

September 2021

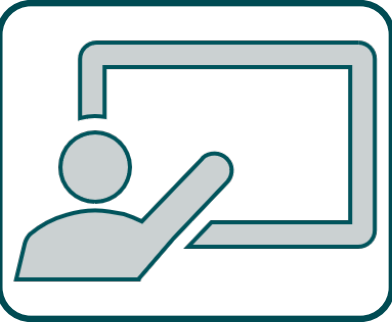
Technical Aspects of Vaccine Sustainability in Global Context

Simone Blayer, Global Head CMC NCT

Towards a Post-Pandemic World: Lessons from COVID-19 for Now and the Future.

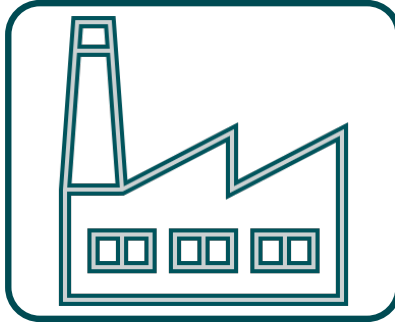


Chemistry, Manufacturing and Control: A Project Portfolio For Sustainable Manufacturing



Training

- Current LMIC companies
- Strengthening national release laboratories for new technologies
- Formation of new workforce



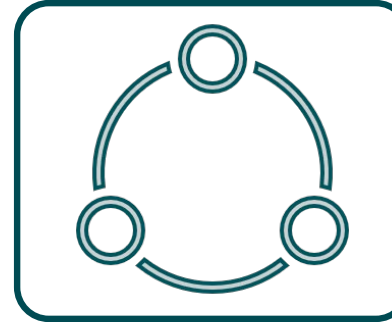
Tech Transfer Hubs

- Technical support for establishment of tech transfer hubs
- Equipment, training, quality, manufacturing and analytical



Innovation

- Support local incubators and ecosystem
- Provide center of expertise (such as analytical method transfer)



Predictable and Consistent Supply

- Support the creation of sustained supply chain networks in LMIC
- Partnership with other NGOs and donors



Vaccine Life Cycle

- Technical Assistance to increase sustainability of current manufacturers
- Quality, National Regulatory and WHO Prequalification support

Vaccine Supply Chain – presentation and delivery



Primary packaging

- Dose volume (0.1, 0.5 mL, other?)
- Vial size
- # of doses (preservative?)
- Suitable for storage and program conditions.



Cold chain / thermostability

- Standard 2 – 8C, ultra cold chain (-20C, -80C?)
- Carrier / refrig / freezer requirements



Route of delivery

- Parenteral, oral, mucosal?



Method of delivery

- Syringe (AD, RUP, SIP, prefilled)
- Drug product and dose volume compatible



Waste disposal

- Environmental considerations for material selection (vaccine production and program delivery)