SDGs and PPPs in the Healthcare Sector: New Benchmarks

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Public-Private Partnerships for Global Health at the National, Municipal, and Community Levels –
A Workshop within Forum on Public-Private Partnerships for Global Health and Safety (PPP Forum)

Washington 23-24 October 2019
Topics of Presentation

1. Presentation of SDG.17 Consulting GmbH
2. SDG 2030 Agenda and PPPs
3. New benchmarks for PPPs in Healthcare Sector
4. Presentation of Working Groups within Global Health Hub Germany
Our focus is on healthcare and sustainable health and, in particular, on:
SDG. 3 "Health and well-being"
SDG. 5 "Gender equality and women’s empowerment"
SDG.6 "Water and Sanitation"
SDG. 9 "Industry, Innovation and Infrastructure"
SDG.13 “Climate Action Measures”
SDG.17 "Global Partnerships"
We voluntarily accept ISO 26000 as a reference document containing guidelines for implementing socially responsible behavior and the ten principles of the Global Compact with respect to human rights, labour, environment and anti-corruption.

SDG.17 Consulting GmbH is a member of German Health Member of German Health Alliance, Global Health Hub Germany, German PPP Association (BPPP e.V.), UN Women National Committee Germany e.V., German Federal Association for Sustainability, Society for International Development (Frankfurt Chapter) and Informal Interagency Task Team of the United Nations on Sustainable Sourcing in the Health Sector (SPHS).
OUR THREE PILARS

Sustainable Development Goals
Translation of Sustainable Development Goals for healthcare infrastructure projects

Public-Private Partnerships
Assisting developing countries in improving their health systems and infrastructure through PPP modalities

Sustainable & Innovative Healthcare
Digital solutions for healthcare sector is an opportunity for developing countries to make leapfrogging
Eng. Natalia Korchakova-Heeb is an internationally recognised expert in sustainable infrastructure, public procurement, public-private partnerships and international technical assistance with experience in the public, private and non-governmental sectors. This includes 14 years of services at the European Commission’s External Services in charge of various sectors, inter alia, public procurement, competition and state aid and managing a portfolio of more than 50 mln EUR. She has also extensive experience of advising the national governments on improvement their national frameworks across the various jurisdictions, and is currently a member of the Executive Committee of the initiative group on establishment of PPPinitiative4-healthcare in Germany, member of the strategic Committee of the World Association of PPP Units an PPP professionals and is the member of the UNECE Working Party on Public-Private Partnerships. She leads at the moment a working group on partnership and working group on digital solutions for global health within Global Health Hub Germany. She works intensively with issues of sustainable infrastructure and how to develop people-first PPPs by adding value for people but forgetting value for money. She holds a Diploma in Environmental Management of Claude Bernard University (France) and was twice a fellow of the International Policy Fellowship (Hungary), a fellow of the Freedom Support Act Fellowship in Contemporary Issues (USA).

Mrs. Korchakova-Heeb established in 2018 the company SDG.17 Consulting GmbH (Germany) to promote People-first PPPs as an instrument to achieve Sustainable Development Goals and to assist with development of pipeline of PfPP projects in social infrastructure in the developing countries. She is the recipient of numerous awards, including award for Entrepreneurial Excellence (USA), a medal from the European Commission for loyal services (EU), governmental awards (government of Ukraine) and is also a renowned international speaker, presenting in Paris, Geneva, Moscow, Singapore, Dar es Salaam in 2019 on public-private partnerships and sustainability.
1. Sustainable Development Goals and PPPs
Some Selected Sustainable Development Goals relevant to PPPs in Healthcare Sector

SDG 17.17
Encourage and promote effective public, public-private and civil society partnerships

SDG 1.
Poverty reduction

SDG 3.
Ensure healthy lives and promote well-being for all at all ages

SDG 6.
Clean water and sanitation

SDG 7.
Affordable and clean energy

SDG 9.1
Development of resilient infrastructure

SDG 10
Reduced Inequalities

SDG 12
Responsible Consumption

SDG 13
Climate Action
Important Notions for development of PPPs in Healthcare

Planetary Health, One Health Concept

- People-first PPPs
- Sustainable Finance
- Sustainable Procurement
- Circular economy
- Data Privacy
- Resilient Infrastructure & Climate Risks
  - E-health
  - Healthcare Mobile Apps
  - Telemedicine
  - Artificial Intelligence
- Smart/Green hospitals
- Sustainable health
- Planetary Health, One Health Concept

We inspire for sustainability
One Health Concept

- Non-communicable diseases
- Human Medicine
- Public Health
- Social network
- Evolutionary Medicine
- Urbanisation
- Cycles & Reservoirs
- Ecology
- Ecotoxicology

- Infectious diseases
- Antimicrobial resistance
- Multifactorial diseases
- Zoonoses & Epizooties
- Veterinary Medicine
- Domestication
- Human-animal relation
- Cultural practices
- Legal framework

- Animal health
- Environmental health

We inspire for sustainability.

SDG.17 CONSULTING
Current Trends in Provision of Healthcare Services

01 Preventive Medicine: Prevention vs. Treatment
Policies and financing is switching from treatment to preventive medicine.

02 Focus on primary care
Increased emphasis on primary care in comparison to secondary and tertiary care (Astana Declaration on Primary Health Care: From Alma-Ata towards Universal Health Coverage and SDGs).

03 Aging population
Aging population and a need for more services for elderly people
Shift from a hospital-centered model to community-based care and integrated services

04 Less need for large hospitals
Vastly improved outpatient and home management

05 Precision Medicine
Development of precision medicine based on genomics revolutionizing production of medications and treatments

06 E-health and digital solutions
Examples of successful e-health developments include health information management and networks, electronic health records, telemedicine services, wearable and portable monitoring systems and health portals, use of blockchain technologies, smart hospitals, artificial intelligence, application of Machine Learning, Artificial Intelligence, etc.
PPPs as an Instrument to Achieve SDGs, in particular SDG.3

PPP projects should demonstrate relevance to SDGs and reflect on their contribution to achievement of SDGs.
2. New Benchmarks for PPPs in Healthcare Sector
BENCHMARK N1
Poverty Reduction

- WHO: Poverty and environmental-root causes of a significant burden of death, disease and disability in many parts of the world Consultations on „Increasing Investments in Health Outcomes for the Poor“

- UNECE People-first PPP. Inclusive
  “Leaving no one behind”
  Affordable and equitable access for all

- IFC Ethical Principles in Health Care
  Principle 2: Making a Positive Contribution to Society
  The organization considers its impact on society and the broader health system when planning and delivering services, including considerations of quality, efficiency, access and affordability.
BENCHMARK N1

Gender Equality in Healthcare Sector

Gender Equality, Infrastructure and PPPs

A PRIMER
The average annual energy consumption of a German hospital under normal operating conditions has been determined to be 0.27 MWh per m², 14.37 MWh per worker, and 23.41 MWh per bed. (“Evaluation of Energy Consumption in German Hospitals: Benchmarking in the Public Sector”, Alfonso González González and others)

North Rhine-Westphalia Energy Agency (NRW), successful examples show that it is possible to reduce energy costs in hospitals by up to 40%.

• Passive House Standard - efficient thermal insulation combined with a ventilation system

• Nearly zero energy standard - by 2020 the specifications of the German Energy Saving Ordinance. They combine the thermal insulation on the facade and roof for example with triple insulated glazing, a heat pump and solar thermal energy for water heating

• Energy Plus standard- more energy is produced by the hospital than consumed (due to the use of renewable energy)

• Use of e-mobility in buildings - supporting the rollout of e-mobility infrastructure such as e-charging points in buildings.
Resilient Healthcare Facilities

- Resilience - capacity of health actors to prepare for and effectively respond to crises and to maintain at the same time core functions when a crisis hits (war, terror attacks, technological catastrophes, humanitarian crisis, epidemic, natural disasters)
- Hospitals belong to so-called critical infrastructure
- The Hospital Safety Index of the World Health Organisation
- Concept of last standing building
- Climate resilience should be mainstreamed in public investment management systems, specifically in engineering standards, for the development of all kinds of infrastructure, including PPPs
- Application of BIM (Building Information Modelling) - digital representation of physical and functional characteristics of a facility helps in critical situations
BENCHMARK N3
Quality Infrastructure

G20 PRINCIPLES FOR QUALITY INFRASTRUCTURE INVESTMENT
Maximizing the positive impact of infrastructure to achieve sustainable growth and development;

- Raising economic efficiency in view of life-cycle cost;
- Integrating environmental considerations in infrastructure investments;
- Building resilience against natural disasters and other risks; Integrating social considerations in infrastructure investment;
- Strengthening infrastructure governance.

Healthcare in world’s largest economies ‘accounts for 4% of global emissions, is a larger share than either aviation or shipping.

Public Accessibility*
- Short (max. 600m) accessibility to the closest point of public transport (bus, tram, train, etc.) Think about reducing the distance to the healthcare facility and the service access cost
- Quality of the road connection (connection to the developed main road, motorway access via a good arterial road)
- Individual parking concept (parking for people with mobility limitation, female parking, family parking, bicycle parking, temporary parking for emergency physician, delivery, etc.)
- Good accessibility (no crossing without traffic lights or use of multi-lane roads that are designed solely for motorized traffic)
- Development of the site by existing bicycle network

*(based on German Healthcare Partnership GREEN HOSPITAL STUDY)
BENCHMARK N4
Digital Inclusion

• Many of the people who could most benefit from digital services are the LEAST LIKELY to be online. One in five people lack basic digital skills and one in eleven people have never been online. These are likely to be older, less educated and in poorer health than the rest of the population (Report on Digital inclusion for health and social care, NHS, 2018)

• Closing the digital gender divide—women having less access to the digital services

• Smart hospitals, telemedicine, health mobile applications, blockchain for health, Artificial Intelligence (AI) and Big Data
BENCHMARK N5
Sustainable Cities and Communities

• WHO European Healthy Cities Network

• Concept of Urban Health

• Smart Cities including Smart Hospitals

• PPP Guildel for Regional and Local Governments of Latin America
R E S P O N S I B L E  C O N S U M P T I O N  A N D  P R O D U C T I O N

BENCHMARK N5
Circular Economy

- Refurbishing/remanufacturing of medical equipment (Philips, Siemens, GE)

- No use of plastic in the EU by 2021. Complete ban on plenty of single-use products, the use of plastics for which no alternatives currently exist – mostly food packaging – will have to be cut down by 25 percent by 2025.

- Recycling of medical, food and other waste - concept of circular economy

- Use of recyclable materials - 25% of the hospital waste is plastic.

- Reflection of those requirements in procurement requirements
Incorporating climate change considerations into existing PPP policy frameworks to enable integration of climate resilience into planning and design of new PPP projects and ideally also revising frameworks of existing projects

Climate resilience mainstreamed in public investment management systems, specifically in engineering standards, for the development of all kinds of infrastructure, including PPPs

Policy alignment between climate change policies, national infrastructure planning and SDG-reporting

Allocation of Climate risks in PPP healthcare project

Identification of climate risks within PPP

Assessment of climate risks

Allocation of climate risks

Climate risk mitigation

Climate risk monitoring and review

Resilience-building adaptations to infrastructure are not expensive if incorporated early in the project lifecycle (1-2% percent)

Lenders should require consideration of climate risk and resilience as lending criteria, and implementation of resilience measures through lending covenants.

Climate financing for PPPs Green Climate Fund, Climate Investment Funds, and Green Bonds.

Reflection of those requirements in procurement requirements.
How it would affect PPP projects in healthcare sector?

- Investors will be checking the healthcare projects as to their SDG compliance and against “people-first PPPs” criteria.
- The cost of integration of climate risks, SDG-compliancy in PPP business model are little costs compared with long-term gains.
- Smart cities would require smart and green hospitals. Digitalisation will affect the design and delivery of PPP projects- smart PPPs (use of BIM, Blockchain, e-health telemedicine, etc). Size of the hospitals will be reduced due to digitalization and provision of e-health.
- More primary care facilities less secondary and tertiary hospitals will be built.
- More care facilities for elderly people and integrated care will be required where PPP model could be applied.
- A lot of energy efficiency innovation projects will be under way to bring healthcare infrastructure in line with zero-energy requirements by 2020. Considering the number of the projects required, PPP could be a solution.
- Along with infrastructure PPPs, we will see more non-infrastructure PPPs (IT PPPs, pharma product development PPPs, service PPPs).
3. Presentation of Working Groups within Global Health Hub Germany
Working Group on partnerships within Global Health Hub Germany

- Mapping existing public-private partnerships in the health sector in Germany and eventually in other countries.
- Involvement of new partners into the discussions of the Global Health Hub (pharma companies, hospital operators, healthcare providers, banks, impact investors, etc.)
- Stimulating the establishment of new partnerships.
- Promotion of German expertise and know-how on an international level to allow the creation of cross-border partnerships.
- Organizing awareness events to highlight best practices and to broker new partnerships.
Existing databases of PPP projects
Mapping of PPP Health Projects – slide 1
### PPP Database

**Projects Details**

<table>
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<tr>
<th>Project title</th>
<th>Sector</th>
<th>Budget(s)</th>
<th>Project type</th>
<th>Contractor</th>
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<tr>
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<td>Infrastructure</td>
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<td>Primary Healthcare</td>
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<td>Agriculture</td>
<td>SDG17</td>
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Showing 1 to 8 of 8 entries
Possible Outputs

1. Development of online open platform where partnerships projects in the health sector will be registered and are open for stakeholders
2. Initiation of new partnerships involving the German partners and partners from developing countries
3. Organization of educational and public awareness events in Germany and with support of German partners in some selected developing partners.
The use of digital solutions in healthcare allows new business models to be established to enhance efficiency and, at the same time, maintain high quality in healthcare provision.

The Fraunhofer Institute for Systems and Innovation Research estimates that integrated digitization of data and processes could achieve annual savings of EUR 9.6 billion in the German healthcare system alone.

According to current forecasts, the German eHealth market will grow to around EUR 3 billion in 2017. The global market for digital health will grow to more than USD 200 billion through 2020.
Scope of work

- Mapping of digital health solutions in Germany and their categorization
- Mapping initiatives and relevant digital health projects aimed at implementation of digital solutions within Germany and on the European/global level
- Undertake a mapping of domestic and partner resources in selected developing countries
- Establishment of ecosystem on digital solutions for global health (with support of ECHA)
- Engage with at least 2 countries and catalyse/facilitate joint actions to exchange best practices.
Thank You! Questions?