

Follow-up of the report of the Consultative Expert Working Group on Research and Development: Financing and Coordination

Health research and development demonstration projects

Report by the Secretariat

1. In response to the Health Assembly's request in resolution WHA66.22 and decision WHA66(12) to facilitate the implementation of a few health research and development projects and to convene a technical consultative meeting over two to three days in order to assist in the identification of these demonstration projects, the Director-General held a technical consultative meeting of experts in Geneva, 3 to 4 December 2013, immediately followed by a meeting of Member States on December 5, 2013.

2. The Director-General has the honour to transmit to the Executive Board the reports of (1) the Global Technical Consultative Meeting of Experts on the Identification of Health Research and Development Demonstration Projects (Geneva, 3-4 December 2013, Annex 1) and (2) the Global Technical Consultative Meeting of Member States on the Identification of Health Research and Development Demonstration Projects (Geneva, 5 December 2013, Annex 2).

ACTION BY THE EXECUTIVE BOARD

3. The Board is invited to note this report and provide guidance for implementation of a few projects, in order to report back to the Sixty-eighth World Health Assembly in May 2015, through the Executive Board at its 136th session in January 2015.

ANNEX 1

REPORT OF THE GLOBAL TECHNICAL CONSULTATIVE MEETING OF EXPERTS ON THE IDENTIFICATION OF HEALTH RESEARCH AND DEVELOPMENT DEMONSTRATION PROJECTS

The Global Technical Consultative Meeting of Experts on the Identification of Health Research and Development Demonstration Projects convened at WHO headquarters in Geneva on 3 and 4 December 2013. The objective of the meeting was to select and shortlist projects aimed at developing health technologies (medicines, vaccines and medical devices, including diagnostics) for diseases that disproportionately affect developing countries and remain unaddressed owing to market failures. The projects needed to demonstrate the effectiveness of innovative and sustainable financing and coordination approaches to address the identified gaps in research and development.

The terms of reference for the Global Technical Consultative Meeting were set by the World Health Assembly in resolution WHA66.22 and decision WHA66(12). The mandate of the meeting was “to assist in the identification of demonstration projects that:

- (a) address identified research and development gaps related to discovery, development and/or delivery, including promising product pipelines, for diseases that disproportionately affect developing countries, particularly the poor, and for which immediate action can be taken;
- (b) utilize collaborative approaches, including open-knowledge approaches, for research and development coordination;
- (c) promote the de-linkage of the cost of research and development from product price; and
- (d) propose and foster financing mechanisms including innovative, sustainable and pooled funding”.¹

Experts were invited by the Director-General of the WHO, in consultation with the Regional Directors, as requested by decision WHA66(12). (See the list of experts in Appendix 1.) WHO Member States were admitted as observers during the experts’ meeting.

The group elected M. Tanner as Chair and M. Al-Sherbiny as Vice-Chair.

In accordance with WHO policy, in advance of this meeting all experts were asked to report on real, potential or actual conflicts of interest that they might have in relation to the subject matter of the meeting, that is assisting in the identification of health research and development demonstration projects as per the mandate laid out in resolution WHA66.22 and decision WHA66(12). Experts were asked to provide a Declaration of Interest (DOI) with respect to this work, as well as an additional DOI with respect to the individual projects. (See box for declared conflicts of interest.)

¹ Decision WHA66(12).

Box: Declared conflicts of interest

The following interests and/or affiliations were disclosed in the course of the review of the above-referenced Declarations of Interest, and were addressed as indicated:

Marcel Tanner is Chairman of the Board of the Drugs for Neglected Diseases initiative (DNDi), which has two proposals on the list (P6 and P22). He is also named as an advisor in one proposal, P11. It was deemed appropriate to recuse M. Tanner from consideration and decision-making regarding these proposals.

Maged Al-Sherbiny is a member of the Scientific and Technical Advisory Committee (STAC) of the African Network for Drugs and Diagnostics Innovation (ANDI). ANDI submitted two proposals on the list (P3 and P12). It was deemed appropriate to recuse M. Al-Sherbiny from consideration and decision-making regarding these proposals.

Barthelemy Nyasse is also a member of ANDI STAC. Accordingly, it was deemed appropriate to recuse B. Nyasse from consideration and decision-making regarding proposals P3 and P12.

Rajae El Aouad declared that she owns patents on certain anti-tuberculosis molecules developed in Morocco. Three proposals relate to tuberculosis (P2, P7 and P19) and it was deemed appropriate to recuse R. El Aouad from consideration and decision-making regarding these proposals.

G. Balakrish Nair is the executive director of Translational Health Science and Technology Institute (THSTI) of India. His institution submitted two proposals on the list for this meeting (P7 and P18). It was deemed appropriate to recuse G.B. Nair from consideration and decision-making regarding these proposals.

Ivan Addae-Mensah is a further member of ANDI STAC. Accordingly, it was deemed appropriate to recuse I. Addae-Mensah from the consideration and decision-making regarding proposals P3 and P12.

Uford Inyang is likewise a member of ANDI STAC. Accordingly, it was deemed appropriate to recuse U. Inyang from consideration and decision-making regarding proposals P3 and P12.

No other interests declared by members of the group for this second level of review were deemed relevant to the work of the group.

The Secretariat introduced the process by situating the Global Meeting within the long-lasting WHO process to increase research and development investment in diseases that disproportionately affect developing countries. The Chair introduced the process and the list of criteria. Experts discussed and adopted the criteria without amendments (Appendix 2). The experts had discussed the criteria in a teleconference prior to the meeting and made a number of amendments at that time.

The experts evaluated the 22 project proposals¹ that were submitted to the meeting using the criteria in Appendix 2. The criteria were divided into two groups:

¹ See for a complete list of the submitted proposals: http://www.who.int/phi/implementation/phi_cewg_meeting/en/index.html (accessed 19 December 2013).

Eligibility criteria

- Category A criteria focusing on public health aspects and potential impact.
- Category B criteria focusing on scientific and technological excellence.

Innovative approaches to research and development

- Category C criteria addressing innovative approaches.

Reviewers had been assigned to each project prior to the meeting. On the first day of the meeting, primary and secondary reviewers first presented their assessment to the group with respect to Category A criteria. The experts then discussed the assessments and proceeded to vote on Category A criteria. Six out of 22 projects did not fulfil the entry criterion, which was a minimum of 60% of the total possible score (10 out of 17).

Subsequently, the assigned primary and secondary reviewers presented their assessments of the remaining 16 proposals with respect to Category B criteria. The experts then discussed the assessments and proceeded to vote on Category B criteria. Two out of 16 projects did not fulfil the entry criterion, which was a minimum of 60% of the total possible score (11 out of 19).

On the second day of the meeting, primary and secondary reviewers presented their assessments of the remaining 14 proposals with respect to Category C criteria. The experts then discussed the assessments and proceeded to vote on Category C criteria. After a discussion, experts agreed to apply the same procedure used for Category A and B, namely, to use an entry criterion of a minimum of 60% of the total possible score (13 out of 21). Seven out of the remaining 14 projects did not meet this criterion.

Experts then discussed which projects to recommend for implementation. Bearing in mind the mandate given to the group by decision WHA66(12), the group's objective was to select scalable projects that demonstrated new, innovative ways of financing research and development, as well as open and collaborative ways of conducting research and development. They also considered whether the projects addressed research and development gaps for diseases that disproportionately affect developing countries.

Following this discussion, the experts agreed to recommend and shortlist the following projects to be carried forward in the process based on their total score meeting the 60 per cent criterion in all three rounds:

| RANK | Project No. | TITLE | TOTAL (out of 57) |
|------|-------------|--|----------------------|
| 1 | 22 | The Visceral Leishmaniasis (VL) Global R&D & Access Initiative | 49.00 |
| 2 | 18 | Multiplexed point-of-care test for acute febrile illness | 45.50 |
| 3 | 8 | Demonstration of the potential of a single-dose malaria cure of artemether-lumefantrine through reformulation in a nano-based drug delivery system | 44.50 |
| 4 | 15 | Exploiting the pathogen box: an international open-source collaboration to accelerate drug development in addressing diseases of poverty | 43.00 |

| RANK | Project No. | TITLE | TOTAL (out of 57) |
|------|-------------|---|-------------------|
| 5 | 11 | Development of a vaccine against schistosomiasis based on the recombinant Sm14, a member of the fatty acid binding protein family: controlling transmission of a disease of poverty | 42.00 |
| 6 | 13 | Development of Class D Cpg Odn (D35) as an adjunct to chemotherapy for cutaneous leishmaniasis and post kala-azar dermal leishmaniasis | 40.50 |
| 7 | 12 | Development for easy to use and affordable biomarkers as diagnostics for types II and III diseases | 39.50 |

In addition to the shortlisted projects, the group intensively discussed project P9 entitled “Dengue vaccine development”, which did not meet the 60% bar, but was the eighth highest scoring project. The experts felt strongly that this project fulfils most criteria for a demonstration project. The project has been supported by the government of a disease-endemic country for two decades, has successfully mobilized resources, is using best science, will ensure access at an affordable price to developing countries and will be a model for other developing countries to enhance research and development capacity.

Through the process experts highlighted the following aspects they considered crucial to ensure that demonstration projects meet the terms of reference as outlined in WHA66(12). The experts:

- recommended that an in-depth analysis be conducted on the selected projects to refine the innovative aspect/model of conducting research and development in areas where the market fails to deliver;
- emphasized that the purpose of the process is to identify scalable projects to demonstrate new innovative models of financing as well as open and collaborative ways of conducting research and development;
- highlighted that any intellectual property-protected products, processes, data, biological material, or know-how resulting from demonstration projects should be openly licenced to all interested parties, in particular to potential manufacturers in developing countries, to ensure that intellectual property rights do not create access barriers;
- emphasized that the objective of the process is to not only make new, essential health technologies available to neglected populations, but also to build research and development capacity, which includes research ethics in developing countries and taking into account gender equity;
- saw the need to create sustained structures and to transfer technology to enhance and support research capacity development such as centres of excellence in these countries, and emphasized that projects should aim at carrying out the full research and development process in the endemic countries wherever possible;
- recommended that feasibility assessments of the selected projects should be a prerequisite. This should include a much more detailed project description with respect to scientific rigour and feasibility, partnership arrangements, capacity-building as well as innovative concepts. It should include an economic analysis that provides a detailed budget and justification of the individual projects;

- observed that the projects require more work with respect to the whole pipeline from discovery to effectiveness, as well as with respect to target groups and more specific target product profiles of the corresponding products (vaccines, medicines and diagnostics);
- urged that, from the outset, all projects should take into account the needs and perspectives of the end users in the target countries and regions, including gender considerations, to ensure that design and functionality optimally reflect their needs;
- considered that projects that are closely interrelated or tackle the same type of product could be coordinated on a strategic level to maximize their effectiveness;
- emphasized the importance of assessing the impact of each demonstration project and supporting quality improvement;
- suggested developing a more sustainable mechanism to select further demonstration projects on a regular basis; and
- urged Member States to commit to funding and implementing the shortlisted demonstration projects.

Appendix 1

Experts appointed by the Director-General, in consultation with the Regional Directors

1. Ivan ADDAE-MENSAH, Ghana
2. Maged AL-SHERBINY (Vice-Chair), Egypt
3. M. K. BHAN, India
4. Noel CRANSWICK, Australia
5. Nancy EDWARDS, Canada
6. Robert E. EISS, United States of America
7. Rajae EL AOUD, Morocco
8. Mahmoud FATHALLA, Egypt
9. Mohammed HASSAR, Morocco
10. Uford INYANG, Nigeria
11. Vivian KOURI, Cuba
12. G. Balakrish NAIR, India
13. Barthelemy NYASSE, Cameroon
14. Flavia SENKUBUGE, South Africa
15. Siswanto SISWANTO, Indonesia
16. Marcel TANNER (Chair), Switzerland
17. Tomris TÜRMEK, Turkey
18. Jinqian WANG, China
19. Jorge ZARZUR, Argentina

Appendix 2

Assessment criteria for proposals for health research and development demonstration projects

The following questions are proposed to guide the assessment and scoring of the proposals. They are covering three areas:

A – Scope of the proposal – meeting a public health need for the poorest and addressing a market failure. In particular addressing Type II and III diseases and special needs of developing countries with regards to Type I diseases

B – Technical and scientific merit – scientific excellence, feasibility and timescale to achieve a significant milestone

C – Use of new and innovative way of supporting research and development – delinkage of research and development costs (risk) from final product price and use of e.g. open innovation approaches, pooled funding, prizes, patent pools

Category A criteria:

1. Does the proposal address a priority public health need, especially in developing countries, and would the solution proposed likely have an impact?

Scoring from 0 to 5:

0 Unclear public health need or irrelevant solution proposed

5 Both the public health need in developing countries, and the potential impact are demonstrated and evidence-based

2. Does the proposal focus on discovery, development and/or delivery of health technologies?

Scoring from 0 to 5:

0 No

5 Yes

3. Does the project address a market failure?

Scoring from 0 to 5:

0 No evidence that market failure is addressed

5 Clearly addresses market failure

4. Does the project propose a credible strategy to make the final product accessible in terms of affordability and availability?

Scoring from 0 to 2:

- 0 No
2 Yes

If the total number of points exceeds 10/17 (60%), move to Category B criteria.

Category B criteria:

5. Is the proposal based on a sound scientific and technological basis? Scoring from 0 to 10:

- 0 No
10 Strong scientific and technical evidence of feasibility

6. Does the proposal identify credible potential partners to develop the technology in terms of their expertise, roles and coordination?

Scoring from 0 to 5:

- 0 No
5 Credible partners and roles well identified

7. Does the proposal identify potential producers of the final product and the production strategy?

Scoring from 0 to 2:

- 0 No
2 Credible potential producers and roles well identified

8. Is the project likely to achieve at least one significant milestone in the first five years?

Scoring:

- 0 No
2 Yes

If the total number of points exceeds 11/19 (60%), move to Category C criteria.

Category C criteria:

9. Does the proposal utilize collaborative/partnership approaches, including open-knowledge approaches, for research and development coordination?

Scoring from 0 to 5:

0 No

5 Yes

10. Does the proposal propose approaches for de-linkage of the cost of research and development from product price?

Scoring from 0 to 5:

0 No

5 Yes

11. Does the proposal include use of innovative financing mechanisms, such as pooled funding or prizes?

Scoring from 0 to 5:

0 No

5 Yes

12. Does the proposal present effective and efficient coordination mechanisms for the project?

Scoring from 0 to 2:

0 No

2 Credible potential partners and roles well identified

13. Does the proposal potentially contribute to strengthening research capacity in developing countries?

Scoring from 0 to 2:

0 No

2 Significantly

14. Is the suggested approach likely to be generalizable and/or scalable?

Scoring from 0 to 2:

0 No

2 Both generalizable and scalable

TOTAL SCORE:

Maximum score: $17 + 19 + 21 = 57$

Conclusion: Overall does the project present a new and innovative approach to supporting research and development that is likely to provide an affordable product within a realistic timescale?

Comments:

ANNEX 2

REPORT OF THE GLOBAL TECHNICAL CONSULTATIVE MEETING OF MEMBER STATES ON THE IDENTIFICATION OF HEALTH RESEARCH AND DEVELOPMENT DEMONSTRATION PROJECTS

The meeting convened on 5 December 2013 at WHO headquarters, Geneva, and elected Precious Malebona Matsoso (South Africa) as Chair.

Member States decided to open Session 2 of the meeting to all nongovernmental organizations in official relations with WHO as well as to the experts that participated in the Global Technical Consultative Meeting of Experts on the Identification of Health Research and Development Demonstration Projects (Geneva, 3 and 4 December 2013) (see Annex 1). The Vice-Chair of the latter meeting presented its outcomes. Following the presentation, the floor was opened to Member States and to nongovernmental organizations. Médecins sans Frontières International and Health Action International made statements.

Member States took note of the draft report and expressed appreciation for the work of the experts. With respect to the seven plus one projects identified, Member States felt that, as recommended by the experts, more work needed to be undertaken to further develop the proposals, in particular the innovation aspects. Member States also emphasized the need for developing a communication plan when carrying out the next stages of this work.

Member States discussed different options for moving forward with respect to the seven plus one projects, and agreement was reached on the following:

1. The Secretariat, in consultation with the former Chair of the Consultative Expert Working Group and in line with resolution WHA66.22 and decision WHA66(12), will list the elements required for greater elaboration of the innovation aspects of the seven plus one identified projects and will share this list with the proponents of these proposals by 15 December 2013.
2. The deadline for feedback from the proponents will be 15 January 2014.
3. An information document containing this feedback will be provided to the Executive Board as an addendum to the proposals for its consideration.

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