding ceiling of USD 12.16M. The implementing organization for the project is the WHO Prequalification Programme (WHO PQ). The WHO PQ falls under the Health Systems and Innovation (HIS) cluster of WHO, within the Department of Essential Medicines and Health Products (EMP) under the Regulation of Medicines and Other Health Technologies (RHT) unit.

Since the WHO restructuring which began in 2014, the RHT unit is comprised of four groups:

- Technologies Standards and Norms
- Regulatory Systems Strengthening
- **Prequalification (PQ)**
- Safety and Vigilance

[1] UNITAID web site: http://www.unitaid.eu/en/what/cross-cutting/prequalification

With the WHO restructuring and the PQ team integration across product areas in 2014, the PQ team is now comprised of five teams:

- Diagnostics Assessment
- Medicines Assessment
- Vaccines Assessment
- Inspection Services
- Technical Assistance

UNITAID funding is essential to the existence and ongoing activities of the PQ programme for medicines and diagnostics, and its efforts focusing on HIV, TB and malaria as well as related disease areas (e.g. Hepatitis B and C). The other major funder of the PQ programme is the Bill & Melinda Gates Foundation (BMGF), which supports PQ as part of an "umbrella grant" on "Optimizing regulatory processes for priority global products" in the amount of USD 48.2M for five years (Nov 2013-Nov 2018). Gates support for PQ has focused on streamlining the process for diagnostics assessments; revised PQ procedures for vaccines; improving PQ business processes through a customer relationship management (CRM) IT solution for diagnostics PQ and a quality management system to ensure good performance; and integration of the PQ Team across the three product areas[2]. UNITAID and Gates are reportedly now working toward greater harmonization and collaboration across their projects in support of PQ.

2 OBJECTIVES OF THE EVALUATION

The aim of this evaluation is to assess the progress made towards the overall objectives of the WHO PQ medicines and diagnostics projects funded by UNITAID by evaluating the objectives and indicators, achievements to date, and to some extent, the impact of the activities. As the current UNITAID grant period ends at the end of 2016, UNITAID requested a "forward looking" review to assess what has been done under the grant, current activities and challenges, and potential future challenges and priorities, to help inform decisions around design of a potential next grant to begin in 2017. The evaluation has focused on the current grant project period of 2014 through 2016 (as far as 2016 information is available at this time in May 2016), but has also examined key activities and progress leading up to this latest period.

3 EVALUATION FRAMEWORK AND PROCESS FOLLOWED

The EHG evaluation team examined the objectives and key performance indicators (KPIs) as specified in the project's Logical Frameworks (logframes) for Medicines and Diagnostics, and their performance to date vis-à-vis these indicators. Achievements of the project were measured against targets established (where targets were set) in the Project Plan and logframes. This performance data was obtained from project reporting, and from documentation including WHO lists of prequalified products/suppliers, Global Fund data, and country feedback. Other analysis focused on the programme's alignment with UNITAID's strategic objectives, and the relevance, effectiveness and efficiency of project measures and their implementation; and on project impact (where possible). Information from various sources (documents, interviews, web sites, presentations and data) was triangulated to avoid bias or errors.

The evaluation team attempted to assess project impact with regard to the estimated general increase in availability and access to quality-assured medicines and diagnostics for HIV/AIDS, TB and

[2] BMGF Progress Report Form – WHO Regulatory Umbrella Grant Progress Report, March 2015

malaria worldwide. Impact was also assessed (through qualitative information from key respondents and project reports), where possible, around the project's effects on capacity built in countries to enhance regulatory and QA practices for medicines and diagnostics. The evaluation also attempted to measure project progress toward implementation of recommended improvements from prior reviews and evaluations of the WHO PQ programme.

This evaluation relied on interviews with multiple stakeholders, as well as extensive review of documentation and data, to attempt to objectively assess the status and performance of the PQM and PQDx project under the 2014-2016 UNITAID grant.

4 LIMITATIONS

The team was not able to speak with every potential respondent at all affected organizations (WHO, UNITAID, partners and procurers, manufacturers, NRAs, MOHs, labs) to obtain their feedback about WHO PQ and recommendations for the future. However, the team did endeavour to contact as wide a pool of respondents as possible, reaching out (sometimes numerous times) to attempt to interview stakeholders (and reaching more than 75 individuals from 32 organizations). Regarding measurement of PQ performance, there was some inconsistency among the different versions of logframes and indicators, and many activities for which no targets were set, making a straight assessment of performance against targets since inception of the project difficult in some cases. Some indicators are also more measurable/quantifiable than others. The team used quantitative and qualitative analysis to attempt to reach evidence-based conclusions, and triangulated responses to ensure a more balanced analysis of often-divergent opinions and impressions among respondents. Although it was included in the documents list of the TOR, the evaluation team was not able to obtain the McKinsey report on the new financing model for PQ, which remains under discussion (and confidential) at WHO.

5 FINDINGS

UNITAID has supported the World Health Organization's Prequalification Programme (WHO PQ) since UNITAID began in 2006. UNITAID considers this PQ project vital to "ensure that new drugs and user-friendly formulations brought to market for low-income countries are of the highest quality".....and to help build "a more efficient market place for safe medicines" by increasing the number of quality-assured products and suppliers.[3]

The UNITAID website notes that the WHO PQ Programme has prequalified over 300 medicines, 25 diagnostics and a male circumcision device since 2009[4]. Almost all of these are vital medicines and devices to combat HIV, TB, and Malaria. Major donors and procurers depend on PQ (in addition to approvals from stringent regulatory authorities - SRAs) for assuring that the health products they procure meet standards of quality. As Médecins sans Frontières (MSF) stated in a 2015 letter to WHO, "WHO PQ is the only independent body which considers quality assurance challenges and risks related to the health products most needed by people lacking sufficient access to health care services or living in low-resource settings."[5] It was calculated by a McKinsey team in 2014 that 60% of Global Fund-funded medicines by value in 2015 were PQ'd only or PQ'd and SRA-approved (this reportedly rose to 72.3% in 2015); and that there are over USD2.4B in annual sales of PQ'd

[3] http://www.unitaid.eu/en/what/cross-cutting/prequalification

[4] http://www.unitaid.eu/en/what/cross-cutting/prequalification

[5] MSF (Dr. Myriam Henkens) letter to WHO (Kees de Joncheere), May 14, 2015 – on PQ financing model

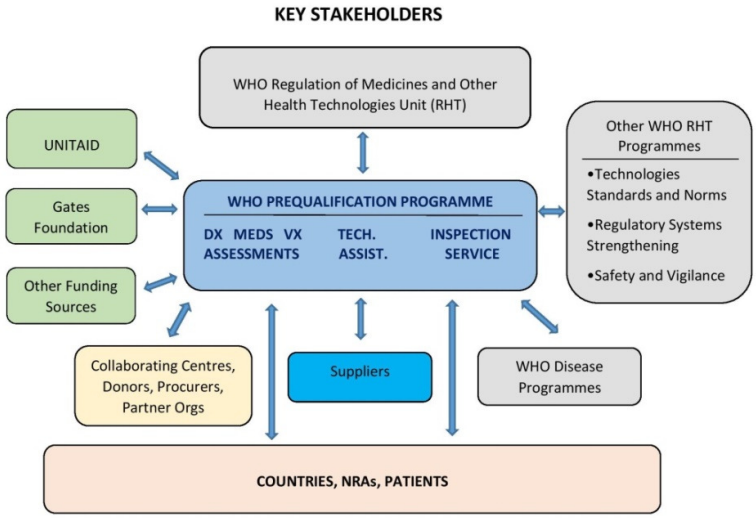
medicines, diagnostics and vaccines in low and middle-income countries.[6] This indicates the very large volumes of products (and by association, patients) which are affected globally by PQ's efforts.

WHO PQ activities are central to UNITAID's strategy to combat HIV, Malaria, and TB, in assuring that quality medicines and diagnostics are on the market for procurement by donor organizations and country governments. UNITAID is a vital supporter of the PQ Programme within the Regulation of Medicines and other Health Technologies (RHT) department, providing over a third of total RHT annual funding needs (estimated by McKinsey at USD40-50M[7]) with this USD50M three-year project (and funding "more than 80% of the WHO Prequalification programme for HIV, TB and malaria medicines and diagnostics,"[8] according to UNITAID). Without this funding, quality assurance (QA) of vital medicines and diagnostics to combat these diseases could be compromised, and/or the market could be reduced to products approved by the US FDA and other stringent regulatory bodies around the world (with much less availability and selection of products for patients).

The chart below depicts the various key WHO PQ stakeholders and beneficiaries within and outside of WHO. This graphic reveals how central PQ is to the World Health Organization and its various divisions, and to donor organizations and procurers, manufacturers/suppliers, and to countries and their national regulatory authorities (NRAs). The beneficiaries and persons affected by this programme are diverse and wide ranging.

As many respondents noted, although not a regulatory body, WHO PQ plays a vital role that regulatory bodies such as US FDA and the European Medicines Agency (EMA) cannot play as well (despite some efforts of these other agencies such as FDA's Tentative Approval process for developing countries) – in focusing on products destined for developing country markets and being the global voice for public health. As perhaps the leading and most objective or neutral leader and standard-setter in health, which developing countries respect and look to for guidance, WHO has (in business terms) a "unique selling proposition," offering a unique value on the global stage.

Figure 1 Key stakeholders



[6] PQ/RHT Financing Strategy-Discussion Document Draft – PQ/RHT team debrief. Nov 5, 2014 (selection of PowerPoint slides in hard copy)

[7] PQ/RHT Financing Strategy – Confidential Discussion Document Draft – PQ/RHT team debrief. Nov 5, 2014 (selection of PowerPoint slides in hard copy)

[8] http://www.unitaid.eu/en/what/cross-cutting/prequalification

In the following sections, this report describes the team's findings from analysing the WHO PQ project's:

- Harmonization with UNITAID strategic objectives
- Progress made on recommendations from previous reviews
- Progress against project indicators and targets
- Impacts on the market
- Implementation and Management
- Harmonization with Global QA Efforts
- Financial Data and Trends
- Sustainability and new PQ Financing Model discussion
- Performance against the Key Research Parameters/questions (effectiveness, efficiency, etc.)

5.1 Harmonization with UNITAID Strategic Objectives

As expressed in UNITAID's documentation, and by its leadership, UNITAID's goal is to fill important gaps in the market/landscape for key health products and interventions in the fight against HIV, Malaria, and TB. Similar to Global Fund core principles, UNITAID notes that they do not want to be the sole funder of an effort (but rather, look for partners and grantees to co-finance). They also do not want to fund merely routine interventions or structures and functions (but rather essential activities, and "game-changing ideas" [*UNITAID web site]* that are not otherwise funded), and they want to invest in efforts that can have a real, measurable impact. This evaluation, therefore, sought to keep in mind these core principles and philosophy of UNITAID in reviewing this project investment and seeking recommendations for a potential future grant to WHO PQ.

UNITAID's strategic objectives for 2013-2016 are as follows *(UNITAID Strategy 2013-2016)*:

1. Increase access to simple, POC diagnostics for HIV/AIDS, TB and malaria
2. Increase access to affordable **paediatric medicines** to treat HIV/AIDS, TB and malaria
3. Increase access to **emerging medicines and/or regimens as well as new formulations,** dosage forms, or strengths of existing medicines that will improve the treatment of HIV/AIDS and co-infections such as viral hepatitis
4. Increase access to **artemisinin-based combination therapies (ACTs) and emerging medicines**
5. Secure supply of **second-line TB medicines**, and increase access to emerging medicines and regimens that will improve treatment of both drug-sensitive and MDR-TB
6. Increase access to **products for prevention of HIV, TB and malaria**

WHO PQ activities are central to UNITAID's 6 main strategies to combat HIV, Malaria, and TB, in assuring that quality medicines and diagnostics are on the market for procurement by donor organizations and country governments. As such, the PQ project is highly relevant and critical for UNITAID's objectives, in supporting the major global QA effort for health products for developing countries. Point-of-care (POC) diagnostics (especially rapid tests) and other priority products are a focus for PQ, more paediatric products have been PQ'd, and broadly more products and suppliers have entered the PQ list and the market to meet market needs. PQ is one of the first steps in providing access to quality products but it only has its full effect on quality and access when further barriers for those products to enter the market are also removed (e.g. country registration) and when the products remain effective and safe once they are on the market. There might therefore be a benefit in capitalizing on the PQ team's work to further enhance regulatory capacity and post-market surveillance (PMS) efforts.

As a cross-cutting QA intervention, the PQ project contributes to all 6 strategic objectives of UNITAID, however, UNITAID may in future become concerned about being the main funder for PQ, and having its funding "institutionalized" or absorbed as part of the essential resources for funding the overall

operations of this entity (hence the need for UNITAID to contribute to the evolution of a new financing model for PQ). There may also be ways (as mentioned in the Recommendations section below) that UNITAID can support innovation and modernization in some ways that the WHO PQ programme works.

5.2 Progress made on Recommendations from Previous Reviews and Reports

The evaluation team reviewed prior evaluations/assessments/reviews of WHO PQ and UNITAID project support to PQ, to review the recommendations made, and to ascertain progress against these recommendations. These previous evaluations and reviews include:

- Global Medical Technology Alliance (GMTA) – Position paper on WHO PQDx (2008-9)
- Aedes UNITAID mid-term review of WHO PQ project – April 2011
- External Review of the WHO Diagnostics Prequalification Pathway – July 2012
- EHG UNITAID Mid-Term Evaluation of WHO PQDx project – March 2013
- Bill and Melinda Gates Foundation review/Progress Report - March 2015
- BMGF and UNITAID meeting Notes for the Record, Geneva, 25 Jan 2016

Overall, significant progress has been made within WHO PQ to address the numerous recommendations made in these reviews. Work continues and remains to be done around:

- Further streamlining and expediting PQ timelines;
- Harmonizing and integrating across PQ teams and with TB and Malaria products;
- Harmonizing and building partnerships with SRA to expedite access to key products;
- Working with more national regulatory authorities (NRA) to build collaborative procedure efforts and streamline country registrations (a focal need and incentive for manufacturers to work with PQ);
- Enhancing PQ communications (and explaining rationale and value add) and guidance;
- Conducting a WHO RHT/PQ scoping exercise/analysis and developing a strategic plan; and
- Building sustainability through a new PQ financing model.

See Annex 6 for the full table on these reviews and recommendations made, and findings on progress to address these recommendations.

5.3 Progress on Project Indicators

The logical frameworks (logframes) for both the Medicines and Diagnostics projects funded by UNITAID have been modified somewhat over time, with some indicator names and priorities changing, and with some additional products (e.g. Hepatitis medicines) being added to the priorities over time. For the 2014-2016 grant period, logframes were provided to the evaluation team, dated as follows:

Medicines:	Diagnostics:
• May 16, 2014	• May 16, 2013
• Aug 4, 2014	• July 21, 2014
• Aug 4, 2014, modified March 2, 2015	

Designated activities for UNITAID funding are contained in the Project Plan and LogFrame, and include:

Diagnostics:

- Prequalification and Requalification of priority products
- Encouraging manufacturers to submit quality dossiers for priority products for PQ
- Manufacturing site inspections
- Lab evaluations of diagnostics
- Multi-center lab evaluations of CD4, VL, EID, and HCV technologies
- Maintain UN list of PQ'd diagnostics
- Promote WHO procurement practices for diagnostics
- Promote development of priority diagnostics
- Assess and pilot the Expert Review Panel for Diagnostics (ERPD)
- Build/scale up communications with diagnostics manufacturers associations
- Technical assistance to manufacturers to apply for PQ
- Develop technical support tools including sample dossier
- Training to manufacturers to improve understanding of PQ requirements
- Participate in the IMDRF (International Medical Device Regulators Forum)
- Support country NRAs in major manufacturing countries to strengthen their regulation of priority diagnostics
- Build/strengthen regional regulatory networks in Africa
- Establish post-market surveillance to monitor quality of diagnostics in countries
- Expand/strengthen countries' capacity for quality management systems (QMS) through process quality control and EQA

Medicines:

- Prequalification of priority finished pharmaceutical products (FPPs) and active pharmaceutical ingredients (APIs)
- Requalification of PQ'd priority products (5+ years after PQ)
- Update and develop norms and standards for QA of medicines
- Prequalify medicines quality control labs (QCLs) to monitor medicines, and promote network of PQ'd labs
- Risk-based sampling and quality testing of PQ'd products in countries
- Harmonize technical assistance for building capacity of manufacturers
- Build capacity of manufacturers in recipient countries
- Engage with manufacturers to ensure adequate numbers of FPP/APIs get PQ'd
- Implement ERP
- Promote harmonization and adoption of QA standards among procurers
- Accelerate country registration for PQ'd/SRA-approved medicines
- Review gaps in required medicines for HIV, TB, Malaria to advise manufacturers on ways to provide needed products or formulations
- Risk-based pharmacovigilance of priority products in countries

The WHO PQ team report on their performance against project indicators in semi-annual and annual reports to UNITAID. Below is a summary accounting of performance through 2015 on project indicators. However, this was quite challenging to summarize, given the changes in some indicators, the unclear targets (and lack of targets, in some cases – many are listed as "indicative only, therefore no targets" and others indicate "waiting for UNITAID priorities"). Adding to the challenge are the different reporting templates and reports used (with some discrepancies among these – e.g. between the final medicines logframe of March 2015, and the UNIPRO reporting template form now being used to report to UNITAID). The UNIPRO platform is an online reporting tool for UNITAID grantees, which serves as a data management system for UNITAID. It appears that the UNIPRO form (used for the first time this reporting period – for 2015 annual report) contains some errors and "bugs" which may need correction, and it appears incomplete and inconsistent in some places. It is

also rather difficult to read and interpret at this stage. In some cases, targets listed on the logframe and other documents differ from what is on the UNIPRO template. It should be noted that the evaluators obtained only an Excel extract from the UNIPRO platform (whereas the entire online platform would have provided more comprehensive information, and is likely easier to read). These issues made a rapid review of performance against targets and indicators more difficult than it perhaps should be. (And perhaps the Excel form extract to review the UNIPRO data could be made more user friendly). However, the evaluation team has attempted to summarize in the tables below the status against established targets, by output indicator, for the year 2015, which reveal that the project appears to be performing well and meeting most of the set targets:

Table 1. WHO PQ project indicators, targets and 2015 performance

WHO Medicines Prequalification (MPQ) ***IMPACT & OUTCOME INDICATORS: Increase uptake of WHO prequalified diagnostics/medical devices that are priority to UNITAID***		
Output Indicators	***Targets*** *(Sources: WHO-PQ_Meds_II_UniPro_ReportingTemplate (9).xlsx & UNITAID_Meds_Indicators reporting template v2_20140804FINAL.xlsx)*	***Status at end 2015*** *(Sources: WHO-PQ_Meds_II_UniPro_ReportingTemplate (9).xlsx & 2015 Annual Report Narrative)*
1. Continuous prequalification of UNITAID priority products - Applications accepted - Applications for UNITAID priority products - FPPs and APIs PQ'd - PQ's meds requalified - Timeline to PQ	***UNIPRO template report:*** • Applications accepted for assessment (logframe says "waiting for UNITAID priority product lists" in order to set targets. UNIPRO report says "NA" for targets) ***Indicators Reporting Template:*** • 35 newly PQ'd FPPs per year • 15 newly PQ'd APIs per year • <30 median days to completion of initial dossier screening • <270 median days to completion of dossier assessment (- stop clock time) • <180 median days from acceptance of dossier to initial inspection • -<30 median days to send out inspection report	***UNIPRO template report:*** • 49 FPP applications accepted (17 for HIV, 7, malaria, 18 TB) • 16 FPP applications accepted for UNITAID priority products • 23 API applications accepted • 35 additional FPPs PQ'd • 18 newly PQ'd UNITAID priority products • 13 additional APIs PQ'd • Data on UNIPRO form reporting on PQ timelines is unclear, but reportedly 671 was median for all dossiers ***From narrative report:*** PQ'd products include some high-demand products including tenofovir-based FDCs. First applications for Hep- C FPP and API were received. During 2015, 35 (including 23 HIV/AIDS, 3 malaria and 5 TB) FPPs and 13 APIs (including 7 HIV/AIDS, 3 malaria and 2 TB) were PQ'd. Of the FPPs, 16 are UNITAID priority medicines (10 HIV/AIDS, 3 malaria and 3 TB); of the other 13 HIV/AIDS FPPs are used to treat HIV/AIDS-related conditions. Of the APIs, 12 are used in the manufacture of HIV/AIDS, malaria and TB products.
2. Development, harmonization and application of pharmaceutical norms and standards, related to UNITAID	***Indicators Reporting Template:*** • No targets set for priority standards or guidelines established by WHO • 5 QC labs that have received TA from PQ, PQ'd per year • # PQ'd products tested and passing QC testing per year (no targets set)	***UNIPRO template report:*** • 30 standards/guidelines established • 15 standards set relevant to UNITAID priority areas • 3 QC labs PQ'd (2 received TA) • No data on UNITAID-funded prequalified products tested

priority products	• 200 PQ'd products tested in 2015 (NOTE: UNIPRO form has no targets set for any of these activities in 2015)	• 129 PQ'd products tested ***From narrative report:*** 3 QC labs PQ'd (Uganda, India, and Belgium). Uganda and India received TA from PQ. (Target not met, but few applications from labs received)
3. **Increased diversity and availability of quality-assured UNITAID priority products** (In other docs Output 3 is: "Implementation of mechanisms for QA of UNITAID priority products")	***Indicators Reporting Template:*** • applications received from "new" manufacturers, and "new" countries (no target set - "waiting for UNITAID priority lists") • # of products assessed by ERP (no target set - "Under discussion") • 10 accelerated registrations of PQ'd or SRA'd products in countries per yr (30 by end 2015) ***UNIPRO template report:*** • # Of procurement organizations adopting MQAS (target: 5)	***UNIPRO template report:*** • 0 new countries, 3 new manufacturers, 4 new products • 27 assessed submissions by ERP under criteria1 (3 HIV, 11 Malaria, 13 TB) • 36 assessed submissions by ERP under criteria2 (0 HIV, 8 Malaria, 28 TB) • 55 accelerated registrations • 9 proc orgs using MQAS
4. **Expand the range of WHO-prequalified UNITAID priority products adapted to the needs of specific populations**	***Indicators Reporting Template:*** • Manufacturers developing products identified by WHO in gap analysis (no targets – "indicative only"?) • # of new products deemed "urgent" by UNITAID PQ'd (no targets – "indicative only"?) • 1 risk safety profile developed per year (3 by end 2015) by priority area ***UNIPRO template report:*** • # of new products identified by WHO in its gap analysis submitted for PQ – FPPs and APIs (no targets set?)	***UNIPRO template report:*** • 8 new products identified & submitted

WHO Diagnostics Prequalification (DxPQ)

IMPACT INDICATORS: Sustainably increase access to quality-assured, appropriate medicines, thereby improving prevention, diagnostics and treatment of HIV/AIDS, TB and malaria in vulnerable populations

OUTCOME INDICATORS: (purpose): Increase availability of quality-assured treatment for HIV/AIDS, TB and malaria

Output Indicators	***Targets*** *(Source: UNITAID_Dx_Indicators reporting template v1_20140721_FINAL.xlsx)*	***Status at end 2015*** *(Source: WHO-PQDx_II_UniPro_ReportingTemplate (3).xlsx & 2015 Annual Report Narrative)*
1. **Prequalification of UNITAID priority diagnostics/ medical devices to support prevention, diagnosis and treatment of HIV/AIDS, HCV, HBV, TB and malaria**	Overall outcome target is 30 products under assessment each year….By end 2015: • 92 cumulative Dx products with manufs going for PQ (10 per year) • 272 cumulative applications received (30 per yr) and 192 dossiers accepted (20 per yr) for inspection (and production lines inspected) • 20 PQ decisions taken, and 10 PQ'd products per year (46 PQ'd products by end 2015) • 270 days to PQ (180 days for abbreviated assessment)	***UNIPRO template report:*** • 2 manufacturers incentivized for PQ • 21 applications received for assessment in 2015 (4 HCV, 17 HIV) • 28 applications accepted for assessment in 2015 (3 HBV, 9 HCV, 16 HIV) • 18 devices PQ'd (4 HCV, 5 HIV, 9 Malaria) • 93 cumulative Dx manufacturers incentivized to go for PQ • Lead time performance unclear on UNIPRO template, however reportedly median lead times are as follows: 94.5 (manuf time), 454 (WHO

		assessment time) ***From narrative report:*** • 314 median days to PQ for products that were accepted for and underwent full assessment (however this figure excludes dossiers submitted before 2014. Total results are reportedly 454 days) • For abbrev.products, 65 median days to PQ (i.e. time attributable to WHO)
2. **Facilitate rapid access to appropriate diagnostics/ medical devices of ensured quality, i.e. PQ'd or ERP** (UNIPRO form: "Promote WHO standards for procurement of QA'd Dx")	• 10 countries adopting procurement practices in line with WHO guidance • 2 ERPD panels per year and decisions taken	• 8 cumulative countries adopting WHO standards in proc of QA'd Dx • 2 ERP panel decisions taken
3. **Improve readiness of manufacturers of UNITAID priority dx for WHO DxPQ**	• 3 priority dx manufs per year with gap analysis done and TA planned • 2 priority dx manufacturers per year receiving TA	• 3 manufacturers with gap analysis and TA planned • 0 manufacturers received TA
4. **Strengthen national and regional regulatory capacity, in particular in countries with manufacturing capacity**	• # of countries with accelerated registration procedure for PQ'd products (no targets set) • 5 products with accelerated registration in 2015	• 0 countries • 0 products
5. **Post-market surveillance systems for diagnostics/ medical devices implemented/ expanded to monitor product quality in country**	• 5 countries conducting PMS including lot testing and vigilance • 5 countries participating in EQA programmes for PQ'd dx	• 4 countries conducting PMS • 0 countries participating in EQA

The table below lists the numbers of products (medicines, APIS, and diagnostics/medical devices) PQ'd in 2014 and 2015, and the numbers of UNITAID priority products PQ'd in those years. There are currently (May 2016) over 400 PQ'd medicines (for HIV, TB, Malaria, Diarrhoea, Influenza, Neglected Tropical Diseases, and Reproductive Health); 88 API products; and 57 in vitro diagnostic (IVD) products on the WHO PQ list (almost half of the latter are rapid tests for HIV and Malaria, 12 are viral load technologies, another 12 are early infant diagnosis – EID - assays).

Figure 2. Numbers of FPPs, APIS and IVDs PQ'd in 2014 & 2015

Number of FPPs Prequalified and Newly Prequalified by Area and Year

	2014	2015
HIV/AIDS		
Priority FPPs	15	10
Other FPPs	16	13
Malaria		
Priority FPPs	7	3
Other FPPs	0	0
TB		
Priority FPPs*	6	3
Other FPPs	0	2
Total	44	31

* WHO website does not list Rifabutin 150mg capsules as PQ'd in 2014

Sources: UNITAID MPQ 2014 and 2015 Annual Reports, www.who.int

Number of APIs Prequalified by Area and Year

	2014	2015
Prority API's		
HIV/AIDS	10	7
Malaria*	4	3
TB	3	2
Other API's	5	0
Total	22	12

*WHO website does not list Sulfadoxine as PQ'd in 2015

Sources: UNITAID MPQ 2014 and 2015 Annual Reports, www.who.int

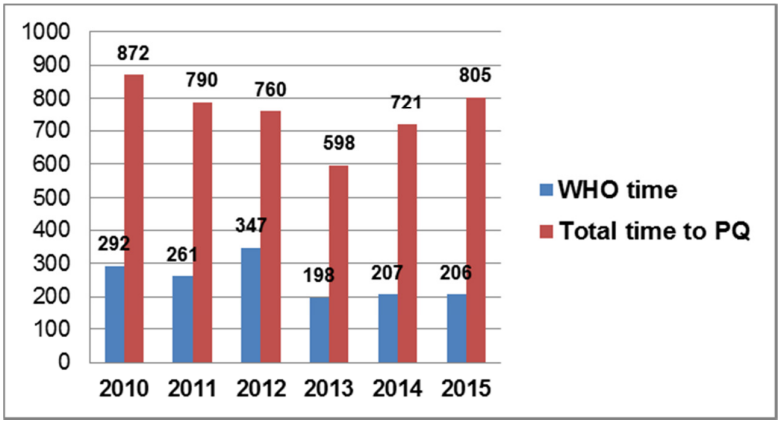
Number of Priority Diagnostics/Medical Devices Prequalified by Area and Year

	2014	2015
HIV/AIDS	6	5
HCV	0	4
HBV	1	
Malaria	2	8
MCD		1
TB		
Total	9	18

Sources: UNITAID DPQ 2014 and 2015 Annual Reports, www.who.int

Regarding timelines for PQ processes, which have been a source of complaint in the past: from information provided in the 2015 Annual Report to UNITAID (with revisions, received May 3, 2016), it appears that both "WHO time" and "total time to PQ" have increased somewhat since 2013 for medicines (finished pharmaceutical products - FPPs -- see graphic below), although WHO time is much more consistent (at around 200 days) than total time (indicating most delays appear to be on the manufacturer side). WHO PQ explains that this is likely due to the lower priority for procurement of these particular PQ'd products in 2015 (so lower potential business volumes), and hence lower priority by manufacturers to address WHO queries and complete the PQ process.

Figure 3. Median number of days to WHO prequalification for FPPs that underwent full assessment 2010–2015 (graphic reproduced from WHO PQ 2015 annual report to UNITAID)



Time to PQ for medicine products with SRA approvals also appears to have risen slightly in the last three years, with WHO time remaining much lower than manufacturer time. The high number of days for WHO time in 2015 (after being down significantly in 2013 and 2014) was reportedly due to

an unusual case with two dossiers submitted with special requests, and two other dossiers that were more problematic than normal, leading to unusual delays.[9]

The PQ diagnostics team streamlined PQ procedures in 2014. According to the 2015 annual report, the median time for a full assessment in 2015 was 314 days (this data does not include dossiers submitted before 2014), which is approximately 16% longer than the indicator target of 270 days. (If data before 2014 are included, the median number is 454 days). No full assessments were completed in 2014, so there is no basis for comparison with the previous year. The median number of days for an abbreviated assessment in 2015 was 65 days, substantially better than the 180-day target. Some manufacturers and other respondents have complained to the evaluation team that the process is still too long (reportedly multiple years in some cases). Respondents have noted that it is essential, with these rapidly changing technologies, to expedite access and time to market as new technologies can arise in 5 years, making the PQ'd diagnostics quickly obsolete. A pilot effort is under way to qualify laboratories to work with manufacturers to develop their product data, rather than having WHO PQ develop this data as part of the PQ process. This could streamline and expedite the PQ process further.

5.4 Impacts on the Market

As stated earlier, UNITAID's investments are meant to have significant impact, fill needed gaps, and/or be catalysts or "game changers" in the fight against diseases. The PQ Project Plan describes market shortcomings that the programme is intended to address, specifically: limited availability of quality-assured products, limited number of suppliers for particular markets, higher prices because of limited competition, and concerns that some products in various markets have not been quality-assured or are of low quality.

In-depth analysis of PQ's impacts on market shortcomings would require analysis of market data at the country level that is beyond the scope of this evaluation. However, it can be stated that the very nature of the programme – assessing and prequalifying medicines, APIs, and diagnostics -- directly addresses the first market shortcoming, limited availability of QA'd products. Prior to this current grant from UNITAID, (Dec 2013) WHO had prequalified 318 medicines, mostly for HIV, TB and Malaria (according to the WHO PQ web site list at the time). As of May 2016 (according to the PQ Medicines list posted on the WHO web site), the number of PQ'd medicines had increased to 409 (for HIV, TB, Malaria, Diarrhoea, Influenza, Neglected Tropical Diseases, and Reproductive Health), with a broader scope of medicines, suppliers, and diseases. The addition of active pharmaceutical ingredients (APIs) as distinct products for PQ provides an added, new contribution of PQ to the market, providing greater flexibility in sourcing of APIs. In May 2016, according to the WHO PQ web site, there were a total of 87 prequalified APIs, in contrast to 23 prior to 2014 (according to the UNIPRO template baseline figure).

Similarly, as of early 2013 (according to analysis for the WHO PQDx evaluation submitted March 2013 to UNITAID)[10], there were 16 PQ'd diagnostics devices; and by the end 2015 there were 50 (according to the WHO PQ web site)[11]. By April 2016, the number had increased to 57. Streamlined procedures for "abbreviated PQ" for in vitro diagnostics (IVDs) and devices that are already SRA-approved began in 2014, the same year the Expert Review Panel for Diagnostics (ERP-D) was launched with the Global Fund to provide an interim measure to provide access to more of these

[9] UTD_DxMPQ_2015_annual_narrative_report_20150322.docx
[10] "Mid-term evaluation of WHO Diagnostics Prequalification Programme," Euro Health Group (EHG), March 2013
[11] From WHO PQ web site:
http://www.who.int/diagnostics_laboratory/evaluations/160502_prequalified_product_list.pdf?ua=1

products. These are concrete examples of increased availability. However, it is important to note that the increased numbers of PQ products are only a proxy indicator of availability, and do not translate directly to increased availability at the country level. Country-level availability is also determined by many other potential limiting factors that are largely outside of the control of the PQ programme, including national registration and treatment protocols, decisions of manufacturers to enter the market, funding, supply chains, competition, procurement decisions, prices, etc.

Implementation of programme activities other than prequalifying health products also contributes to the overall goal, but direct impacts on the market are not easily measured. For instance, the PQ Programme also works to support the continued (post PQ'd) quality of medicines by also prequalifying quality control laboratories (QCLs) that test the quality of medicines in countries. According to the WHO web site, 41 QCLs have now been PQ'd around the world.[12] The WHO PQ list of QC labs (March 2016 update) currently includes 41 labs in 29 countries around the world.[13] As a result of the PQ Programme, there is therefore greater global capacity (in all WHO regions) to provide testing services to ensure QC of medicines, but the measureable impacts are only evident downstream. PQ's work to follow-up and re-qualify medicines and IVDs has also had an impact in discerning quality issues and potential problems, issuing "notice of concern" guidance to the market about particular products, and delisting products from PQ when required to protect patients. PQ's technical assistance (TA) to producer countries, regulatory authorities, and manufacturers will similarly have impacts that may be difficult to measure. Generic manufacturers note that going through PQ made them improve their overall quality systems – indicating a broader impact on quality of all products, not only those that are PQ'd.

Regulatory authorities in countries (NRAs) interviewed confirm that WHO PQ's TA and support have been very valuable for their capacity building. They also say that the collaborative registration procedure — to speed up the rate at which PQ'd medicines are registered nationally and made available to patients in countries – is an excellent initiative with a positive and measurable impact that is very welcome by NRAs and manufacturers. The programme, which now has participation of at least 27 countries, has helped reduce median registration times in these countries to under 90 days from what in some cases could take years, previously. Manufacturers have stated that this aspect of the PQ programme is an important incentive for them to go through the PQ process.

WHO is also supporting joint registration review initiatives for medicines dossiers, where groups of countries (e.g. Zambia, Zimbabwe, Botswana, Namibia and soon South Africa) share the task of reviewing common registration dossiers among themselves and have quarterly meetings where they approve or disapprove the registration of those products. The decision is then valid for all participating countries. This kind of initiative not only substantially reduces the time needed for registration, but also improves the overall quality as regulatory authorities are learning from one another and they harmonize procedures among themselves. These initiatives benefit all product categories, not only PQ'd products. However, many manufacturers are not aware of these initiatives; it would be beneficial for RHT/PQ to communicate more about them, especially to manufacturers. UNITAID would benefit from better measuring the outcome of those activities: e.g. how many countries are participating, how many country registrations are now completed within 90 days, etc. Currently the collaborative procedures are only open to countries on the African continent, but WHO has expressed the desire to expand to other regions including Southeast Asia. Expanding to more geographical areas would be beneficial, as many countries have already expressed their interest in participating.

[12] http://apps.who.int/prequal/lists/PQ_QCLabsList.pdf
[13] http://apps.who.int/prequal/lists/PQ_QCLabsList.pdf

India (where many of the generic manufacturers are located) recognizes PQ as a great value add to both improve the quality of national production and to promote international business. They are therefore financing workshops between domestic manufacturers and PQ, and note that their regulatory authorities participate in every manufacturing plant inspection organized by the PQ programme.

In considering impact, one can also look at the volumes of PQ'd products being procured on the global market, increasing rapidly as testing and treatment programmes expand in countries and more patients receive testing and care. The Global Fund estimates that 39 million people are HIV positive (with half not yet knowing their status)[14]; and that 15 million people worldwide are on treatment for HIV/AIDS, with over 8 million of those benefiting from Global Fund-funded programmes. As many as 2 million people may be infected with HIV each year, and there are some 9 million new TB cases each year. The Global Fund also states that as of mid-2015, 515 million treatments for malaria had been provided under its programmes.[15] These figures provide a view of the vast numbers of patients worldwide receiving health products under this one major donor (which requires that health products comply with stringent quality assurance standards, one of which is PQ). The figures (and data on undiagnosed persons) also point to the large unmet need and potential additional numbers of patients needing these health products (and needing to rely on quality being assured by PQ and SRAs).

PQ'd products are largely the products of choice for international partners involved in international procurement targeting lower and middle-income countries (LMICs). Some manufacturers have reported that PQ is especially important when going for national tenders in LMICs (e.g. in Africa, when governments are procuring under their own budget), where PQ is often a prerequisite and the fact the product may be FDA or EMA or CE approved does not matter. In the Global Fund QA policy for medicines, US FDA, CE and PQ are currently considered as equivalent in levels of stringency, but GF reportedly plans to amend these QA policies (for medicines and diagnostics), so these classifications reportedly may change in future.

Regarding diagnostics (dx), the international market is still quite unregulated and led by a strong industry lobby, and branded manufacturers with relatively high prices. Many LMICs base their dx procurement decisions on price, without access to a regulatory/QA framework to guide them. Quality issues with diagnostics have repercussions on the whole treatment continuum, and can render investments in treatment not only ineffective and inefficient, but also potentially dangerous (if there is a mis-diagnosis, false negative or false positive). It is critical that more focus be put on the quality of diagnostics worldwide.

Some differences between PQ Diagnostics and PQ Medicines

Within WHO:

- PQ for diagnostics started in 2010, much later than PQ meds (2001-2)
- There are no competing QA channels within WHO for medicines, whereas PQ diagnostics competes with other quality endorsement systems within the WHO TB and Malaria programmes
- Roles and responsibilities between the disease programmes and PQ meds are quite well defined and not questioned, which is not the case for PQ Dx

Products:

- There are now a large number of medicines that have been PQ'd, but the number of PQ'd IVDs

[14] Global Fund web site: http://www.theglobalfund.org/en/hivaids/

[15] Global Fund web site: http://www.theglobalfund.org/en/

and devices remains relateively low, with some critical IVDs (e.g. for TB) not PQ'd
- The large majority of PQ'd medicines are generic, but PQ diagnostics operate mostly with branded products (with a much stronger industry lobby to deal with)
- The product families in diagnostics are much more diverse, ranging from low-tech to very expensive high-tech equipment platforms, to inexpensive rapid tests, reagents, and consumables. Lab tests usually require a combination of machinery, reagents and consumables (and a proper lab set-up/ infrastructure). The surrounding environment for diagnostics is also diverse, from high-end reference laboratories to clinics and rural communities, adding to the complexity of QA for dx.
- The average product life cycle of a diagnostic device is very short in comparison to that of a medicine. Most drugs/formulations are used for decades, whereas diagnostics/devices have an average 5-7 years before a new/better version comes onto the market. Therefore timing is particularly critical for PQ dx.
- Diagnostics is the first necessary step prior to treatment, therefore any mistake or quality issue will have repercussions on the treatment or non-treatment of the patient (just as quality issues with the medicines or products prescribed have repercussions)

Regulatory situation:
- The fact that IVDs/devices are not ingested and are not considered potentially life-threatening (unlike medicine) means they are not regulated as stringently within the whole SRA community.
- The Global Fund published its QA policy for Diagnostics only in 2010
- The international and country regulatory frameworks for medicine are better established than those for diagnostics. Many countries operate in a regulatory vacuum for diagnostics.

The degree of PQ's impact on markets can also be amplified by the complementary actions of other actors. To paraphrase from the Project Plan, PQ's efforts together with the buying power of UNITAID (and other partners) can help shape the market in a way that benefits public health. Similarly, efforts to ensure stronger, ongoing participation by PQ in efforts to harmonize global regulations and standards (e.g. in diagnostics) beyond the PQ programme could have a multiplier effect on the impact from prequalifying products.

As stated in the Project Plan, "specification, advocacy and application of a global standard for quality, safety and efficacy of medicines will continue to contribute to creating a climate for participants that reduces uncertainty and creates a 'level playing field' for manufacturers entering the market."[16] All programme efforts in this regard contribute to impact in the markets, but direct attribution and quantification of the impact to the actions of PQ is difficult.

5.5 Implementation and Management of the PQ Project

It appears that the project has made significant progress in implementation, with some over-performance, some delays and many new initiatives under way. There have also been numerous organizational challenges (both at WHO and at UNITAID) that have made performance somewhat more challenging for both donor and grantee. Some difficulties also appear to be avoidable, in that better, more open communications between teams (e.g. disease programmes and PQ) and between PQ and UNITAID might have helped to alleviate difficulties in managing work streams, reporting, understanding priorities, and reaching common expectations.

[16] PQ Project Plan - PQP-A1-PP-v1-2014.docx, pg. 29

In discussing this project with numerous internal and external stakeholders, and in reviewing the project documents, it appears that implementation and management of the project had a number of strong points, but also numerous challenges. Most challenges observed on both sides (UNITAID and WHO PQ) seem to be due to management and communications issues: misunderstandings between the parties, lack of feedback to reports or communications, and lack of clarity and consistency around priorities and expectations (exacerbated by staffing challenges and turnover on both sides).

From the WHO PQ side, strong points include significant technical strength and capacity including some new staffing and streamlining of operations, support and co-funding to bolster various PQ activities, a strong global position enabling progress to be made in working with countries, and continuous improvements in PQ meds and PQ Dx performance with expanding scopes. However, there were also numerous challenges related to WHO structural and HR constraints (lengthy and cumbersome hiring processes, inability to move staff to different positions), turnover of WHO and PQ personnel, the challenging ongoing efforts to integrate the PQ areas (medicines, vaccines, diagnostics, inspection, and TA) under one larger PQ team, and the uncertainty and limited resources at WHO which leads to competition and poor collaboration.

These management challenges are also manifested in the WHO information system and separate databases across PQ teams, which have made data collection, management, and reporting to donors difficult. The IT professionals within RHT are reportedly now working to design a unified workflow system and Quality Management System. This IT effort has funding support from BMGF, with a process under way to integrate and harmonize IT systems across the PQ category teams.

These (largely management related) challenges at WHO have at times impacted on PQ's ability to deliver and perform optimally under this project, despite the strong technical capabilities and efforts and hard work of the PQ team.

From the UNITAID side, strengths include the strong funding support provided to "fill gaps" and support essential interventions by PQ, and the organization's flexibility in working with WHO PQ and other implementers to adjust/adapt to realities on the ground. The relationship and grant partnership between UNITAID and WHO PQ has reportedly been difficult at times, but is universally reported as much improved in the last year with collegial and collaborative relations and more open and regular communications. However, challenges have included the rapid turnover of project staff and restructuring of teams within UNITAID, leading to lack of continuity and inefficiencies in planning and support to WHO PQ. Other challenges noted include the cumbersome and shifting reporting requirements and templates (now UNIPRO) and indicators (difficult and time consuming for the implementer) which make monitoring and oversight challenging; and the unclear and inconsistent communications (e.g. around UNITAID priorities and directions) that can lead to confusion among implementers. Some respondents note that the UNITAID reporting system is not focused on substance and impact, but appears to be more focused on process, and for some it is hard to understand the relevance of some of the details they are asked for from UNITAID. Some noted that the reporting requirements appear more "antagonistic" than constructive in some cases. Another concern among many respondents was UNITAID's investment in what some see as duplicative, competing, or even conflicting programmes (e.g. malaria testing, TB diagnostics, pharmacovigilance) outside of PQ, which they feel leads to confusion around priorities and "double messaging" to the market, suppliers, and buyers. Since PQ is the highest quality standard within WHO, it can suffer from this competition among standards, as many manufacturers will not undergo the most stringent process when they can avoid it. This can lead to unfair competition for those manufacturers that have chosen to go through PQ.

As UNITAID and BMGF are the main funders of WHO PQ, there is increasing attention to greater collaboration and harmonization between these two organizations. The current BMGF umbrella

grant expires in Dec 2018, but BMGF have reportedly signed a new grant for expansion of PQ to include WHOPES (WHO Pesticide Evaluation Scheme), and will likely remain involved with PQ in future. As noted in the March 2015 review of the BMGF grant, there were challenges (to ensure accountability and timely implementation, and to monitor expenditures) brought on by the differences in planning and reporting requirements of the two donors.[17] It is hoped that these challenges are being resolved through greater harmonization, and use of project management tools (perhaps to include an indicators dashboard and monitoring tool developed by BMGF – which could be tailored for use by UNITAID as well) for staff to track activities more easily. BMGF has stated their willingness to match their reporting timelines with those of UNITAID to ease the process for the grantee. However, the philosophies of the two donors (BMGF and UNITAID) in terms of oversight appear quite different: UNITAID relies on detailed semi-annual reporting, and Gates relies on "lighter" annual reporting and a simple quarterly dashboard but includes significant informal communication with technical and non-technical staff at the grantee, which is perceived by some as beneficial, and by others as inefficient.

5.6 Harmonization of PQ With Global QA Efforts

Since its beginnings in 2003, the WHO PQ programme has been integral to global efforts to provide quality-assured medicines to combat HIV, TB, and Malaria. WHO PQ has partnered closely with the Global Fund, MSF, the Clinton Health Access Initiative (CHAI), UNITAID, and other organizations working to scale up prevention and treatment efforts to combat these major epidemics. The vital role of PQ continues as care and treatment programmes expand in countries to reach ever-more patients, and as needs for new products (new ARVs and combinations, new diagnostic technologies) continue to arise requiring ongoing review and assessment of these innovations. There is a broad consensus among partners and countries about the very high value that PQ provides, and even the most critical manufacturers agree about the necessity for PQ (even if sometimes they disagree about the level of stringency - mostly for diagnostics).

The GF's QA policy specifically states that "Global Fund grant funds may only be used to procure antiretrovirals, antituberculosis and anti-malarial FPPs that ….are: (i) Prequalified by the WHO Prequalification Programme or authorized for use by a Stringent Drug Regulatory Authority (SRA); or (ii) Recommended for use by an Expert Review Panel (ERP)"[18]….and reportedly some 60% of Global Fund-funded products are either WHO PQ'd only, or WHO and SRA-approved[19], according to a 2014 McKinsey study (this percentage as reported by PQ in 2014 had risen to 74% of GF products PQ'd and SRA approved). Other major procurers (MSF, CHAI, UNITAID, and others) also rely on WHO PQ as a vital arbiter of product quality. For them PQ is first choice, and they only look at other QA options when there are no PQ'd products available in a category.

WHO PQ's close work with the Global Fund on the ERP and ERPD programmes (for which UNITAID is a co-funder) to expand access to vitally needed medicines and diagnostics; PQ's collaboration and support from UNITAID; and collaboration and support from BMGF are all indications of both WHO PQ's work with the international community, and of the inter-dependence of these relationships in some ways (with WHO PQ almost fully funded by donor organizations at this point in time).

[17] BMGF Progress Report Form – WHO Regulatory Umbrella Grant Progress Report, March 2015, pg.7

[18] GLOBAL FUND QUALITY ASSURANCE POLICY FOR PHARMACEUTICAL PRODUCTS (as amended and restated on 14 December 2010)

[19] PQ/RHT Financing Strategy – Confidential Discussion Document Draft – PQ/RHT team debrief. Nov 5, 2014 (selection of PowerPoint slides in hard copy)

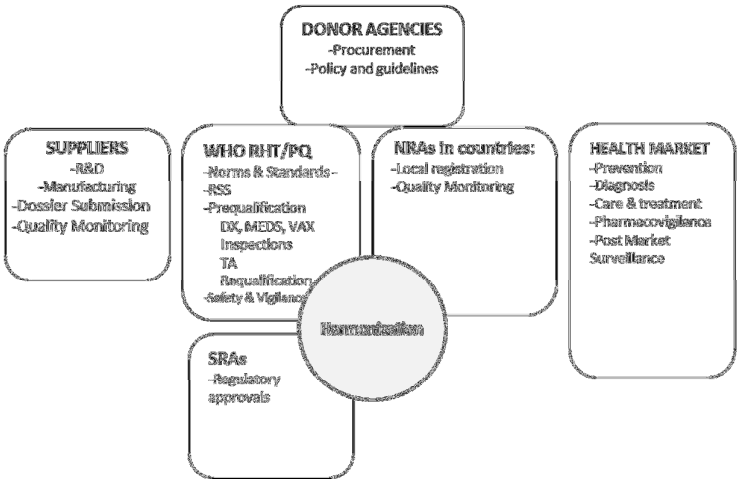
One of the major criticisms of PQ diagnostics in the 2013 evaluation was the lack of engagement in the global debate around the regulatory framework for diagnostics. This seems to have improved greatly, with greater formal and informal communication with various partners through the global diagnostics taskforce (GDT). Partners note that they wish more information would be made public on the WHO website (e.g. key milestones and potential timelines for products undergoing PQ), as currently they rely on informal communication with PQDx staff members to better plan their dx procurement.

WHO PQ programmes have also seemingly further expanded their participation/contribution with major initiatives around harmonisation of regulatory frameworks. PQ reportedly actively engages with initiatives from industry such as IDMA (International Diagnostics Manufacturers Association) and the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH). The complexity and diversity of regulatory frameworks remains a barrier to access, and manufacturers as well as many regulatory agencies support initiatives to streamline and harmonize. WHO could play a role in more actively leading these initiatives. As noted elsewhere in this report, there may be an opportunity for WHO to take the lead in enforcing a global QA standard for IVDs/devices, given that there is currently wide disparity and some confusion – countries needing to procure IVDs have little information/standard upon which to base their decisions, and as a result may resort to choosing based on price alone.

In addition, quality assurance is a continuum and there is a need for a strong global mechanism to better ensure quality once products have been PQ'd or SRA approved – once they are in the markets and health facilities. This becomes more critical as more medicines (treating ever more patients) and devices are on the global market, and available in countries with little or no pharmacovigilance (PV) systems and with insufficient post-market surveillance (PMS) by manufacturers. This appears to be an area needing more support and attention from the international community and within WHO.

As the graphic below indicates, PQ is a key part of the QA continuum globally, but there are many stakeholders (manufacturers, NRAs, etc.) in the process, and much collaboration required.

Figure 4. Global quality assurance continuum and WHO PQ



5.7 Financial Data and Trends

UNITAID funding commitment for the PQ medicines programme has totalled USD104.2M for 2006 through 2016; and for the PQ Diagnostics programme, USD22.6M from 2009 through 2016 (*www.UNITAID.eu*). According to the Project Plan, the total budget for the PQ programme for 2014-2016 is USD 66,444,328 (including non-UNITAID contributions and with 13% programme support cost). The total programme budget for UNITAID funding is USD 50,303,408 (with 13% programme support cost) for 2014-2016.[20] As such, UNITAID's funding was expected to cover about 76% of total estimated costs. The other 24% funding was anticipated to come from fees collected from manufacturers; grants from BMGF, WHO, USAID, Global Fund and UN agencies; and in-kind support from NRAs and NRLs.

Table 2. From project plan document: proposed project budget

	2014	2015	2016	Totals without PSC	Totals with PSC
Diagnostics	3,601,326	3,710,324	3,455,324	10,766,973	12,166,680
Medicines	11,724,918	11,331,717	10,692,682	33,749,317	38,136,728
Totals				**44,516,291**	**50,303,408**

In accordance with the TOR, the evaluators have focused on the UNITAID grant and have not examined spending funded by contributions from sources other than UNITAID.

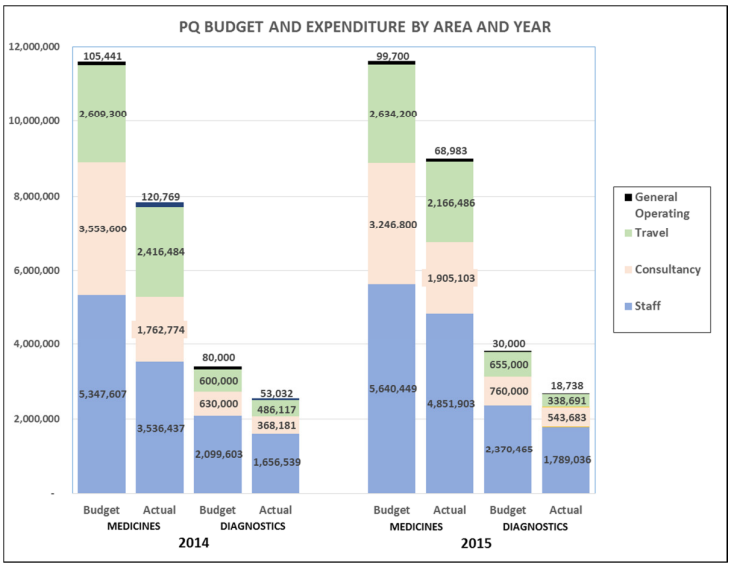
MAIN OBSERVATIONS ON EXPENDITURES 2014-2015

As depicted in the chart below, the UNITAID budgets were considerably underspent in both 2014 and 2015. The annual reports attribute the underspending to a combination of factors including: initial delays in finalizing the UNITAID grant, delays in receiving complementary funding, difficulties filling staff positions, challenges and delays with filling consultancies, savings achieved from activities, scheduling difficulties, funding for some budgeted activities provided by sources other than UNITAID, programmatic delays, and temporary reallocation of WHO staffing to focus on the Ebola outbreak.

The difficulty with staffing up the project is reflected in the fact that 34% of the UNITAID staffing budget for MPQ and 21% for DxPQ were not spent in 2014. Only 12 of the 52 funded positions (full and part-time) for MPQ and 6 of the 20 funded positions for DxPQ were fully expensed. Overall, only 16.78 FTE (full-time equivalent) of 24.07 FTE budgeted for MPQ and 7.83 FTE of the 9.8 FTE for DxPQ were expensed in 2014. Spending on staffing was higher in 2015, but still was only 86% of the amount budgeted for MPQ and 75% of the amount budgeted for DxPQ. In 2015, the programme paid for 25 FTEs of the 26 budgeted for MPQ and 7.85 FTE of the 9.8 FTE budgeted for DxPQ.

[20] The total UNITAID funding in the signed funding memos is just slightly lower, at USD 50,030,580 (MPQ USD 38,136,728 and DxPQ at USD 11,893,852)

Figure 5. PQ Budget & Expenditures for 2014 and 2015



Similarly, difficulties with filling consultancies are reflected in the fact that 50% of the MPQ budget and 41% of the DxPQ budget for consultancies were not spent in 2014. In 2015, 41% of the MPQ budget and 28% of the DxPQ budget for consultancies were not spent.

The difficulties with filling staffing and consultancy positions have delayed timely programme implementation. It has been noted in the annual reports, however, that the apparent underspending on staffing may overstate the impact on project implementation, as some staff resources may have been provided by WHO (and/or BMGF), but were not charged to the UNITAID grant.

EXPENDITURE TOWARD LOGFRAME OUTPUTS

The levels of spending by logframe outputs that are indicated in the annual reports provide only a partial picture of how project funds are allocated across outputs. Expenditure by outputs described in the reports includes spending on Consultancies, Travel and General Operations only. The analyses by outputs in the reports do not include spending on staffing. Staffing is the largest component of the budget by far (47% of MPQ and 62% of DxPQ 2014-2015 budget) so staffing expenditure by output would provide more insight into whether project resources are allocated appropriately across outputs. The Project Plan does provide some indications of how staff members would allocate their time across outputs, but it is not clear from the reports provided that staffing is tracked by logframe output.

VALUE FOR MONEY (VfM)

In this section, the evaluators endeavoured to apply DFID's 3E VfM Framework (Economy, Efficiency and Effectiveness) to examine whether the programme is working to maximize value for money whenever possible. (See Annex 1 for additional insights on efficiency, etc). The table below lists aspects of the programme that reflect, or contribute to, achieving value for money (positive) or conversely, may reflect, or detract from, achieving value for money (negative).

Table 3. Summary of VfM considerations

SUMMARY OF VFM CONSIDERATIONS	
Positive Factors	**Negative Factors**
Economy - *whether the programme is buying inputs such as staff, consultants and travel, at the appropriate quality at the right price.*	

SUMMARY OF VFM CONSIDERATIONS	
Positive Factors	**Negative Factors**
Salaries are determined by the UN standard compensation system that bases salary levels on qualifications.	Cost of the major input (labour) may be higher in the UN system than attainable elsewhere due to location and benefits.
Quality of staffing and consultancies are vetted by UN system, with high degree of qualifications required for employment.	
Travel costs determined in accordance with UN regulations.	
Efficiency - *how well inputs such as consultants, staff, and travel are converted into the outputs identified in the logframe.*	
Multiple efforts have been taken to streamline the PQ process with positive results.	Some indicators have been mixed. Difficulties with staffing, project scheduling, financing and coordination have resulted in delays.
	Feedback from some manufactures suggests that the PQ process can be inefficient, burdensome and often takes too long
Introduction of PQ track for SRA authorized products has reduced redundancy and expedited PQ	Competing parallel channels to ensure the quality of Diagnostics within WHO for TB and Malaria create redundancy, inefficiency and cause confusion.
WHO PQ has often made use of contractor specialists (for Copenhagen assessments, for inspections, etc.), rather than relying exclusively on WHO staff, as a cost-effective way to manage work load	
Group was established to provide technical assistance and training to PQ applicants to help make process smoother and more efficient through improved applications	
Effectiveness - *How well the outputs have achieved the project's stated outcome: "Increase availability of quality-assured treatment and diagnostics for HIV/AIDS, TB and Malaria".*	
Targets for desired outcomes have been largely met, albeit with some delays. Adding more PQ'd products increases their availability in that they can be procured.	Efforts to harmonize national regulations are underway, but national registration is still an obstacle to availability for some PQ'd products, and there is much more to be done in this area.
Programme design includes activities that complement PQ and address the range of obstacles to availability of quality medicines and diagnostics (registration, PV, etc.).	Logframe Goal has no target and is not easily measured. 2015 Annual Report proxy indicator for goal (% of GF purchases that were WHO-PQ'd) provides limited measure of effectiveness.
Programmatic adjustments have been made in an effort to enhance effectiveness.	
WHO's unique global position makes it the most effective and legitimate agency to run PQ. No other organization has the position, reputation or global capability to do it.	
Cost Effectiveness – *How much impact on availability of quality assured treatment and diagnostics does the PQ programme achieve relative to the inputs provided by UNITAID?*	
UNITAID funding to PQ is helping to ensure availability of QA'd products on global markets. UNITAID funding is also leveraged by other sources of funding. (According to the project plan, every USD1 provided by UNITAID is matched by USD0.32 from other sources.)	2015 Annual Report proxy indicator for goal (% of GF purchases that were WHO-PQ'd) was essentially unchanged from 2014.
Benefits beyond programme objectives including avoidance of costly disease due to greater	Lack of coordinated regulation of diagnostics could be causing mis-diagnoses, impacting public health

SUMMARY OF VFM CONSIDERATIONS	
Positive Factors	**Negative Factors**
availability of quality-assured drugs	

In sum, efforts to improve operational efficiency in the PQ process have contributed to increased value for money. Other obstacles to increased availability of quality-assured medicines and diagnostics, such as national registration, may undercut the effectiveness of the programme. In addition, effectiveness of the program (Goal) is not easily measured and without a target, the ability to ascertain whether the project has been effective (or more effective than a counterfactual scenario) is not clear. Indeed, there are no readily identifiable counterfactual scenarios – if WHO did not do PQ, it is unclear whether any other entity(ies) could or would, and what would be the global health ramifications.

5.8 Sustainability and New PQ Financing Model

WHO is known as "the UN health agency in persistent financial straits," according to an Intellectual Property Watch article in 2013[21] on the WHO's initiation of PQ fees, which quotes the PQ programme (PQP) at the time as saying "in the current economic climate, we can no longer afford to rely solely on donor funding for our ongoing financial viability…..We are not moving PQP toward a full cost recovery model, but we are looking to achieve a balance between external and internal funding." In this same article, the MSF executive director is quoted as saying about PQP "the key to its future functioning and success relies much more on political and sustainable financial support from member states" [rather than on fees].

WHO PQ started charging fees for the PQ services in September 2013, and fees (according to the PQ web site) are as indicated in the table below. A rapid calculation based on these current fee levels and the approximate numbers of products PQ'd per year reveals that (in the 3rd column) the potential revenues from fees would only cover a small fraction of PQ's operating costs, with vaccines the largest contributor by far.

Table 4. WHO PQ Fees by Product Type

Product type	Current PQ fee	Fee revenue
FPP	0 to USD8000	If 31 per year = USD248,000 max
API	0 to USD8000	If 12 per year = USD96,000 max
Vaccine	USD500 screening + USD25,000-66,500 evaluation + annual fee of USD9600-16,800	If 18 per year = USD1.5M max
Diagnostics/ Devices	USD4000 + USD8000	If 17 per year = USD136,000 max

By contrast, the US FDA's fees start at USD 60,000 for an application, with a full FDA approval for a medicine costing upwards of USD 100,000.[22]

If the Department of Essential Medicines and Health Products (EMP) at WHO is 85% reliant on donor (external) funding, as reported by respondents, and with PQ receiving most of its funding from UNITAID and Gates, it appears that sustainability and viability of the WHO PQ programme has not become stronger and more viable since 2013, but perhaps more in dire need of financing solutions. As mentioned earlier in this report, USD50M in UNITAID funding for PQ over three years equates to

[21] "WHO Now Charging Fees for Drug Prequalification, Raising Access Fears" – by William New, Intellectual Property Watch (Sept 10, 2013)
[22] http://www.fda.gov/ForIndustry/UserFees/PrescriptionDrugUserFee/default.htm

almost USD17M per year, representing 80% of the total cost of PQ according to UNITAID (or almost half of the approximately USD40M estimated total annual cost of the entire RHT unit).

The question of programme sustainability and specifically how the PQ programme could be funded without the current over-reliance on donors, have been discussed and studied for some years, most recently in a study conducted by McKinsey consultants. The BMGF provided funding to WHO to contract a consultant team to research and develop options for a sustainable financing model, and McKinsey Consulting was selected, engaged and provided a report/analysis in 2014. This was followed by stakeholder consultations, including manufacturers, countries, procurement agencies and other donors/partners. The objective of this exercise was to find a sustainable way to finance the WHO RHT/PQ operating costs, with the goal to find a model that covers at least 50% of operating costs in the shorter term.[23]

According to the McKinsey research, overall PQ/RHT costs were USD36.6M in 2013, expected to be USD43.9M in 2017 (high estimate is USD50M), and rising 5% per year. This same research indicated that PQ "enabled sales" of over USD2.4B in 2013 to large donors and procurers, which indicates that PQ cost represents only approximately 2% of these PQ product values.[24]

The evaluation team was not granted access to the McKinsey study, but understands that several possible models were discussed, with the main finding being an apparent preference that manufacturers contribute 1% of sales of their PQ'd products to the major procurers back to WHO to fund the PQ programme. This was apparently not well received by suppliers (although promised PQ improvements/ enhancements and expedited in-country registrations, which could go with this new fee structure, would be welcome.

There appears to be a continued lack of consensus (and some controversy) around future financing of WHO PQ, and the process used to seek solutions (and reportedly, manufacturers and other groups are still submitting alternative proposals). Many feel manufacturers should pay, as they benefit from the business opportunities they gain from having PQ'd products, but manufacturers see this as an indefinite (and unquantifiable) "tax" that they alone would bear and many worry fees could deter manufacturers from getting PQ'd at all. Others feel the big procurers (Global Fund and others) are major beneficiaries of the PQ programme, and should pay for its services. (In the evaluation team's interview with a member of the Global Fund Sourcing Unit, he stated publicly that the Global Fund ***would*** be willing to contribute to PQ's costs). Despite the apparent lack of consensus around this critical decision for the future of PQ, WHO PQ staff appear to feel a decision from the Assistant Director General's (ADG's) office of WHO is imminent, in the first half of 2016.

5.9 Answers to Key Research Questions (*see Annex 1 for detailed table*)

Part of this evaluation's Terms of Reference (TOR) was to address the UNITAID PQ grant with a view to the key criteria of relevance, effectiveness, efficiency, impact, lessons learned, and sustainability. A detailed table with answers to key research questions in each of these 6 areas is provided in Annex 1. However, the summary of findings against these criteria is as follows:

[23] PQ/RHT Financing Strategy – Confidential Discussion Document Draft – PQ/RHT team debrief. Nov 5, 2014 (selection of PowerPoint slides in hard copy)

[24] PQ/RHT Financing Strategy – Confidential Discussion Document Draft – PQ/RHT team debrief. Nov 5, 2014 (selection of PowerPoint slides in hard copy)

***Relevance**:* This grant is highly relevant to UNITAID's objectives and to global public health need. WHO PQ is critical to global quality assurance efforts for health products, and has major partnerships and collaboration with partner organizations, donors and countries.

Effectiveness: The PQ project has been effective in meeting its indicators and targets, with some delays and obstacles, and operating within/under the grant budget allocated but with considerable stresses on staff. Efforts to expand the scope (given market demands for new products and products in other categories), further streamline operations, and better harmonize within and outside WHO, and with UNITAID, are under way and necessary.

Efficiency: Although WHO is an institution with significant operating costs (infrastructure, salaries, overheads, etc), PQ has made efforts to build efficiencies into its operations and through greater collaborations (e.g. with GF and FDA) and expedited procedures. The PQ project (largely due to WHO HR constraints) under-spent on its project budget (while still performing on most indicators), allowing for a 6-month no-cost extension from UNITAID. Efficiencies in management and implementation could be improved from both UNITAID and WHO sides.

Impact: The PQ project appears to be meeting its impact goals under this grant. PQ has a significant global impact on quality assurance and access to vital health products. However, direct impact in terms of lives saved or other health outcomes, is difficult to measure. Impact could be further enhanced through greater efficiencies, and collaborative efforts, and potentially greater attention to stabilizing the QA and regulatory environment for diagnostics (which is currently lacking cohesion and consistent application of quality standards).

Learning & Risk Mitigation: It appears that recommendations from previous reviews and evaluations have largely been followed by PQ. It does not appear that lessons or programme improvements are very publicized/shared, although this would be beneficial. Project logframes and indicators should be developed in a collaborative way, to ensure their relevance and appropriateness for PQ performance. Although no systematic risk assessment and management plan has been undertaken by UNITAID or PQ, this is recommended for the future, as there are potential risks that can affect all parties.

Sustainability: As WHO PQ is almost wholly dependent on donor funding for its survival, with PQ fees contributing only a small part of its costs and with WHO resources very constrained, discussions have been under way for some years around how to make it more sustainable. Various models are under discussion for the financing of WHO PQ, including up-front fees, fees from manufacturers as a percentage of sales of their PQ'd products to major donors, contributions from these large donors and procurers, and various hybrid options. Some of these models would be accompanied by PQ expansion and/or performance improvements and streamlining efforts to have products enter country markets. A decision is expected from WHO in 2016, with implementation of a new model to begin in 2017.

A Few Key Respondent Quotes:

***About UNITAID**:*

- *UNITAID is a fantastic donor (for WHO PQ)…. UNITAID has been very supportive, and the funding is exactly what WHO needs*
- *UNITAID have been understaffed, under-resourced, but now operate more as a project team*
- *UNITAID should fund PQ, and strongly "KPI" them*
- *UNITAID reporting is antagonistic, rather than constructive…could be more collaborative, less process driven*
- *UNITAID is key for PQ survival and doesn't interfere in the technical work…But there is confusion over who does what (e.g. with UNITAID funding other QA efforts)…. It would be*

good to understand where UNITAID's mandate is going in future

- *Yes, Gates and UNITAID should support the products PQ process. But the pipelines they go into [in countries] are porous, and need surveillance!*

***About WHO PQ**:*

- *My firm belief is PQ is one of UNITAID's best investments, a real service to the world.*
- *PQ is not very visible, not very transparent….Manufacturers make a lot of noise, so PQ needs to communicate better to counteract that, and clarify the added value of PQ*
- *PQ has great value add – SRAs like FDA are good, but PQ is the only one playing the crucial role for developing countries (but this is not publicized well enough)*
- *PQ is operating in a vacuum – not really a regulator, but acting like it in many ways…PQ is not meant to be a regulatory authority…WHO is expensive, not nimble and can't do everything…*
- *Absorptive capacity of WHO PQ is hard for UNITAID to gauge, so it is hard to respond to PQ's requests to expand scope….PQ should make the case for why they should do syphilis test PQ.*
- *Evolution of the PQ programmes has been very good…but Dx is the little brother [compared to medicines] with groups, priorities and focus areas*
- *Integration of PQ has been more spontaneous than managed…optimization of working processes is still in its infancy…..it was a management decision, without much thought to how it would be done….now the 5 groups work in silos, without enough communication across groups, people still trying to find their place…. Need more and better mapping of roles for the 5 groups.*
- *Financing model – WHO cannot continue as is, resource levels don't permit it to survive…where the money comes from is important [for WHO] to remain independent…Linking fees to sales is seen as indirect taxation by suppliers….No one is championing the financing model decision at WHO…. McKinsey report took a business approach, but may be missing the public health perspective…Don't need a complex rebate mechanism, but can keep it more simple….*
- *Managing donors - multiple expectations and requirements to satisfy needs of donors is a huge amount of work (at WHO)….*
- *It is a disaster for WHO to have two QA schemes not agreeing….there is no duplication between the malaria program/FIND testing and PQ, and the current process is an entry point to PQ…PQ will be the future but this needs a phased transition.*
- *There is need for more collaboration, recognition of mutual strengths (between PQ and WHO disease programmes)*
- *Up to the donors to decide what quality standard (for Dx) they want to follow, but it's impossible for WHO to rubber stamp a CE Mark product, when quality is so variable…There is value for PQ for Dx arguably more than for medicines. Dx quality standards are much more uneven…Dx is led by industry and not strongly regulated.*
- *Even if products are PQ'd, the countries [registrations] are a nightmare, requiring evaluations, reviews, fees and time from manufacturers to register locally.*
- *From a partner: [We] love PQ, it makes our work a lot easier…we just wish they would expand their scope (into Hep, cholera, neglected diseases, diagnostics).*
- *From a manufacturer - We go for FDA and not PQ: we do not want to be assessed on 2 standards and keep 2 recording systems. PQ is too slow…*
- *From an API maker – It is great to be able to be assessed in isolation from a formulation! (unlike with other SRAs)…PQ is great! PQ is a great marketing tool for API makers*
- *From an NRA: PQ is great! But their scope is too narrow (only covers 10% of the products we need to register)…..We have benefited so much from PQ's TA, quality of our work is better*

6 RECOMMENDATIONS & POTENTIAL ACTIONS

The following are the evaluation team's recommendations (and proposed actions) to address the observed and reported challenges to the programme, and/or to help make a potential future grant to WHO PQ further contribute to UNITAID's stated objectives of filling needed gaps and contributing to "game changing" efforts to combat HIV, Malaria, TB and related diseases in developing countries. These are grouped in eight categories below with ones of particular importance or priority highlighted in orange:

Recommended Actions	Reasoning/Rationale	Potential Timing & Funding	Lead entities
1. Improve alignment across grants & programmes			
Request a deadline for all parties to agree and begin implementing transition plan for the Malaria RDT product testing from FIND	UNITAID investment in parallel programmes and competing efforts within WHO leads to some confusion and duplication of effort (e.g. malaria program review of RDTs with FIND (UNITAID project 2013-2017 for USD9.4M), TB program review of TB dx), which appear to be confusing to WHO, countries, and the international community, and may lead to quality concerns in some products. This is detrimental to PQ and those manufacturers who go through PQ, which comes with a cost but no perceived additional benefit for them, since both systems qualify them for international procurement.	**By Sept 2016** No funding necessary (although funding to facilitate the process could help expedite)	FIND, PQ Dx, UNITAID
Avoid any appearance of conflict of interest in grant investments – consider systematically requiring UNITAID supported devices to go through PQ	Care should be taken to avoid any appearance of conflict of interest through investments in supporting manufacturers (e.g. GeneXpert, Dx technologies for HIV), as well as investment in PQ/QA of these products, to not appear to have any preference for particular products/ suppliers. TB dx devices supported by UNITAID should be held to the highest QA standard, which is PQ. Cepheid, which is a UNITAID-sponsored manufacturer, is going through the TB programme's endorsement process for TB products, but goes through PQ for their HIV tests.	**ASAP**	UNITAID
WHO to draft a document on the roles and responsibilities for diagnostics across all disease areas, perhaps including a transition plan	To avoid duplication of effort and confusion, there is a need to clarify roles and responsibilities for diagnostics within WHO. A formal reference document specifying which department is in charge of which areas and how the collaboration between for instance PQDx and the disease programme shall take place is needed. This clarification of roles will help build the necessary positive collaboration between PQ and disease programmes. There is good technical and complementary expertise in each department that needs to be capitalised upon in the new repartition of responsibilities. This can help facilitate integration of the TB dx	**By Sept 2016** No funding necessary (although funding to facilitate the process could	WHO disease progs & RHT

	endorsement process from the TB programme into the PQ Dx programme. Several respondents questioned the seniority of the PQ Dx team, and some thought they lack seniority, disease and field expertise, and have disproportionate power to make the rules as they go along. PQ should not be setting the standards in isolation, therefore it is important to establish collaboration between the disease programmes and PQ, and clarify roles. PQ should focus on PQ process, with guidance on diagnostic strategy (e.g. need to take into account dx products or systems that may be less effective in case detection than others, but may have a greater impact because they can be used much more broadly in the field, e.g. dry blood spot methodology and POC devices).	help to expedite)	
WHO to draft a document on roles and responsibilities for PV, across all disease areas.	There is a similar confusion around pharmacovigilance (PV) for PQ medicines, with disease programmes implementing PV activities in parallel with the PV department within RHT.	**By Sept 2016** No funding necessary	PQ meds and disease progs
UNITAID to declare that it will align its funding to these WHO documents	The different channels for assuring quality of diagnostic devices made sense in the past as PQDx was not established, but is now a somewhat counter-productive duplication of efforts, which might be exacerbated by continuous funding on both sides. Through its funding and guidance UNITAID should help reinforce the important complementarity between disease programmes and PQ, and help find ways to bridge the current divide between them. Relations have been strained and adversarial at times, but there is a need to build mutual recognition of strengths, and to collaborate.	**ASAP** No funding necessary	UNITAID
2. Develop consistency and continuity at UNITAID, enhance relations and communications with PQ			
Ensure better continuity of staff in charge of the PQ programme within UNITAID	The relationship between PQ and UNITAID has been burdened by a high staff turnover at UNITAID (reportedly now over), leading to the project team changing, with lost continuity around decisions, and some confusion. UNITAID should endeavour to ensure continuity of staff in charge of managing PQ, with fewer structural changes within the organization. The international regulatory framework in which PQ is evolving is complex and requires in depth understanding from the project team at UNITAID to be able to manage the project well. Continuity is also critical to follow up on requirements, agreed standards and indicators.	**ASA**P No funding necessary	UNITAID
Reach common agreement on logframe based on past lessons, to build continuity and comparability across	Consolidate and finalize logframes and indicators, and refrain from changes during the project, unless necessary and mutually agreed. Consider aligning with core indicators in GHO (Global Health Observatory). Ensure that indicators (e.g. time to PQ) and priorities (and criteria for them) are defined collaboratively with WHO. Ensure indicators are final before budget template is put in place, because the budget depends on indicators. Respondents	New grant (2017)	UNITAID PQ

grants	noted challenges with this, and evaluators found analysis across logframe versions and indicator templates/lists cumbersome, inconsistent, and difficult. Indicator numbers have shifted, making comparisons/trend across the project timeline nearly impossible.		
Continue exploring potential streamlining and synergies between BMGF monitoring system	UNITAID should continue to work with PQ to streamline, simplify and better align reporting systems with the WHO system, and with BMGF. Consider the Gates reporting template model and project dashboard, and a more user friendly budget template. BMGF reported being ready to match reporting timelines with UNITAID.	Under next grant (2017)	UNITAID
3. Enhance UNITAID Communication and visibility around QA			
If desired, request grantee to communicate and acknowledge UNITAID with beneficiaries	The evaluator is not sure of the level of recognition UNITAID would like to achieve. Should they want to become better known as a major partner in QA for international health, they may need to better publicize the important role of UNITAID in funding essential efforts like PQ to enable excellence in life-saving health programs. WHO is very grateful for UNITAID's funding but UNITAID is less well known to more indirect beneficiaries such as partner organizations, in-country NRAs, and manufacturers.	ASAP No funding necessary	WHO UNITAID
UNITAID to update its web site and details on the PQ program	UNITAID should update its web site and details on the PQ program – some information is out of date, and is now irrelevant, for example a 2014 announcement of upcoming EOI. Some data (e.g. number of QC labs qualified) is reportedly 4 years old (from 2012).	ASAP No funding necessary	UNITAID
Communicate better about UNITAID priorities	UNITAID should clarify and be consistent in stating its "priorities" (among products, countries), providing visible lists of these on the web site and external communications. When priorities change, these changes should be explained and new lists/communications produced for grantees like PQ but also for partners and countries to better understand UNITAID's objectives and philosophy. Many WHO respondents expressed concern or confusion around UNITAID priorities, and a need to understand these better. At least one UNITAID respondent disagreed that there were any firm product or country priorities at UNITAID, and did not understand where WHO PQ got this impression. Many at WHO appear to feel that UNITAID is restricted in the activities they will support, and therefore do not request new activities even where a clear gap exists. Clarification is needed.	ASAP No funding necessary	UNITAID
4. Consider broader support for continuum of QA efforts, including post-PQ			
Consider expanding UNITAID support to post-market activities. WHO to explain the potential impacts of PV	UNITAID should consider looking beyond PQ only (include more focus on post-PQ, including pharmacovigilance - PV and post-market surveillance - PMS) to assure quality all the way to the patient, especially given the lack of PV and PMS in most countries. Enforce standardization of QA after PQ. As the number of PQ'd products increases (with more volumes and time in the market), so do the risks. Any quality or public health issue with a	For next grant (2017). Requires additional funding	UNITAID WHO RHT

and PMS, and how these relate to UNITAID priorities	PQ'd product could hurt PQ's image and that of UNITAID, as well as being detrimental to health. Prior to providing more funding for PV activities, the roles and responsibilities for PV in WHO between disease programmes and RHT should be clarified (see earlier recommendation) and aligned with RHT's PV strategy, to avoid fragmentation and overlaps (as many projects have PV elements). Clarifying this structure and coordinating through RHT could have an added impact (building an international system as a side effect). There is broad agreement that PMS and PV are problems in UNITAID target markets (most LMICs) but there is lack of leadership in this area, which appears under-supported. Respondents noted that branded drug makers do PMS in their markets, but no one is now doing PMS for generics, unless the country has a strong system in place (which is rare), and it is widely reported that many countries do not have PV systems in place at all.		
WHO to further formalise collaboration with SRA agencies	UNITAID could encourage a more coordinated approach between WHO, EMA, FDA, for QA follow-ups (e.g. return visits to plants of approved manufacturers, intelligence sharing, risk assessments, joint inspections). With confidentiality agreements in place, there could be efficiencies to gain through more collaboration with these agencies (both pre- and post-PQ). Some of these kinds of collaborative activities are taking place, but it would be beneficial to work on a more strategic and systematic approach. This could also help alleviate some of the criticism and strain on manufacturers.	Next grant (2017). Some funding required	WHO RHT UNITAID
Intensify and expand collaborative procedures and joint dossier reviews to other geographic areas. Also intensify and expand support to NRAs	Consider more support to expand the collaborative procedures initiative, regional joint reviews, and work with NRAs to speed registration in countries for PQ'd products and build local NRA capacity. Manufacturers have a cumbersome task registering in many countries who demand reviews, time, fees, etc. and this delays patient access. Manufacturers are very much in favour of efforts to expedite and streamline the registration process in countries. NRAs appreciate TA from PQ, and would like more. This is also mentioned in #8 below.	Next grant (2017). Funding required	UNITAID WHO
5. Consider expanding the scope of product areas with PQ support, to address needs			
Continued support for WHO PQ to maintain and expand efforts to PQ APIs	Support WHO PQ to maintain and expand efforts to PQ APIs -- this appears to be a successful area of work for PQ, which is a unique value-add for WHO and reportedly has good impact in improving quality of API manufacturers, and in providing flexibility to FPP manufacturers in choosing APIs. The CPQ (certified PQ document), a document with information on the API and its certified PQ status, shows the NRA that quality is assured, and there is no need for further assessment. This enables easier registration in countries.	Next grant (2017). Funding required	UNITAID WHO
WHO PQ to more actively discuss with UNITAID need	UNITAID could discuss priorities with PQ, and request that PQ "make the case" for any additional product lines or categories that may be added to the priorities list in future (G6PD,	Now (June 2016) & for	WHO PQ

to work on products perceived to be beyond current scope/priority.	syphilis test, anti-venoms, etc). WHO PQ should explain the expected impact, how the work will be done, cost implications, HR needs, etc.	next grant (2017)	
Expand the scope of PQ support to include OIs (opportunistic infections) and STIs (sexually transmitted infections)	UNITAID could consider support to PQ to add medicines and dx for OIs and STIs, which can be considered still within the scope of UNITAID priorities around HIV, etc. Dx for syphilis is one example. A top wish expressed by NRAs is for PQ to expand their scope of products.	Next grant (2017). Funding required	UNITAID
Consider allowing a small portion of products outside of UNITAID priority, to address emergencies	UNITAID could consider providing support to PQ to enable it to expand its work beyond HIV, TB, and Malaria. PQ could work on urgent emerging issues unrelated to HIV, TB, or Malaria (e.g. Ebola and Zika). WHO has to respond to these emergencies when they occur, and no negative impact on the achievement of UNITAID targets was reported (from work in 2014-15 on Ebola, Zika, etc). Dengue; cholera; anti-venoms – especially now that Sanofi product no longer being produced; blood products; rabies vaccine; multiplex assays; are some of the product areas mentioned.	Next grant (2017). Some funding required	UNITAID WHO
6. Support improved WHO PQ communications to stakeholders			
WHO PQ should provide more information on its web site about progress of dossiers in pipeline (e.g. expected timing), decision making process, PQ list changes, etc.	Support improved PQ/RHT communication and transparency. This would better counteract the "noise" coming from the suppliers' side (e.g. complaints about PQ process). Transparency has improved through web site enhancement, but more improvement is desired (e.g. procurers who rely on PQ would like to see an indicative timeline for the different phases of the PQ process so that they can better plan their procurement. Currently they rely on informal calls to PQ in get information).	ASAP	WHO PQ
WHO PQ should provide more information on web site for each step of the PQ process – the steps, why they are necessary, and how they are not a duplication with FDA and CE mark process	PQ is sometimes accused by industry of constituting a duplication of effort for products already having FDA approval and CE mark. PQ needs to make the case for their value-add for manufacturers. This is particularly important for diagnostics as they deal with mostly branded products, which already have FDA and/or CE mark -- there is no requirement for them to go for PQ to participate in international procurement. It seems that many manufacturers are not aware of the benefits of PQ (e.g. collaborative procedures, better access to public procurement in countries where PQ is a prerequisite, etc.).	ASAP	WHO PQ
Support PQ to institute an interactive "live" web	Support activities that lead to faster PQ process (without compromising on quality). This is the strong desire of most manufacturers, and many express the willingness to pay for this, as the	Next grant (2017).	WHO PQ UNITAID

based platform that enables manufacturers to see their dossier status, and respond to each query as they arise	lost time to market is a top concern. This appears to be even more important for dx manufacturers, as the life cycle of dx products is comparatively short. Dx manufacturers complain about lack of transparency, lack of visibility into status of their applications. Consider an online tool for the manufacturer to log in and address queries as they are posted, without having to wait for all queries to be consolidated and sent in one round by PQ. This could help accelerate the PQ process, according to some manufacturers.	Requires funding	
PQ medicines should clarify (and publish on line) what the procedure is for manufacturers to address Notice of Concern (NOC) and Notice of Suspension (NOS) warnings	Respondents agree that PQ medicines procedures are quite clear, however clarity is lacking when issues arise later around PQ'd products (e.g. with NOC or NOS), as there is currently no clear process (but manufacturers are greatly impacted) for moving beyond these. The current PQ system of stopping all activities involving PQ of products from the manufacturer when there is an issue related to one of their products should be better justified to manufacturers or reassessed, as it is currently perceived as punitive and unfair. One consideration may be to involve an external stakeholder or partner to help resolve the issue and ensure it does not present a roadblock to market access for too long.	Next grant (2017)	WHO PQ
UNITAID and WHO PQ to work with the international community to build consensus on QA standards	UNITAID could work with WHO PQ to liaise with major partners including Global Fund, Gates, PEPFAR, and UNICEF, and endeavour to obtain consensus on QA standards to follow globally, especially the need for more consistent regulation of diagnostics. This dialogue will be important as/when Global Fund develops the next revisions to their QA policies.	Next grant (2017)	UNITAID WHO PQ
7. Support to WHO PQ to address management and structural challenges			
Support PQ's efforts to integrate category teams. Consider outside support led by change management specialists	In 2014, WHO RHT began the integration of the 3 PQ streams (vaccines, medicines, diagnostics) within a broader PQ Team including also inspections and TA. There are efficiencies to be gained from integration (in IT, HR, etc), however it is not complete yet in practice, and faces challenges. UNITAID could provide additional support to PQ to get the maximum in terms of efficiencies from this integration (without compromising on the quality the technical work within the 3 groups). It has been noted that WHO "needs to get the whole team rowing in the same direction", and manage PQT integration in a systematic way.	Next grant (2017)	UNITAID WHO RHT
Conduct an analysis and develop a strategic plan for WHO RHT/PQ	Consider funding a full costing analysis and strategic plan for PQ - a "scoping study" followed by a sort of "business plan" or strategic plan to examine and define the strategic goals that they are planning to achieve and necessary staffing and other resource requirements. This analysis is required to better enable PQ to analyse its needs, and proactively "sell" its value add to member states, partners and donors, and manufacturers, rather than merely having to be responsive to donor requests and demands.	Next grant (2017). Requires funding	WHO RHT UNITAID

Assess feasibility, consider system that enables manufacturers to continuously submit to PQ	As mentioned above under #6 (web based system), there is a need to support activities that can help expedite PQ (without compromising on quality). Many manufacturers express the willingness to pay for this, as the lost time to market is their top cost concern. Consider a system that would enable products to be accepted for PQ continuously and not have to wait for 2 months for the next review panel to take place in Copenhagen. This is currently being done for products that are particularly strategic.	ASAP, for consideration under new grant	WHO PQ UNITAID
When possible anticipate demand for the development of standards for new product categories in advance of first dossier submission, to reduce overall time to PQ	Support PQ to work more with manufacturers and partners: PQDx could do more on publishing standards, requirements for manufacturers to go through PQ, to have better submissions, more and faster success. PQ have started creating tools, sample templates for submissions, etc. but more is needed. PQ notes that WHO should take the lead on normative standards on IVDs. PQ Dx is criticized by manufacturers for the length of time it takes for PQ for a new product category (category never PQ'd before). PQDx need to anticipate the needs and prepare in advance for new product categories rather than the current "make the standard as they go along" approach. This current system leads to frustration from the manufacturers, as they cannot plan in advance but have to react to unexpected requests.	Next grant (2017). Funding required for PQDx standards and guidelines	UNITAID WHO PQDx
Consider support to PQ to conduct a full risk assessment for PQ Team.	As many different stakeholders depend on PQ, it would be useful to conduct a risk assessment as part of a larger strategic plan exercise that is needed by PQ to assess PQ's capacity and resources, and put plans in place to mitigate these risks.	Next grant (2017)	WHO PQ UNITAID
Consider greater strategic focus on PQ of diagnostics in the next grant	Given the complicated regulatory environment for PQ Dx and the fact that it is a newer PQ programme, it may require greater focus to reach full maturity. This may be more feasible now that the teams are sharing resources (with integration). There is a need to increase the number of dx products PQ'd (as many dx are needed, e.g. Hep C, viral load, EID). The dx regulatory framework is still under-emphasized, and lacking a coordinated approach. It is important to act now to make sure that countries which are now starting to regulate diagnostics are doing so in a coordinated way that does not lead to major national disparities. PMS of dx is just starting, and PQDx face a growing PMS work load, lot testing in countries, requalification of dx, continuing reviews, etc. The post-PQ phase also includes manufacturers making changes to their products, and re-inspection of manufacturers (3-5 years after PQ).	Next grant (2017)	UNITAID WHO PQ
Consider and discuss with WHO PQ potential changes in scope and priorities under a new financing model	A new financing model may have a strong impact on UNITAID's influence on PQ and their ability to focus on UNITAID's priorities. WHO PQ may extend their scope to all essential medicines and essential diagnostics, and it is crucial to anticipate and prepare for these changes. Improvements at PQ (speed, streamlined registrations, clear guidelines and processes, transparency and clear/fair fee structure, sales opportunities, etc.) will be	Next grant (2017)	UNITAID

	expected, if new fees are applied. PQ may need support to anticipate and plan for these improvements, and to communicate to ensure expectations are met. It is also important that, in any fee structure, WHO PQ maintains its independence and has no conflict of interest (e.g. if funded by industry).		
8. Consider expanding support and TA for country activities that show real impact for QA			
Consider supporting expansion of collaborative procedure initiative – Get more countries to join, work to harmonize countries' requirements for registration.	As the single largest complaint of manufacturers, the cumbersome and lengthy (and costly) in-country registration processes slow access for patients, discourage manufacturers away from the market, and reduce interest in going for PQ (since PQ does not reduce the burden of obtaining country registration). For example, even though paediatric formulations were desperately needed, they were very slow to be registered. Helping expedite country registrations can be a great value add of WHO PQ, can attract more manufacturers and products, and can speed access for the markets.	Next grant (2017)	UNITAID WHO PQ
Consider support to build up the rotational fellows programme to bring NRA representatives to work at WHO for short periods	There has reportedly been good success so far with this effort, according to PQ, with effects that continue as the fellow returns home to his/her NRA. It should be opened up to other regions beyond Africa (e.g. SE Asia). PQ would select them carefully, work with them, motivate them with a potential 3-month learning stint at WHO, and then have them work side-by-side at WHO learning and improving their capacity. Another suggestion was to consider a rotational post for PV to help build PV capacity in countries.	Next grant (2017)	UNITAID WHO PQ
Consider support to more initiatives for joint dossier review for medicines registration, and expand these to new geographical areas. Also consider option for Dx	Both in-country regulatory authorities and manufacturers are very supportive of these regional initiatives (e.g. Zazibona), which have reportedly been successful in reducing the backlog of products in the countries' medicines registration pipelines. Lessons learned from this could be taken to new such initiatives.	Next grant (2017)	UNITAID WHO PQ

ANNEXES

ANNEX 1: ANSWERS TO KEY RESEARCH QUESTIONS

Key Questions for the Mid-term Evaluation	Findings
Relevance	
1. Are outcomes and impacts aligned with UNITAID's overall mission?	Yes, the grant is highly relevant and critical, in supporting the major global QA effort for health products. The PQ project helps pursue objectives of increased access and selection of quality products for HIV, TB, and Malaria and also Hepatitis and potentially new and related focus areas. It benefits many different kinds of stakeholders: donor agencies, international and national organizations working in the field of health, country regulatory authorities, and manufacturers.
2. How does the grant contribute to one or more of UNITAID's six strategic objectives?	As a cross-cutting QA intervention, the PQ project contributes to all 6 strategic objectives of UNITAID.
3. Do the goals and outcomes of the project align with the response of other donors and partners?	UNITAID funding is essential to the life of PQ, and is aligned with the work of other donors/partners, who do not fund PQ (other than BMGF) but rely on it for the essential quality of health products for their programs. Alignment with BMGF, as the other major funder of WHO PQ, has increased, as the organizations work to harmonize and make more efficient their objectives and requirements of the grantee. The ERP and ERPD are important collaborations with Global Fund, and used by other partners/procurers as a gauge of quality. Collaboration with GF on invitations for EOI from manufacturers for needed products also helps align objectives.
Effectiveness	
1. Are the outputs consistent with the objectives and expected outcomes in the project plan?	The project appears to be delivering outputs as expected in the project documents. Numerous changes have been made in indicators and targets, by UNITAID and/or in consultation with UNITAID.
2. Were the outputs of the project achieved within the timeframe in the project plan?	Generally, yes
3. What are the main factors influencing the achievement or non-achievement of the outputs or overall outcomes?	The PQ team notes that delays have been largely due to manufacturers' dossiers and response time, prioritization (or lack thereof) of their PQ efforts. Some delays at WHO PQ have been related to HR gaps, and to emergency incidents including Ebola taking staff away from their other PQ work. For diagnostics, the PQ process for the first product in a new product family (when no other such product has been PQ'd) is very lengthy due to the need to develop new standards for evaluation of these products.
4. What factors have been considered to ensure that value for money has been achieved?	PQ has made efforts to streamline their processes, reduce timelines, and expedite access in country (e.g. through work with NRAs, and through the collaborative procedures pilot), as well as through expedited/abbreviated procedures for SRA approved products. There is also some co-funding, and leveraging of other sources of funding. PQ also relies on external expertise for the PQ process: CDC provides lab evaluation free of charge and experts are recruited based on specific needs for dossier evaluations. PQ is also undertaking some joint inspections with other regulatory authorities.
5. How can PQ and the WHO disease programmes better align and make more	Prioritization of products should be done in close consultation between WHO PQ/RHT and the disease programmes, as well as partner organizations (including GF) and countries. Global Fund's Sourcing Unit

Key Questions for the Mid-term Evaluation	Findings
efficient the prioritization of products for PQ, determine the number of manufacturers needed, and develop guidelines?	can help advise on ideal numbers of products and manufacturers for market efficiency. UNITAID can potentially improve/enhance alignment across its grants, to ensure there is no duplication or "double messaging" to the market, about QA standards (and agree with GF and other major donors on the best standard for all to follow). There is a clear task distribution between PQ medicine and disease programmes, which is not the case for diagnostics. WHO should quickly clarify the roles and responsibilities for diagnostics between the disease programme and PQ, specifying what each department's responsibility is and what is a shared responsibility. Given the challenges brought about by the competing QA channels for diagnostics, these roles should be clarified as soon as possible. UNITAID should refrain from funding activities that contradict these officially determined roles and responsibilities. A similar initiative to clarify roles around PV and PMS within WHO would also be beneficial.
Efficiency	
1. Have project activities been completed in line with project timeline and budget?	Activities are within budget, but timelines not always met (e.g. some delays in PQ, some delays in TA and working with countries/NRAs)
2. Can WHO PQ demonstrate that national authorities are aware and participating in grant activities at the national level?	Yes. Countries are procuring PQ'd products, prefer to procure PQ'd products when available, and wish that the scope of PQ'd products would be larger. Some NRAs are working with WHO, receiving TA and support including joint inspection, rotational programs, collaborative procedures, joint dossier review, etc., and report that their procedures have improved. Some 27 countries are now part of WHO's collaborative procedure to expedite in-country registration of PQ'd medicines – this has reportedly been very successful, and is expanding. Medicines QC labs are being PQ'd and working with WHO. The PQ diagnostics programme is however lagging behind somewhat in their work with countries/regulatory agencies. PQ diagnostics is also planning a similar but different initiative to pre-assess labs that would be upgraded to perform tests on IVDs, potentially reducing the current reliance on only two labs to test products to be PQ'd.
3. How cost-effective and cost-efficient is project implementation?	Despite attempts to streamline and ensure VFM, WHO PQ's structure and system within the WHO bureaucracy is generally an expensive one, with high staff costs and less than efficient and flexible procedures. However, WHO does find some efficiencies (e.g. working with external experts).
4. Were challenges raised with UNITAID in a timely manner and did UNITAID help to resolve these challenges?	Reportedly, when WHO PQ has made suggestions or requested changes/flexibility from UNITAID, this has generally been accepted by UNITAID. The organization's relative flexibility and pragmatic approach has been appreciated by the grantee. However the high turnover within UNITAID among staff overseeing the PQ grants has made communication more challenging.
5. Is the grantee implementation arrangement efficient?	There have been some inefficiencies on both sides, from staff turnover and ongoing updating of new project team members, to changing logframes and indicators. Inefficiencies are also noted due to the reporting requirements, and the high volume of back-and-forth communications and queries required. Inefficiencies may also exist in the funding of parallel (and at times competing) QA efforts (PQ, FIND, TB Dx). There are also inefficiencies within the WHO structure impacting the project. The integration of the 3 PQ programmes under one management needs to be further refined to build greater efficiency.
6. Are there efficiencies that can be gained by aligning product reviews with other	Yes, there is likely room for greater efficiency in collaborating with the US FDA and other SRAs to expedite approval and PQ processes, when possible. However, prior to that WHO should specify in detail where and

Key Questions for the Mid-term Evaluation	Findings
Stringent Regulatory Authorities (SRAs) (and those already approved by an SRA)?	why they differ in their procedure from other agencies (to alleviate criticism from manufacturers that PQ is duplication of work for SRA-approved products). The regulatory framework for diagnostics internationally is fragmented, and the industry lobby can be strong in shaping the framework. There is a lack of consistency on the Dx side about what QA standard to follow , with potential quality implications in the field. Efficiencies can be gained in consolidating QA within PQ and instituting better coordination between PQ and WHO disease programmes. A greater focus from UNITAID on diagnostics to help fill the regulatory gaps internationally could have a significant impact. Effective diagnostics is an absolute prerequisite for effective treatment, and this case should be better communicated.
7. In what ways are UNITAID and Gates funding to PQ complementary? Could they be better aligned to maximize efficiency?	There appears to be great complementarity, in that each is filling gaps, without duplicating efforts. BMGF's support for the IT/database integration and other functions within RHT are vital and complementary to PQ's/RHT's work. Similarly, BMGF's regulatory capacity building for producer countries (China, India) helps these countries work with PQ and enhance their quality standards. Both funders are working increasingly to harmonize their interventions, synchronize reporting timelines and formats, and build synergy.
8. What would be the practical implications and foreseeable reasons for and against expansion in scope? (e.g. areas already under consideration within WHO – transition of WHOPES activities and G6PD)	WHO PQ believes expansion of scope is feasible and in line with their basic mandate, and countries/procurers have expressed a desire for PQ to expand its scope to all essential medicines and diagnostics. However, it is not entirely clear whether the staffing and resource capacity of PQT can manage the burden of additional workload from new product and disease areas. A thorough PQ analysis or assessment, including costing and necessary staffing components of their work, is required to ascertain the feasibility of expansion in scope given the current staffing and resource constraints. BMGF has already decided to support expansion of PQ scope to include WHOPES, so perhaps some of this analysis was done by BMGF to help in this decision.
9. Assess any negative impact of legacy assessment programs led by WHO program teams (e.g. FIND malaria Rapid Diagnostic Test (RDT) product and lot testing program, working in parallel to WHO PQ of malaria RDTs)?	There appears to be a significant impact in duplication of efforts, undermining of full integration of the PQ team, fostering competition and lack of collaboration between PQ and the disease programs, and reportedly "double messages" to countries and the market. These other assessment programmes affect manufacturers' motivation to go for PQ (which is the highest standard and not the easiest path for them), and can ultimately negatively affect product quality. Other investments by UNITAID (e.g. Expand TB and GenXpert diagnostics for TB) may also need to be reviewed to ensure any potential conflicts and/or duplication are mitigated. (UNITAID notes that both of these are ended/ending now).
10. What are the challenges and opportunities for the PQ project in terms of supporting national registration of products after PQ?	Manufacturers struggle greatly with in-country registrations and cumbersome processes, despite having their products PQ'd (with fees, staff time, delays in getting into markets – and sometimes decisions not to enter the market at all), and all wish for greater streamlining and expediting. Many manufacturers appear not to be aware of WHO's efforts in addressing this challenge, so WHO should consider enhancing its communications about this work. Through work with NRAs and capacity building of NRA technical staff, as well as collaborative procedures (commitment to approve the registration of medicines within 3 months of PQ approval) and regional efforts such as Zazibona (joint review of registration dossiers), PQT can help lead the countries toward more expedited registration procedures for PQ'd products. The collaborative procedures effort should be intensified and expanded – this would be a major value-add of WHO, and a major incentive for suppliers to

Key Questions for the Mid-term Evaluation	Findings
	participate in PQ. PQ diagnostics should also move forward in this area of working with countries.
11. Efficiency, timing, process, alignment between the PQ project and the ERP?	The ERP and ERPD are important collaborations with Global Fund, and used by other partners/procurers as a gauge of quality. Global Fund and WHO PQ appear happy with the ERP, and in the joint collaboration to manage it. ERPD was launched with GF in 2014, and is reportedly helping manufacturers to know what they need to do to be good manufacturers, and is working well with an expanded scope of products (2 Dx products have gone on to be PQ'd). However, manufacturers can go for ERPD without any formal commitment to go for PQ. They can get a CE Mark during their year on the ERP list, and then not apply for PQ (the incentive is currently not there, for Dx manufacturers). Some have reported that the number of products which can go to ERPD is too limited, and ERPD meetings are too infrequent.
Impact	
1. Will the project result in the intended impact?	The project logframes define the impact goal as: Medicines: "sustainably increase access to QA'd and appropriate medicines for HIV, TB and Malaria" and Diagnostics: "increased access to appropriate, QA'd diagnostics, medical devices and medicines for prevention, initiation and treatment of HIV, HCV, HBV, TB and Malaria." The project is contributing to these goals, however direct impact (and level of impact) is impossible to measure or contrast with what the market would look like without the intervention of PQ. Through collaboration with WHO, GF, CDC, and other partners, UNITAID (including this project) tries to help shape the market, by identifying and filling gaps, ensuring market stability (competition, selection, price) and access for patients. Currently, an important issue for diagnostics is that either they have PQ (have passed the highest standard), or there is little information about the quality and suitability of the products for the target countries in selecting these IVDs. Countries therefore often end up resorting to price in making procurement decisions. It is therefore critical that PQDx expands the number of device categories they PQ, with ERPD as an interim measure.
2. Can the grantee attribute UNITAID's financial support to patients tested or treated in each beneficiary country?	UNITAID is the largest funder of PQT, and the majority of procurement worldwide for HIV, M, TB is of WHO PQ'd products. In the absence of SRA approved products, PQ'd products are the products of choice for most countries. Therefore, UNITAID's investment in PQT is directly impacting patient access to quality assured products for the 3 diseases.
3. How could the project evolve to achieve the largest impact over time and the greatest value for money?	The project could build greater efficiencies in PQ and UNITAID processes and reporting; harmonize fully with Gates and other funders' support; integrate PQ teams and functions and involve the full QA continuum (through to PV and PMS); remove redundancies of other testing programs, bringing all QA into the PQ team; consider addition of other needed products; and enhance collaborative procedures and regional/country registration to expedite in-country access. PQ may also wish to consider outsourcing some functions, to achieve greater VFM.
4. Do partners, countries and suppliers recognize UNITAID's funding has contributed to improvements in the landscape for Dx and medicines for HIV, malaria and TB?	Although major partner organizations know UNITAID, it does not appear well enough known or appreciated globally or in countries. Countries and most suppliers appear to recognize the contribution of PQ, but do not necessarily attribute this to UNITAID funding. It appears that there is not sufficient publicity or recognition of UNITAID as a key partner in QA efforts globally.

Key Questions for the Mid-term Evaluation	Findings
Learning and Risk Mitigation	
1. Have lessons learned been documented and widely disseminated by grantee and UNITAID?	It does not appear that lessons learned, or adaptations/ improvements in the programme are widely publicized or shared globally. Communications about the achievements of the programme could greatly improve, which could also reduce some of industry's criticisms of PQ.
2. Have programmatic and financial risks been identified and tracked over the course of grant implementation?	There does not appear to be a systematic risk assessment and management process in place at PQ or UNITAID (although UNITAID has begun more closely monitoring risk across their grants), and not very evident documentation of recognized risks (e.g. risk to WHO if a PQ'd medicine causes deaths or health crisis, risk of confusion between different levels of QA hurting quality), although these appear to be in some programme staff's minds. There are various potential programmatic, technical, financial, legal and other risks to be considered. There are recognized potential programmatic risks from HR and structural issues at WHO, and emerging crises like Ebola, Zika, and others. Risks and risk mitigation efforts are described briefly by PQ in the 2014 and 2015 reports to UNITAID, with a focus on the new financing model and unease among both meds and dx manufacturers, confusion and disagreement around the benefits and need for PQ for dx (when other systems exist). The Project Plan also has a brief section on risk. UNITAID and the project may want to consider a system to regularly assess and manage various types of risks over time.
3. Have the findings and recommendations of mid-term evaluations or audits (where relevant) been used to improve grant performance?	Yes. Recommendations from the 2013 review of the PQDx have been largely followed and implemented. Recommendations from other reviews have largely been followed, with some improvements still under way.
4. To what extent do global emergencies (e.g. Ebola) impact on prioritization of workload within the PQ department, and could this compromise their ability to achieve grant deliverables agreed with UNITAID?	WHO staff noted that emergency situations like Ebola and Zika do indeed take up their time, taking them away from regular PQ programme duties. It appears that especially the dx team at PQ have had to give time to Ebola (due to need for rapid diagnostic solutions) and now Zika virus. This need to address emergencies in the health landscape (which will always be present) should feature in WHO's (recommended) PQT analysis of funding and staffing needs, to build its strategic approach for the future.
5. Do the project plans, logframes, and/or budgets of the grant need to be amended?	Logframes have been amended over time, but remain somewhat problematic in areas, with some indicators difficult to measure and others out of PQ's control. WHO questions the relevance of some of the current indicators, so a potential new grant would benefit from closer work together (UNITAID and WHO PQ) on indicators/logframe. The budget was under-spent largely due to WHO HR delays, hence the possibility of a 6-month no-cost extension of the PQ grant from UNITAID.
Sustainability	
1. What plans have the PQ team put in place for sustaining the overall program?	There is discussion, research and analysis currently on a new financing model for PQ to ensure its sustainability, for which McKinsey was engaged to do a study and report in 2014. However, there is reportedly still no consensus on the best approach. Manufacturers are against a new 1% fee on sales of PQ'd products, which is one option being discussed. Manufacturers have reportedly submitted other potential financing models, and favour funding for PQ not from industry but from international organizations and international procurers. PQ feels there cannot be one model for all manufacturers, as they are very different, with some much smaller than others. There is a need to adapt any model

Key Questions for the Mid-term Evaluation	Findings
	to the very different situations of manufacturers, so as not to deter them from applying for PQ (thus hindering access in the market). Global Fund has indicated their willingness to help fund PQ. Most indications are that a hybrid approach will have to be adopted. It is expected that the model will be implemented in 2017.
2. How could/are other WHO programs align to support PQ? E.g. if PQ's scope is expanded?	Duplications could be removed, and PQ could be made responsible for all testing and QA. Disease programmes and PQ could collaborate and communicate better to avoid duplications or conflicts. If the PQ scope expands to include WHOPES, G6PD, and/or other product areas (e.g. syphilis tests, snake anti-venom, etc.) the PQ team must collaborate with the relevant disease programmes/areas. Roles and responsibilities must be made clear (as noted).
3. In addition to the McKinsey and Charles River Associates models, what alternative financing models have been proposed, and what are the comparative benefits and challenges when compared with the original model?	Feedback was sought from manufacturers, on the various financing options. Alternative financing models have reportedly been proposed by the medicines and vaccines manufacturers, including suggestions that the procurers pay fees to support PQ. Reportedly the diagnostics manufacturers were angered by the process and did not have a consensus among them so did not submit a proposal (although PQ Dx team were encouraging them to do so). It appears that a hybrid approach will need to be adopted. Even though the 1% of sales option appears to be very unpopular among manufacturers, it might be preferable for small newcomers not to have to pay for PQ up front but only pay if their device/medicine achieves sales. Generally the viability of the new model will be dependent on how well it caters to the various categories of products/ manufacturers and the very different markets they operate in.

ANNEX 2: PERSONS CONTACTED

UNITAID Team	
Kate Hencher	Programme Manager, Medicines & Diagnostics
Romane Theoleyre	Programme Officer
Brian Kaiser	M&E Lead, Strategy & Results
Nargiza Mazhidova	M&E / Data Analyst
Jewgeni Bader	M&E / Data Analyst
Smiljka de Lussigny	HIV Diagnostics
Ambachew Yohannes	UNITAID Malaria Portfolio
Ali Cameron	UNITAID Malaria Portfolio
Carmen Perez Casas	UNITAID HIV Strategy
Irina Avchyan & Ganesh	UNITAID Finance Managers
Janet Ginnard	UNITAID Team Lead, Strategy
Lorenzo Witherspoon	UNITAID Procurement Specialist
Philippe Duneton	Deputy Executive Director
Robert Matiru	Portfolio Manager
WHO Prequalification Team (PQ)	
Mr. Deusdedit Mubangizi	Lead, Inspection Services
Milan Smid	Lead, Technical Assistance
Mark McDonald	WHO PQ Team Coordinator
Rutendo Kuwana	WHO PQ Technical Assistance (TAL) group, Technical Officer for Medicines
Carmen Rodrigues-Hernandez	WHO PQ Lead, Vaccines Assessment
Gaby Vercauteren	WHO PQ Team Technical Assistance – Diagnostics
Irena Prat	WHO PQ Diagnostics Assessment team
Mercedes Perez	WHO PQ Diagnostics Assessment team
Anita Sands	WHO PQ Diagnostics Assessment team
Matthias Stahl	WHO PQ Lead, Medicines Assessment
Antony Fake	WHO PQ Technical Officer, API Assessment
Other WHO Regulation of Medicines and other Health Technologies (RHT) Dept	
Dr Lembit Rago	Regulation of Medicines and Other Health Technologies (RHT), Head
Shanti Pal	Lead, Medicines Safety (Safety & Vigilance team of RHT)
Peter Mahomet	RHT Project Officer
Michael Ward	WHO Regulatory Systems Strengthening (RSS) Coordinator
Jacqueline Sawyer	RHT Liaison Officer
Laurence Laser	RHT Technical Officer
Jorg Hetzke	RHT Technical Officer (IT, Knowledge Management)
Clive Ondari	RHT Safety & Vigilance Team Coordinator/SAV
Kai Kalmaru	RHT Management – Project Assistance
David Wood	Coordinator, RHT Technologies Standards and Norms (TSN) (*reached out to, did not meet)*
Sabine Kopp	RHT Technologies Standards and Norms (TSN) Lead, QA Medicines
WHO Disease Programmes	
Andrea Bosman	WHO Malaria Program Lead
Karen Weyer	WHO TB Program Lead
Meg Doherty	WHO HIV Program Lead
Partner Organizations	
Martin Auton	Global Fund, Sourcing Department
Alain Prat	Global Fund Quality Assurance Expert, Grant Management Division (formerly in WHO Medicines Safety)
Samuel De Freitas Martins	Bill & Melinda Gates Foundation Senior Strategy Officer
Murray (Mac) Lumpkin	Bill & Melinda Gates Foundation Deputy Director – Integrated

	Development (Regulatory Affairs) & Lead for Global Regulatory Systems Initiatives (formerly with FDA)
Dianna Edgil	USAID, Senior Advisor for Laboratory Diagnostics
Mackenzie Hurlston	US Center for Disease Control, Diagnostics Advisor - Division of Global HIV & TB, The Global AIDS Program (GAP and Prevention, USA (CDC)
Marylou Valdez	US FDA, Associate Commissioner for International Programs
Francisco Blanco	UNICEF Supply Division, Chief, Medicines and Nutrition Centre
Helene Moller	UNICEF Supply Division, Diagnostics (*reached out to, did not interview*)
Umesh Warty	CHAI India - Director, Procurement Services
Melinda Watkins	CHAI - Director, Product Development, Regulatory Affairs
Kelly Catlin	CHAI - Sourcing Director for medicine
Lara Vojnov	CHAI - Diagnostics Scientist
Sandeep Juneja	Medicines Patent Pool (MPP) - Business development director
Elsa Tran	MSF Access Campaign - Coordinator for Diagnostics
Christa Cepuch	MSF Access Campaign -Interim pharmaceutical coordinator
Rosanna Peeling	London School of Hygiene and Tropical Medicine (LSHTM) Professor and Chair of Diagnostics Research - Director of the International Diagnostics Centre (IDC)
Sandra Incardona	FIND Project - Technical Officer Malaria Treatment and Prevention
Iveth Gonzalez	FIND Project - Head of Malaria and Acute Febrile Syndrome Programme
Claudia Denkinger	FIND Diagnostics - Senior Scientific Officer (TB) (*reached out to, did not interview)*
Teri Roberts	Find Diagnostics - Senior Scientific Officer (hepatitis & HIV)
Gaurav Agrawal	McKinsey Consulting - led McKinsey team that worked on WHO PQ Financing Model research)
Manufacturers	
Dr. Stephan Oschmann	President IFPMA *(reached out to, did not interview)*
Rene Cazetien	Sanofi Aventis *(reached out to, did not interview)*
Prashant Deshpande	Mylan *(reached out to, did not interview)*
Shailesh Pednekar	Hetero, Senior Vice President -International Marketing *(reached out to, did not interview)*
Umesh K	Aurobindo Pharma LTD, Associate Vice President & Business Head Antiretrovirals
Stavros Nicolaou	Aspen Senior Executive responsible for Strategic Trade
Mr. Boudewijn and Ms. Anushka Ploos van Amstel	Svizera Europe, Managing director & Head of Quality Management
Murali Sharma	IPCA *(reached out to, did not interview)*
Duncan Blair	Alere - Director of Public Health Initiatives
Philippe Jacon	Cepheid -Vice president IDMA (International Diagnostic Manufacturers Association)
Daniel Bitoun	Becton Dickinson - Business Sales & Marketing Manager West Africa and CIS
Dr. Anke Coblenz-Korte	Abbott Molecular - Marketing Manager Virology Global Marketing
Beverley Goede	Roche - Senior International Product Manager, Virology
Michael Steel	Chembio *(reached out to, did not interview)*
Seng-uk-Yoo	Access Bio *(reached out to, did not interview)*
Dr. Jing Zhang	Lonzeal (API manufacturer) China - Director, Marketing and International Registration
Dr Kamal Vashi	Mangalam drugs - (API manufacturer) India
Mr Gang Chen	Desano (API manufacturer) China - Regulatory Officer (written feedback received)
Countries	
Noura Maalaoui	China - WHO Focal point in WR office (Dx and meds) *(reached out to, did not interview)*

Dr. Madhur Gupta	India - WHO– focal point in WR office (Dx and Meds)
Dr.Charity Ilonze	Nigeria - NAFDAC - National Agency For Food and Drug Administration and Control - Biologics, Vaccines & Medical Devices Unit, Registration & Regulatory Affairs Directorate
Dr. Monica Eimunjeze	Nigeria NAFDAC - Head of registration of drugs *(*written feedback received)
Mr. Hiiti Sillo	Tanzania Food and drug Authorities - Director General
Dr. Wekwete	Zimbabwe - Head of evaluation and registration - Medicines Control Authority of Zimbabwe - (MCAZ)
Dr. Roy A. Sparringa, M.App.Se	Indonesia - Chairman of National Agency of Drug and Food Control (NADFC) *(awaiting written feedback)*
Rolando Dominguez Morales,	Cuba CECMED - Policy & Regulatory Affairs *(reached out to, did not interview)*
Mr. Wang Xiangyu	China Food and Drug Authority CFDA - Director, Division of International Organizations Department of International *(reached out to, did not interview)*
Dr. Tharnkamol	Thailand Food and Drug Authority (TFDA) - Chief, Premarketing Control Division, Bureau of Drug Control (written feedback received)
Mr. Hiltom Katz	Brazil Food and Drug Authority *(awaiting written feedback)*
Dr. Daniel Ngeleka	Democratic Republic of Congo (DRC) NMRA - *(*written feedback received)

ANNEX 3: DOCUMENTS REVIEWED

- PQ Project Periodic Reports: 2014 and 2015 Semi-annual, Annual Reports, and annexes (most recent: 2015 Annual Report, submitted with revisions in May 2016: UTD_DxMPQ_2015_annual_narrative_report_20150322.docx
- PQ Grant documents (Grant Agreements, Project Plans (PQP-A1-PP-v1-2014.docx), budgets, logframes) currently used for the active grants
- Bill and Melinda Gates Foundation (BMGF) Progress Report & Outcome Dashboard– WHO Regulatory Umbrella Grant Progress Report, March 2015
- Notes for record: BMGF-UNITAID meeting on WHO PQ - Geneva, 25.01.2016
- "Mid-term review of the UNITAID-funded WHO prequalification programme," AEDES, April 2011
- "Mid-term evaluation of WHO Diagnostics Prequalification Programme," Euro Health Group (EHG), March 2013
- External Review of the WHO Diagnostics Prequalification Pathway – July 2012
- Global Medical Technology Alliance (GMTA) – Position paper on WHO PQDx (2008-9)
- McKinsey study on PQ financing model (*NOTE: WHO will not release this document, so this document cannot be reviewed by the evaluators)*
- PQ/RHT Financing Strategy – Discussion Document Draft – PQ/RHT team debrief. Nov 5, 2014 (selection of PowerPoint slides from McKinsey research, in hard copy)
- "Public Consultation on Proposed Financing Model for WHO Prequalification – Summary of Responses Received," from WHO PQ, 02 June 2015
- "Proposed Financing Model from WHO Prequalification" – Discussion Guid - from CRA Charles River Associates, August 2015
- Financing model proposed by Indian generic manufacturers (*not made available to the evaluators*)
- Survey of Diagnostics Manufacturers, 2015 (*not made available to the evaluators*)
- UNITAID Strategy document 2013-2016
- UNITAID and WHO PQ web sites and relevant documents, products lists, lab lists
- UNITAID Priority Products lists (2013, 2014)
- "WHO Now Charging Fees for Drug Prequalification, Raising Access Fears" – by William New, Intellectual Property Watch (Sept 10, 2013)
- WHO PowerPoint presentation on NMRA Collaborative Procedure initiative – March 2016
- Briefing paper: 27 April 2012 - Expert Review Panel: A rapid quality risk assessment mechanism for assessing needed pharmaceutical products that have not completed a stringent assessment
- Prequalification of diagnostics programme: update in PowerPoint, by Irena Prat, Group lead, Diagnostics assessment Prequalification Team (2014)
- GLOBAL FUND QUALITY ASSURANCE POLICY FOR PHARMACEUTICAL PRODUCTS (as amended and restated on 14 December 2010
- MSF (Dr. Myriam Henkens) letter to WHO (Kees de Joncheere), May 14, 2015 – on PQ financing model Letter to WHO (Kees de Joncheere), May 14, 2015 – on PQ financing model
- Web sites of US FDA, Global Fund, MSF, UNITAID, WHO, USAID, PEPFAR, CDC, etc.

ANNEX 4: RISK ASSESSMENT AND MANAGEMENT

Status of Risk Assessment and Management:

Although there is risk assessment and profiling for products through the ERP and PQ and much discussion of risk-based QC (around requalification and safety profiles) in the PQ Project Plan document, there does not appear to be much risk assessment and management from a programmatic or organizational standpoint within UNITAID or WHO PQ (although UNITAID notes that they are beginning a more systematic monitoring of risk across all of their grants). Some risks do appear to be in staff's minds (e.g. risk of different QA standards, market risks, risks from PQ funding gaps, etc.), however there is not much evident documentation of recognized programmatic or other risks.

The Project Plan document (PQP-A1-PP-v1-2014.docx),[25] includes a section (4.4) entitled "Risk Assessment and Management" which discusses medium- and longer-term risks to the PQ project. The plan lists the following medium-term risks and plans to manage these:

Risks	Plans to Manage Risks
• Uncertainty following recent PQDx leadership changes	Strengthening collaboration with partners, working to harmonize DX regulation, outreach with partners & industry
• Reduced impact of PQ if major procurers do not procure PQ'd products, with smaller markets for these products and less uptake by health programmes. This could lead to manufacturers pulling away from PQ, leaving a reduced pool of products and suppliers for buyers to buy from	Work on publicizing economic impact of low-quality health products, and conduct advocacy to encourage procurement of PQ'd products at fair prices, by countries and large international procurers
• If international tenders are awarded to only a few large suppliers, this could lead to withdrawal of other manufacturers from PQ	
• If competition among medicines suppliers increases and prices are driven too low, medicines manufacturers may also withdraw from PQ, which could disrupt global supply	
• Local markets and production capacity in countries could suffer (along with the local economy), if procurers purchase only imported PQ'd products instead of non-PQ'd locally made products.	PQ medicines planned to continue working with African manufacturing countries, especially Nigeria, to build capacity.
• Political risks occur given the unstable political and security situations in some countries.	WHO offices advise PQ when such situations arise. At times, such events may cause activities such as trainings to be cancelled
• If collaboration and support from the various partner organizations and agencies upon whom PQ depends is withdrawn, PQ's activities would be negatively affected	Ongoing communication of the public health benefits of WHO PQ and collaboration, public acknowledgement of partners' contributions

The Project Plan also provides information on WHO's other risk management structures and policies, including:

- Code of ethics for staff
- Conflict of Interest Policy
- Fraud awareness and prevention policy

[25] Project Plan document (PQP-A1-PP-v1-2014.docx), pg 69

- Confidentiality policy
- Risk management policy for bank accounts, exchange rate risk, and investment policies

The existence of these policies and risk management structures provides a basis for confidence in the ability of the grantee organization to manage various types of risk. The Project Plan also notes that PQ "plans to develop a risk management framework based on a standard risk management process as described in ISO 31000:2009 Risk management – Principles and guidelines". The evaluation team did not obtain or review such a risk management framework from PQ, if it has been developed.

Risks and risk mitigation efforts are described briefly by PQ in the 2014 and 2015 reports to UNITAID, with a focus on the new financing model and unease among both meds and dx manufacturers, and some confusion and disagreement around the benefits and need for PQ for diagnostics (when other less stringent systems exist). ERPD has risk categories to which it assigns products based on their characteristics and data profile, and these categories define their eligibility for procurement.

Types and Categories of Risk:

In their Grant Risk Assessment and Management (GRAM) process, the Global Fund looks at risks to grants across categories, and according to each risk's likelihood and severity. These risks can include financial risk (e.g. funds being lost, mismanaged, stolen); procurement and supply management risks; programmatic risks; governance and oversight; political risks, and others. Grant recipients are now required to conduct a thorough assessment of risks to their grants, gauging their likelihood and severity, potential impact, time horizon, and contributing factors. The grantees must then develop plans to mitigate and manage these risks on an ongoing basis.

Although this evaluation did not include a risk assessment, some potential risks were observed, as follows:

Technical & Programmatic risk

- Risk that programme goals and objectives will not be reached due to staff departures, HR constraints, structural changes, management vacuum/gaps within WHO
- Risk of confusion between different levels of QA hurting quality - lack of regulatory framework for diagnostics means little consensus around standard to be followed – this means countries are left to procure without sufficient QA. Dx manufacturers will not go for PQ if that is not required (if CE mark or FDA suffices), and if they do not see value add of PQ
- Slow system to PQ dx for new product categories leaves quality gap for the market
- Emerging health crises such as Ebola, Zika – can consume staff time and resources, potentially affecting PQ's work on UNITAID and other priorities
- Expensive and unwieldy (bureaucratic) nature of WHO makes it difficult to make rapid adjustments to build efficiencies and adapt to a changing situation in the field/market

Risks related to Sustainability, New Financing Model

- Difficult and controversial debate over new financing model could mean it takes a long time to resolve
- Risk that with new financing model for WHO PQ will no longer focus on UNITAID priority products, but entail expansion of PQ scope
- If PQ scope expands, risk of PQ not being able to manage the additional workload, mobilize the needed human and technical resources
- Risk that new financing model will not accommodate the very different situations of different products and suppliers and markets
- Risk that a model imposing fees on sales will discourage manufacturers from going for PQ
- Risk that new fees will make product prices rise

- Risk that a new financing model will be difficult to administer, and cause a big new bureaucracy within WHO

Public health risk

- Risk of treatment interruptions if products are not available, not approved in a timely way, delisted, or with supply interruptions
- Risk to public health and safety if products have a quality problem
- Efficacy issues with diagnostics can render investment in follow-on treatment ineffectual and potentially dangerous.

Reputational risk

- Potential risk to UNITAID's reputation, and to WHO's reputation in case of a problem with a PQ'd product on the market – especially given the lack of clear procedures when issues do arise, and lack of coordinated PV structure within WHO disease programmes and RHT
- As WHO is not a regulatory authority, but operates like one, without the legal authority to enforce (e.g. to do product recall), is there a risk to its reputation?
- Management of quality Issues post-PQ (e.g. Notice of Concern) between manufacturers and PQ can stall, when there is no clear path for resolution.

Legal risks

- Is there any potential liability (for any party) in case a PQ'd product is later found to be toxic/dangerous, causing death or illness/disability?

Risk of conflict of interest

- Potential COI (or perception of COI) in UNITAID's support to other QA efforts, and to manufacturers' product development efforts
- Potential COI for WHO if funding for PQ comes from a % of manufacturers' sales (regulator should not be earning revenues from products they are regulating)

Political or security risk

- Threats in the environment, in countries where UNITAID and PQ work – unrest, political upheaval, terrorism, etc. – may cause programme delays or disruptions, and/or dangers to staff and counterparts.

As mentioned in the Recommendations section of this report, there are some actions that may help to address potential risks, including:

- UNITAID could **support WHO PQ to conduct a self-assessment and thorough review (including SWOT analysis)**, to analyse resource and HR requirements and activities, and **build a strategic plan** for the future. (Preliminary draft SWOT analysis was drafted on the basis of findings from this evaluation, and appears in Annex 5).
- UNITAID can **support efforts to expedite and streamline PQ** through harmonized and abbreviated processes, better efficiency, enhanced communications.
- UNITAID can **support efforts to communicate the value of PQ**, and differentiation of PQ from other QA efforts and standards.
- UNITAID can **support WHO to lead the case for global Dx QA standards and framework**
- UNITAID should **refrain from funding parallel QA channels**, work to harmonize and bring WHO QA efforts into PQ (with enhanced collaboration/cooperation between PQ and disease programmes, and clear roles and responsibilities of each).
- UNITAID should **support WHO PQ efforts to expedite and streamline country registrations** (currently an obstacle to market access, and a major impediment for PQ'd suppliers) through

building more regional collaborations like Zazibona, and through expanding the collaborative procedures initiative across more countries and regions.

- WHO should develop and **operationalize a plan to rapidly address emerging risks/issues** (in case of product adverse events, health crises, delisting of a PQ'd product, etc.)
- WHO should **build attention and support to important post-PQ (PV, PMS) activities**, to monitor PQ'd products in markets, to enable rapid reaction in case of problems. Focus on highest risk products first. UNITAID can support WHO/RHT to build a more coordinated PV effort/system.

ANNEX 5: PRELIMINARY DRAFT SWOT ANALYSIS OF WHO PQ AND UNITAID GRANT

Strengths	Weaknesses
• Technical capacity across meds, dx, vaccs, with access to technical disease knowledge and field knowledge through WHO disease programs and other units • Global reputation as the leading international health authority • Seen as objective, neutral partner, the only entity capable of playing this global QA role focusing on developing countries • Support and funding from member states, donors	• Internal structural and HR challenges • Change management not a typical strength of the organization • Bureaucratic and expensive structure of WHO, within UN system • Lack of management oversight, bottom-line orientation among many technical leaders • Communications with suppliers and the international community and clarity around procedures and requirements could improve • Lack of coordinated approach to post-PQ, product follow-ups
Opportunities	**Threats**
• Integration of the PQ team (bringing medicines, diagnostics, vaccines, inspections, and TA under one PQ Team) can bring efficiencies, synergy and greater internal collaboration • In devising a sustainable financing model, WHO PQ has an opportunity to better understand its true costs, its value add, its unique strengths, and to become more strategic and proactive in planning and funding its work • Opportunity for UNITAID to play a catalysing role in strengthening PQT management and organizational strength	• Lack of power as a regulatory body means lack of enforcement ability of PQ • Departure of key personnel, turnover, restructuring, and HR constraints of the organization (making it difficult to recruit) could threaten future performance and reputation • Expensive and unwieldy (bureaucratic) nature of the organization makes it difficult to make rapid adjustments to build efficiencies and adapt to changing situation in the field/market • External threats in public health, political and security risks

ANNEX 6: UNITAID SUPPORT OF WHO PQ:
SUMMARY OF PAST EVALUATIONS AND PROGRESS TO DATE

Review/ evaluation	Key Recommendations made
Global Medical Technology Alliance (GMTA) – Position paper on WHO PQDx (2008-2009)	- WHO should adopt a two-tiered approach where Tier 1 products that have already undergone review and registration by regulatory authorities recognized by WHO could automatically be registered by the manufacturer with WHO as available for consideration for procurement in the UN tender process.
	CURRENT STATUS: - PQ has introduced abridged procedures for products which already have SRA approval at submission for PQ. - For products accepted for abbreviated PQ assessment, they no longer require a dossier assessment and they benefit from abbreviated inspection. - There is however the strong feeling among manufacturer that the abridged procedures still constitute duplication. - The guidance on the web site is very clear about the conditions and process for abridged procedures, but should provide the rationale, explaining why/how the various stages do not constitute a duplication of effort.
Aedes UNITAID mid-term review of WHO PQ project – April 2011	- Revise logframe to include qualitative KPIs - Staffing -- resolve issue of lack of financial expertise/staffing at WHO and lack of personnel continuity at UNITAID; enlarge "contact teams" with UNITAID project managers assisted by dedicated contact person for the project; reinforce staff capacity and maintain external expert involvement (e.g. perhaps temporary, flexible posts financed not by WHO) - Enhance reporting - WHO-PQP should report every budget variance over 10% to UNITAID for prior approval; resolve issues with financial reporting - Enhance collaboration with partner organizations and procurement agencies to encourage interest of manufacturers - Develop an expedited process for identified high priority products - Find other funding source for sustainability and to minimize risk of influence from particular donor (e.g. consider fee collection to applicants for TA, evaluation/ inspection, and/or maintenance of PQ) - Consider expanding PQP scope to other essential medicines (beyond ATM) - Promote "assured quality before price" policy to other donors and stakeholders - Collect information on any quality incident on PQ products, in addition to what the PV programmes may collect - Develop "internal" assessment process by WHO-PQP team between Copenhagen evaluation sessions - Continue planned efforts to improve recognition of WHO PQ assessment and harmonisation of national regulations - Continue to provide capacity building and technical support to national governments, regulatory authorities (including

Review/ evaluation	Key Recommendations made
	QCLs – and continue to support QCLS PQ), manufacturers, and NGOs to develop QA. In addition to those countries targeted in 2011 plan, consider including other countries with manufacturing potential (e.g. Turkey). - Continue efforts to strengthen communications and direct contacts with manufacturers and procurers for better reporting in case of problem, specific request, comments, etc. - Continue recent effort to publicize info on prequalified APIs on WHO PQ website and share with stakeholders. Extend approach to FPPs as soon as possible. - TA focused on manufacturers of needed APIs, as WHO-PQP planned to do in China, should be developed rapidly considering the crucial benefit (for both FPP manufacturers and evaluators) to have the most of such APIs prequalified.
	CURRENT STATUS: - Staffing: UNITAID did not manage to stabilize staff turnover until recently - Recruitment within the WHO system continues to be a barrier - Financial reporting has strongly improved - External experts' involvement has been maintained - There are now strong links with partner organizations and procurement agencies. Outside communication of PQ has strongly improved. PQ however still needs to work on marketing themselves and communicate more on their achievements. Collaborative procedures and joint review initiatives are unknown to most manufacturers. The reduction of the average time to PQ to a current 200 days is also not known to the manufacturers. - The ERP Expert review panel system has been introduced for priority products and authorizes those products to be procured while PQ process is going on. - The WHO PQ is looking at sustainability/financing question since 2012. Discussions are still ongoing and several models have been proposed. It is expected that a decision will be made in 2016 and begin in 2017. - Assured quality before price – little controversy about this (donors, buyers, and most stakeholders agree) - Managing quality concerns: some is happening, but little clarity about what do when a quality issue occurs: what should the communication process be? PQ should develop a clear policy on what manufacturers must do to resolve quality issues when they arise. This appears somewhat unclear for PQ'd manufacturers experiencing quality issues - Assessments between Copenhagen sessions: This is now done in exceptional cases. Manufacturers express the need enhance and improve the timing for PQ. Currently the assessments in Copenhagen occur only every 2 months, meaning that a manufacturer might have to wait. Manufacturers are asking for faster procedures and say they would be ready to pay for faster service. - Recognition of WHO PQ assessment and harmonisation of national regulations: WHO PQ have started/continued working on supporting the following initiatives: Collaborative procedure (participating countries commit to approve or reject the

Review/ evaluation	Key Recommendations made
	registration of PQ'd products within 3 months (successful and growing); Joint reviews : countries jointly review files for registration and reduce the burden for them and manufacturers; Rotational programmes: selected NRA staff members from countries work within the PQ programmes in Geneva for 3 months. These initiatives are highly praised by both the NRAs and manufacturers, however many manufacturers are not aware of these initiatives. WHO PQ needs to market themselves more and better - Technical support for countries: TA is ongoing, highly praised by participating NRAs. Anything that helps lead to faster and more efficient in-country registration is also supported by manufacturers - Strengthen communication with manufacturers: Guidance provided on the PQ webside has strongly improved and manufacturers in general are satisfied with the quality of the interaction with PQ meds. - Support for API manufacturers: APIs are now being PQ'd and listed on web site. PQ of APIs as stand-alone products (independently from a formulation) is very welcome by API manufacturers, as it is a good marketing tool for them. But it would benefit from more communication. Few API manufacturers seem to know about it and FPP manufacturers often do not know about it. The impact of this reaches beyond the PQ'd FPPs to all formulations using the API. The API will start issuing CPQ documents (certified PQ) which will make it easier for NRAs to register the products. The number of PQ'd API products from China has increased (now some 29 of 88 on the APIs PQ list)
External Review of the WHO Diagnostics Prequalification Pathway – July 2012	Proposed Solutions – First phase: 1. Immediate expansion of capacity to work through the backlog; 2. Expert Review Panel for new products; 3. Identify experts to communicate requirements to developers and assist with capacity development; 4. Build on lessons learned on pharmaceutical PQ. Short Term Priorities (Year 1) Develop work plan to obtain access to external expertise; work on the backlog, solutions to backlog problem, include in work plan; identify fast track options (i.e. what other SRAs have done, and what gaps remain); refine the PQ criteria; develop work-streams to include outsourcing and fast-track mechanism; collaborate with NRAs Long Term Priorities (Years 2-5) Work toward harmonization; consider coordination by an International Organization (e.g., PAHO); risk Assessment to decide which products should specifically be inspected by WHO Recommendations – general 1. PQ programme currently appears to be all things to all people. Scope must be curtailed to a level that is sustainable and highly valued to donors. 2. Speed of service is critical to utility (max. period of 1 year) 3. Scoping exercise for WHO to start with strategy development, to identify and quantify primary needs, prioritizing those

Review/ evaluation	Key Recommendations made
	addressable by WHO vs. by partners, developing activity plan (and staffing) designed for impact. (Are there other areas where WHO could have a greater impact – niche products, products in scale-up?)
	CURRENT STATUS: - Backlogs have improved (number of PQ'd Dx products now at 57), priority products are targeted - ERP-D began in 2014 - Communications about PQ procedure: has greatly improved, and manufacturers appear to be clear about what is required. However the rationale for these procedures is contested by many manufacturers, especially those who have FDA, CE Mark, etc. PQ need to further improve their communication and explain for each required procedure why it is not a duplication. - Integration: The 3 PQ programs have been integrated under one management but there is still work to be done to fully benefit from this integration. - Fast-track and expediting options: PQ dx has implemented the abridged procedures for products having undergone an SRA approval. ERPD is also in use, however ERPD products do not necessarily need commit to go for PQ. - Harmonization/coordination by an international organization: Not happening? Diagnostics often operate in a regulatory vacuum in countries. - Enhance speed of PQDx: PQ Dx has reduced its average time for products to undergo PQ. However timing still remains a problem for new product categories. Manufacturers that are the first in their product category pay the price. When possible PQ Dx needs to anticipate the need and work on standards in advance of product submission. - Scoping exercise for WHO to develop strategy and discern needs – not done, but strongly recommended
EHG UNITAID Mid-Term Evaluation of WHO PQDx project – 2013	- Conduct external analysis to identify HR gaps; follow up on recruitment; fill open position of Communications Office - Focus efforts and funding on PQ process - Discuss with WHO management how to improve leadership of PQDx programme - Become more proactive in quality of Dx area, begin regular consultations and communications with others in Dx field - Conduct a process analysis to examine the reasons/obstacles that have led to delays for each dossier. Communicate results widely - Adopt a strategy to remove non-performing manufacturers from the PQ process - Enhance incentives/ understanding among developers to apply for PQ - Improve regular reporting to UNITAID - Explain and illustrate rationale behind PQ Dx methodology for PQ on website - Consider enhanced partnerships with FDA, EU, other agencies - Adopt a specific strategy and procedure to ensure the quality of new technologies on the market until the developers

Review/ evaluation	Key Recommendations made
	have sufficient manufacturing data to PQ - Integrate TB testing into the program - Address urgent Dx needs expressed by physicians, countries
	CURRENT STATUS - HR gaps: Integration of the 3 PQ programs has helped with some HR gaps, communication officer role (half time) is filled by one of manager/officers - Leadership has improved - More regular consultations with stakeholders, communications has improved - Streamlining efforts have been made to expedite PQ process (ERPD, abridged procedure for those with SRA, etc.) - Process in place to remove non-performing manufacturers from PQ process - Enhance incentives/ understanding among developers to apply for PQ: difficult in the current context where WHO offers various channels to ensure quality. The fact that PQ is the highest standard means it is not the path of least resistance for manufacturers. When manufacturers have a chance to avoid PQ without losing business, they may still do so. - Enhance clarity and rationale on PQDx web site: PQDx web site is still undergoing improvements; PQ Dx can communicate better about why what they request is not duplication. - Reporting to UNITAID has improved - Enhance collaboration with FDA and others: Exchange between agencies has improved, and communication about issues around product quality is shared. - Ensuring quality of new technologies in advance of sufficient data for PQ: ERPD has been implemented but it still takes PQ a ong time to PQ products for a new PQ family of products - Integrate TB testing into PQ: TB testing is still not done by PQDx, which is a cause for concern - Address urgent diagnostics needs: Responding countries all wish that PQ would expand their scope outside of ATM
BMGF Project review - March 2015 "Optimizing regulatory processes for priority global products" (grants for dx,	- Planning, reporting requirements and project structure should be more harmonized (BMGF and UNITAID) to enable better accountability, implementation, and expenditure monitoring by WHO PQ…this will be helped by project management tools (e.g. indicators dashboard and monitoring tool) that were developed to help staff track activities - Need to continue to build common PQ ground (including harmonization of terminology) among medicines, dx, and vaccines to build synergy and efficiency - Need for continuous dialogues with key stakeholders - Need to update priority lists for dx and vaccines (in consultation with WHO programmes), and invitations to medicines manufacturers for submission of EOI, to ensure that needed products are submitted for PQ
	CURRENT STATUS:

Review/ evaluation	Key Recommendations made
RH meds, TA to countries for vaccine clinical trials, regulatory capacity building in China and India for vaccines)	- There is increased harmonization and coordination between BMGF and UNITAID. Discussions are ongoing: BMGF only require annual reporting but have much interaction with PQ on an ongoing basis. UNITAID brings requires more reporting. The high staff turnover at UNITAID has made this difficult. - PQ integration efforts continue, including harmonizing terminology (challenges remain to integration) - definitions and nomenclature used for the 3 programs remains different - Dialogue with stakeholders is occurring - Priority lists should be regularly reviewed with disease programmes. WHO HIV programme does not participate in the priority list process(?).
Notes for record: BMGF-UNITAID meeting on WHO PQ performance and future - Geneva, 25 Jan 2016	- The FIND-WHO/GMP RDTs product and lot testing program and WHO Prequalification of malaria RDTs are operating in parallel. PQ should be the single pathway for WHO endorsement for procurement… UNITAID AND BMGF need to engage WHO to influence change. Need to develop WHO/FIND exit strategy (scheduled for Q3 of 2016?) in consultation with stakeholders (plan should clarify how RDTs testing will be harmonized with the WHO PQDx). - Identify and encourage work that FIND can do (e.g. data development) to help inform PQ decision-making. - UNITAID will work closely with BMGF in design of a new grant for enhanced donor alignment, including: developing roadmap for exit strategy of malaria RDT WHO endorsement process; reviewing evaluation findings (metrics/ dashboard, strengthening regulatory capacities, alternative financing models, expansion of PQ scope, etc.); better alignment of processes (e.g. timing of deliverables). - Under new PQDx pilots allowing manufacturers to develop lab data at specified labs (not by PQDx), quality standards of these labs will need greater attention.
	CURRENT STATUS: - Regular discussions/coordination between UNITAID and BMGF (BMGF umbrella grant to WHO RHT expires Dec 2018); new grant signed for WHOPES transition into PQ - Total time to PQ for generic medicines has decreased due mostly to WHO PQ performance. But time that manufacturers take to respond to WHO questions has not improved….due to lack of manufacturer prioritization of response to PQ questions (because of lack of business incentive for the PQ markets, and, inability of some manufacturers to produce quality dossier for initial submission). - For Dx, a new pilot is underway to allow manufacturers to develop required lab data on their products at specified labs (rather than WHO PQ doing this as part of PQ process), to help improve PQ timelines. - FIND transition plan is still in development (and there appears to still be some discord/lack of consensus within WHO, especially around timeline) - New grant under discussion by UNITAID, with potential for improvements, e.g. more harmonized reporting timelines

Review/ evaluation	Key Recommendations made
	- Discussions ongoing about how to ensure quality standards of labs providing lab data for Dx manufacturers submitting applications to PQ

ANNEX 7: TERMS OF REFERENCE FOR THE EVALUATION

Separate PDF file