



11th Global Health Supply Chain Summit

Dates: November 28-30, 2018

Location: Radisson Blu Hotel, Lusaka, Zambia

Conference theme

Accelerating Global Health Supply Chain Excellence: Better Supply Chain System Design, Innovative Financing for Health and New Technologies & Integrated Information Systems

The 11th Global Health Supply Chain Summit (GHSCS) will be held over three days, November 28-30, 2018 in Lusaka, Zambia. The summit will focus on accelerating global health supply chain excellence through better supply chain system design, innovative financing for health supply / demand / performance, and deployment of new technologies (e.g., drones, sensors, digital health, etc.) & integrated information systems. Participants will hear about case studies, strategies, and frameworks from practitioners and academics in the above themes of this year's summit. As in the previous conferences, the summit will assemble an impressive group of practitioners and experts from the global health supply chain field including academics, country planners, NGOs, logistics practitioners, pharmaceutical industry, and donor representatives.

Attached is a detailed agenda of the summit

Guide to detailed Agenda	
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Day 1 (November 28) [All plenary pre-lunch sessions will meet in DOME]				
7:45 – 8:15am	Registration			
8:15 – 8:20am	Welcome to GHSCS 2018			
8:20 – 8:40am	Welcoming Speech: MoH Zambia			
8:40 – 9:10am	Plenary Speaker 1 (Dr. Kennedy Malama, Permanent Secretary, Ministry of Health, Republic of Zambia)			
9:10 – 9:40 am	Plenary Speaker 2 (Felix Olale, Leapfrog Investments, "Transforming access to healthcare across Asia and Africa")			
9:45-10:15am	Coffee Break			
10:15-10:45am	Plenary Speaker 3 (Gavin Steel, Chief Director; Human Resources for Health at National Department of Health South Africa)			
10:45-11:55am	Panel Session 1 (Supply Chain Management & Anti-Microbial Resistance)			
12:00-1:30pm	Lunch			
1:30-2:45pm	Track 1 (Location: DOME)	Track 2 (Location: Room 1)	Track 3 (Location: Mini DOME)	Track 4 Track 2 (Location: Room 2-3)
(75 min track)				
2:45-3:05pm	Coffee Break			
3:10-4:25pm	Track 5 (GHSCS Prize Presentation) (Location: DOME)	Track 6 (Location: Room 1)	Track 7 (Location: Mini DOME)	Track 8 (Location: Room 2-3)
(75 min track)				
4:30-5:45 pm	Track 9 (GHSCS Prize Presentation) (Location: DOME)	Track 10 (Location: Room 1)	Track 11 (Location: Mini DOME)	Track 12 (Location: Room 2-3)
(75 min track)				
6:30-8:30pm	Cocktail			
Day 2 (November 29); [All plenary post-lunch sessions will meet in DOME]				
8:15-9:30am	Track 13 (Location: DOME)	Track 14 (Location: Room 1)	Track 15 (Location: Mini DOME)	Track 16 (Location: Room 2-3)
(75 min track)				
9:35-10:35am	Panel Session 2.1 (Scaling & Sustaining Innovation for Impact) (Location: DOME)	Panel Session 2.2 (Sustainability through ownership transitioning to the government) (Location: Room 1)	Panel Session 2.3 (Meeting Supply Chain Talent Needs) (Location: Mini DOME)	
10:35-11:00am	Coffee Break			
11:00-12:15pm	Track 17 (Location: DOME)	Track 18 (Location: Room 1)	Track 19 (Location: Mini DOME)	Track 20 (Location: Room 2-3)
(75 min track)				
12:15 – 1:30pm	Lunch			
1:30 – 2:45pm	Panel Session 3 (Information System Design and Implementation: Successes & Challenges)			
2:45 – 3:15pm	Coffee Break			
3:15 – 4:30pm	Panel Session 4 (The role and importance of Pharmaceutical companies is designing and managing in-country supply chains)			
4:30 – 5:00 pm	GHSCS Prize Announcements			
5:00 – 5:30 pm	Closing Remarks			

Day 3 (November 30)		
8:30am-10:00am	Tutorial 1 (Continuous Improvement / Kaizen) [Location: Mini DOME]	Tutorial 2 (SC Modeling using Hermes) [Location: DOME]
10:30am – 12:00pm	Tutorial 1 (Repeat)	Tutorial 2 (Repeat)
12:00-1:30pm	Lunch	

DAY 1 (November 28, 2018) [French translation provided in DOME and Room 1]

1:30 pm – 2:45 pm	Track 1 Supply chain financing and economics [Location: DOME]	Track 2 Improving supply chain information systems [Location: Room 1]
[Each talk should be of 20 minutes duration; last 15 minutes is for Q&A]	<p>[T1.1] Health financing innovations, best practices in Zambia and the region (33)</p> <p><i>Jan Willem van den Broek^{1,*}</i></p> <p>¹UNDP Zambia</p>	<p>[T2.1] SIGLUS: a collaborative success story (16)</p> <p><i>António Langa^{1,*}, Brana Santos², Custódio Mondlane³, and Dércio Duvane⁴</i></p> <p>¹GHSC-PSM, ²Mozambique Central Medical Store, ³Clinton Health Access Initiative, ⁴VillageReach</p>
	<p>[T1.2] Assessing the total health commodities financial needs for health facilities and supply chain implications in Tanzania (50)</p> <p><i>Michael John^{1,*} and Christine Chacko¹</i></p> <p>¹Global Health Supply Chain Technical Assistance – Tanzania</p>	<p>[T2.2] Utilizing interoperability layers to facilitate last mile stock visibility in Tanzania (48)</p> <p><i>Melchior Baltazar^{1,*}, Sultana Seif², and Alfred Mchau³</i></p> <p>¹President’s Office – Regional Administration and Local Government, ²Ministry of Health, Community Development, Gender, Elderly and Children, ³Global Health Supply Chain Technical Assistance – Tanzania</p>
	<p>[T1.3] Improving health supply chain design efficiency through rapid and flexible cost modeling (82)</p> <p><i>Michael Krautmann^{1,*} and Dorothy Thomas²</i></p> <p>¹William Davidson Institute at the University of Michigan, ²VillageReach</p>	<p>[T2.3] Designing and developing logistics management information systems for a smarter cold chain in Kenya (25)</p> <p><i>Catherine Silali^{1,*}</i></p> <p>¹National Vaccine and Immunization Program, Kenya Ministry of Health</p>
	<p>Track 3 Improving supply chain design (1) [Location: Mini DOME]</p>	<p>Track 4 Leveraging data to improve systems and processes [Location: Room 2-3]</p>
	<p>[T3.1] Using supply chain design software to design patient-centered TB diagnostic networks to improve access to services (23)</p> <p><i>Sidharth Rupani^{1,*}, Ryan Purcell¹, Heidi Albert², Kekeletso Koo², and Zachary Katz²</i></p> <p>¹Llamasoft, Inc., ²Foundation for Innovative Diagnostics</p> <p>[T3.2] Redesigning the Indonesian family planning supply chain by strengthening organizational capacity, collaboration, and data use (56)</p> <p><i>Nurfadhiah Abdillah^{1,*}, Omar Balsara¹, Barbara Lamphere², Sarah Andersson¹, and Bethany Saad</i></p>	<p>[T4.1] Using supply chain data for decision-making improves availability and minimizes wastage of life-saving health commodities (64)</p> <p><i>Victor Sumbi^{1,*}, Joseph Warero¹, Mildred Shieshia¹, and Alice Micheni¹</i></p> <p>¹GHSC-PSM</p> <p>[T4.2] Leading Commodity Security Efforts in Pakistan through Innovations in Technology and MIS Interfaces (48)</p> <p><i>Dr. Muhammad Tariq^{1,*}, Dr. Khurram Shahzad², Ms. Thuy Huong³, Nikhil Padival⁴, Ms. Mehr Bajwa⁵</i></p>

¹JSI Research & Training Institute, Inc., Indonesia, ²JSI Research & Training Institute, Inc., USA

¹Country Director, GHSC-PSM Pakistan; ²M&E Director; ³Managing Director, Portfolio 4; ⁴PMU Director (Chemonics); ⁵Senior M&E Specialist

[T3.3] **Better supply chain system design through a human centered design approach to improve MNCH commodity availability: the Nigeria experience (78)**

Ladi A. Stephen^{1,}, Mary O. Ameh¹, and Beth Yeager¹*

¹GHSC-PSM Nigeria

[T4.3] **Analysis of Ethiopia's low cost, high impact quick win intervention to improve stock availability (66)**

Fikadu Abebe^{1,}, D. Tadesse¹, T. Seifu¹, G. Belete¹, B. Tadesse¹, and T. Adraro²*

¹USAID Global Health Supply Chain-Procurement Supply Management Project in Ethiopia, ²Pharmaceutical Fund and Supply Agency

3:10 pm
– 4:25
pm

Track 5 | Prize-competition presentation

[Location: DOME]

[Each Prize competition presentation is 25 minutes + 10 minutes for Q&A]

[T5.1] Remote Temperature Monitoring in Tanzania

Dr. Dafrossa Lyimo, Program Manager for EPI/IVD; Bulula Ngwegwe, Assistant National Logistician

[T5.2] Implementation of Logistimo's Supply Chain Management System in Zambia with a specific focus on the Copperbelt Province

Kavya Shetty, Devdutt Mishra and Pratik Shetty, Logistimo India Pvt. Ltd. Bangalore, India

[Each talk should be of 20 minutes duration; last 15 minutes is for Q&A]

Track 6 | Promoting and protecting quality

[Location: Room 1]

[T6.1] **Improved temperature and humidity monitoring for ambient health supply chains (65)**

Scott Dubin^{1,} and Kevin Gandhi¹*

¹Global Health Supply Chain Program - Procurement and Supply Management project

[T6.2] **Using data to keep vaccines cold in Kenya (52)**

Collins Tabu^{1,}, Ernest Some¹, Joyce Charo¹, Catherine Silali¹, Caroline Kania², Amos Chweya³, Mercy Lutukai³, Zoya Mohamed³, and Yasmin Chandani³*

¹Kenya Ministry of Health, ²Nexleaf, ³John Snow, Inc.

[T6.3] **Le CNAPS et la problématique des faux médicaments au Bénin: les solutions TICs pour la sécurisation des chaînes d'approvisionnements (37)**

Fernand Gbaguidi¹, Pierre-Corneille Namahoro², Ricardo Missihoun³, Ulrich Dossou^{4,}, Herman Bonou^{4,*}, and Ernest Codjia⁴*

¹Direction de la Pharmacie, du Médicament et des Explorations Diagnostiques, ²Chemonics GHSC-TA Bénin, ³Fédération Africaine des Associations de Logisticiens, ⁴Association des Logisticiens Béninois

Track 7 Integration and interoperability [Location: Mini DOME]		Track 8 Improving supply chain design (2) [Location: Room 2-3]		
<p>[T7.1] Interoperability: Health and Supply Chain information systems to achieve maximum impact (17)</p> <p><i>Josh Zamor^{1,*}, Alfred Mchau^{2,3}, Derek Ritz⁴, and Craig Appl⁵</i></p> <p>¹OpenLMIS, ²GHSC-Tanzania, ³VillageReach, ⁴ecGroup Inc., ⁵Ona</p>		<p>[T8.1] Immunization supply chain system design concept introduction as entry point for advocating for integration (27)</p> <p><i>Olamide Folorunso¹, Ryan McWhorter^{1,*}, Wendy Prosser^{2,*}</i></p> <p>¹UNICEF Supply Division, ²John Snow, Inc.</p>		
<p>[T7.2] Addressing eHealth silos: systematic integrations of OpenLMIS/eLMIS in Zambia (59)</p> <p><i>Chris Opit^{1,*}, Maureen Simuyandi¹, Wendy Bomett¹, Wendy Nicodemus¹, Jeremy Sikazwe¹, Mekbib Awoke, and Moses Kausa</i></p> <p>¹JSI AIDSFree Zambia</p>		<p>[T8.2] Linking global and in-country supply chain visibility through new and integrated technologies (28)</p> <p><i>Ishmael Muchemenyi^{1,*}</i></p> <p>¹PFSCM</p>		
<p>[T7.3] From three to one: The benefits of donor health supply chain integration – the USAID Nigeria Example (79)</p> <p><i>Fatiya Askerdin^{1,*}, Matthew Attah¹, Oluwale Olalandu¹, Linus Odoemene², Oloyede Akanbi³, Babatunji Odelola⁴, Adenike Adelanwa⁴, Emmanuel Ogwuche⁴, Emeka Ogbolu¹, John Haruna¹, Innocent Ameh¹, and Anthony Anammah¹</i></p> <p>¹GHSC-PSM, ²NSCIP, ³NASCP, ⁴USAID</p>		<p>[T8.3] The use of delivery tracking system to ensure efficiency and accountability in the implementation of seasonal malaria chemoprevention (SMC) in the PMI supported regions of Cameroon (73)</p> <p><i>Philip M. Tache^{1,*}, Glenn M. Gemuh¹, Aloysius Mokom¹, Bombah Ebibiet Armei², Serge G. Mota²; Tewuh Fomunyan, Wenceslas W. A. Tobo¹, Julien Aymard Ovaga¹, Jean Pierre Kidwang³, Elive N. Esuka¹, Dorothy Achu², and Patrick Gaparayi¹</i></p> <p>¹USAID Global Health Supply Chain Program – Procurement and Supply Management project, Cameroon, ²National Malaria Control Programme, Ministry of Public Health Cameroon, ³Far North Regional Technical Group Malaria, ⁴USAID</p>		
4:30 pm – 5:45 pm	Track 9 Prize- competition presentations [Location: DOME]		Track 10 Achieving equity and sustainability [Location: Room 1]	
	<p><i>[Each Prize competition presentation is 25 minutes + 10 minutes for Q&A]</i></p> <p>[T9.1] Maisha Meds: Medicine Ordering System to Support Chemists in Kenya and East Africa</p> <p><i>Jessica Vernon, Sam Wilks, Dorcas Masatia; Maisha Meds</i></p>		<p>[T10.1] Open supply chain information system essential for government ownership & sustainability (60)</p> <p><i>Jeremy Sikazwe^{1,2,*}, Wendy Nicodemus^{1,2}, and Gamariel Simpungwe^{1,2}</i></p> <p>¹AIDSFree Project Zambia, ²John Snow, Inc.</p>	
[Each talk should be of 20 minutes duration; last 15	<p>[T9.2] Implementing eLMIS to Improve Data Visibility and the Health Supply Chain: Lessons from Mozambique</p>		<p>[T10.2] Risk and Equity: Optimizing Pakistan’s immunisation supply chain beyond cost and efficiency (43)</p>	

minutes
is for
Q&A]

Antonio Langa¹, Dianna Lourenco², Brana Santos³

¹GHSC-PSM Mozambique, ²SIGLUS Manager, ³CMAM Deputy Director

Saqlain Gilani¹, Arshad Chandio¹, Naeem Asghar¹, Olamide Folorunso²,
Eshioramhe Kelobo², Ryan McWhorter^{2,*}, Mariam Zameer^{3,*}, Erin Larsen-
Cooper³, Melissa West³, and Nora Phillips³

¹Pakistan Federal EPI, ²UNICEF, ³VillageReach.

[T10.3] **Le remodelage des systèmes permet une chaîne d'approvisionnement plus équitable et performante; exemple de la province d'Equateur en RDC (42)**

Emmanuelle Assy^{1,*}, Eomba Motomoke¹, and Clement Ngombo¹

¹VillageReach

Track 11 | Enhancing management and operations

[Location: Mini DOME]

[T11.1] **Building a strong supply chain from the bottom up: making supply chain management a priority (58)**

Zar Ni Soe^{1,*} and Nyi Zin Latt¹

¹JSI Myanmar

[T11.2] **Pulse: a supervisory mobile application for performance management at the last-mile of health supply chains (8)**

Arun Ramanujapuram^{1,*} and Kaushal Shukla¹

¹Logistimo India Pvt. Ltd.

[T11.3] **Taking the lead: how building supply chain leadership and management skills in the public health system can accelerate supply chain system design (40)**

Eomba Motomoke^{1,*}, Freddy Nsoki¹, Clement Ngombo¹, Nora Phillips¹,
and Franck Biay²

¹VillageReach, ²Ministry of Health of DRC

Track 12 | Increasing access and reducing stockouts

[Location: Room 2-3]

[T12.1] **cStock Kenya: Designing strong supply chains for community health programs (54)**

Eric Wakaria^{1,*}, Martin Ochola¹, Gertrude Muchibi¹, Sarah Andersson¹,
Yasmin Chandani¹, Ken Oruenjo², and Eunice Fwaya²

¹John Snow, Inc., ²Ministry of Health Siaya County, Kenya, County

[T12.2] **Improving medicine availability in the South African public health supply chain (20)**

David Crewe-Brown^{1,*} and Jon Jensen¹

¹Global Health Supply Chain Technical Assistance South Africa

[T12.3] **Essential medicines kits in Zambia - combining with pull mechanisms and using data (63)**

Anne Zulu¹

¹MSL Zambia

DAY 2 (November 29, 2018) [French translation provided in DOME and Room 1]

8:15 – 9:30am	Track 13 Improving supply chain efficiency [Location: DOME]	Track 14 Novel supply chain technologies [Location: Room 1]
[Each talk should be of 20 minutes duration; last 15 minutes is for Q&A]	<p>[T13.1] Next generation immunization supply chain lowers health system costs in DRC (14) <i>Dorothy Thomas^{1,*}, Eomba Motomoke¹, Olivier Defawe¹, Noel Watson², and Jessica Crawford¹</i> ¹VillageReach, ²GHSC OPSMEND</p>	<p>[T14.1] Stakeholder and community engagement are critical to the deployment of unmanned aerial vehicles (UAVs) for public health transport: a case study from Malawi (21) <i>Charles Matemba^{1,*}, Luciana Maxim¹, Thokozani Chimanya¹, Tamara Kumwenda¹, Carla Bauvelt¹, and Olivier Defawe²</i> ¹VillageReach Malawi, ²Village Reach USA</p>
	<p>[T13.2] Optimizing the USAID global health supply chain network: a journey toward supply chain transformation (77) <i>Hua Ni^{1,*} and Xavier Tomsej²</i> ¹GHSC-PSM, ²USAID Bureau for Global Health</p>	<p>[T14.2] Current status/global overview of the unmanned aircraft/UAS landscape for deliveries of health related commodities and for disease diagnosis and surveillance (30) <i>Sara de la Rosa[*]</i>, Interagency Supply Chain Group</p>
	<p>[T13.3] Application des principes de modélisation informatique et de system design dans l’analyse du positionnement optimal des équipements de chaines de froid: cas du Mozambique et de la RDC (41) <i>Emmanuelle Assy^{1,*}, Aida Coelho¹, Ruth Betchel¹, Eomba Motomoke¹, Ana Costache¹, Alex Mwase², and Graça Matsinhe³</i> ¹VillageReach, ²UNICEF Mozambique, ³Ministério da Saúde de Moçambique</p>	<p>[T14.3] Are drones a “leapfrogging” technology or an ill-advised investment? A case study of the potential for drone use in Sierra Leone (32) <i>James Houghton^{1,*}</i> ¹Crown Agents Sierra Leone</p>
Track 15 Enhancing end-to-end visibility [Location: Mini DOME]	Track 16 Managing supply chains in challenging contexts [Location: Room 2-3]	
<p>[T15.1] Pharmaceutical regulatory information systems: the forgotten link for end-to-end visibility (55) <i>Yordanos Sebsebie^{1,*}, Al Shiferaw¹, Heran Gerba², Marasi Mwencha¹, and Paul Dowling¹</i> ¹John Snow, Inc., ²FMHACA</p>	<p>[T16.1] Integration of family planning program for humanitarian crisis population in the national supply chain in Rwanda: case of Nyabiheke Refugee Camps (10) <i>Nyirimanzi Joseph Desire^{1,*} and Kayumba Pierre Claver²</i> ¹Gatsibo District Pharmacy, ²EAC Regional Center of Excellence for Vaccines, Immunization and Health Supply Chain Management, University of Rwanda</p>	

[T15.2] **Integrating systems to provide end to end visibility: supplying remote health facilities with critical commodities takes more than one system** (19)

Craig Appl^{1,} and Mary Jo Kochendorfer²*

¹Ona, ²OpenLMIS

[T16.2] **Addressing the supply chain conundrum in responding to epidemics** (70)

Netsy Woldesemait^{1,} and Tony Lee²*

¹Chemonics International, ²McKinsey & Company

[T15.3] **Building end-to-end visibility into national LLIN distribution in Ethiopia: piloting of interactive voice response as a scalable community level reporting mechanism** (1)

Sami Tewfik^{1,} and Joseph McCord¹*

¹John Snow, Inc.

[T16.3] **Sample Taxi: ride-sharing for sample transportation** (47)

Barbara Singer^{1,}, Susana Moreira¹, Elden Formoso¹, Manjusha Pingali², and Kavya Shetty²*

¹VillageReach, ²Logistimo

11:00 –
12:15 pm

Track 17 | Supply chain human resources
[Location: DOME]

Track 18 | Valuable partnerships and collaborations in supply chain
[Location: Room 1]

[Each talk should be of 20 minutes duration; last 15 minutes is for Q&A]

[T17.1] **Le Programme de Volontariat de Jeunes Logisticiens Professionnels (PVJLP): une initiative révolutionnaire pour la gouvernance et des données de qualité pour la prise de décision dans la chaîne d’approvisionnement en santé publique au Bénin** (38)

Fernand Gbaguidi¹, Pierre-Corneille Namahoro², Ricardo Missihoun³, Ulrich Dossou^{4,}, Herman Bonou^{4,*}, and Ernest Codjia⁴*

¹Direction de la Pharmacie, du Médicament et des Explorations Diagnostiques, ²Chemonics GHSC-TA Bénin, ³Fédération Africaine des Associations de Logisticiens, ⁴Association des Logisticiens Béninois

[T17.2] **Does mobile technology enabled freight aggregation influence inventory control behavior in rural pharmacies?** (5)

Neeraj Thakare^{1,} and Amit Akkihal¹, Logistimo India Pvt. Ltd.*

[T18.1] **TransIT and ePOD: a transportation management system for improved visibility, decision making, performance monitoring, and record keeping** (71)

Scott Dubin^{1,}*

¹Global Health Supply Chain Program - Procurement and Supply Management project

[T18.2] **3PL tripartite contract management for improved performance: case of Medical Stores Limited, Zambia** (74)

Luckson Sichamba^{1,}, Nathan Sichangwa¹, Billy Mweetwa¹, Lameck Kachali¹, Ilitongo Sondashi², and Chikuta Mbewe²*

¹Global Health Supply Chain- Procurement and Supply Management, ²Medical Stores Limited

[T17.3] **Enhancing supply chain performance in the public sector: the “gate keepers” model of supply chain monitoring** (10)

Douglas Onyancha^{1,} and Martin Mwenda¹*

¹USAID/KEMSA Medical Commodities Program

[T18.3] **CANCELLED**

Track 19 Engaging communities and stakeholders [Location: Mini DOME]	Track 20 Improving data systems [Location: Room 2-3]
<p>[T19.1] Community engagement in improving access to medicine (90) <i>Eduardo Dinda^{1,*}, Ana Claudia Naldinho², and Mark McCaul²</i> ¹Kupulumusana Community Group, ² Médecins Sans Frontières</p>	<p>[T20.1] Data for decision-making: integrating open source and non-open source systems (46) <i>Walter Kerr^{1,*}</i> ¹Zenysis Technologies</p>
<p>[T19.2] 'Advocating for change': multi-country experience of achieving stakeholders buy-in for iSC system design (11) <i>Olamide Folorunso¹, Ryan McWhorter^{1,*}, Wendy Prosser^{2,*}, and Olivier Defawe³</i> ¹UNICEF Supply Division, ²John Snow, Inc., ³VillageReach</p>	<p>[T20.2] Visualize, analyze, improve: development and use of the EPI dashboard in Mozambique (18) <i>Timoteo Chaluco^{1,*}, Dercio Duvane¹, Christine Lenihan¹, and Vidya Sampath¹</i> ¹VillageReach</p>
<p>[19.3] Update from the Global Interagency Supply Chain Group (94) <i>Hitesh Hurkchand^{1,*}</i> ¹Interagency Supply Chain Group</p>	<p>[T20.3] World Health Organization funded nationwide scale-up of the Pakistan Vaccine Logistics Management Information System (vLMIS) (72) <i>Muhammad Tariq^{1,*}, Zafar Jamil¹, Thuy Huong¹, and Nikhil Padival²</i> ¹GHSC-PSM, ²Chemonics</p>

Abstract # to Track Mapping

Abstract #	Track	Abstract #	Track	Abstract #	Track	Abstract #	Track	Abstract #	Track
1	15.3	20	12.2	38	17.1	55	15.1	71	18.1
2	17.3	21	14.1	40	11.3	56	3.2	72	20.3
5	17.2	23	3.1	41	13.3	58	11.1	73	8.3
8	11.2	24	18.3	42	10.3	59	7.2	74	18.2
10	16.1	25	2.3	43	10.2	60	10.1	77	13.2
11	19.2	27	8.1	46	20.1	63	12.3	78	3.3
14	13.1	28	8.2	47	16.3	64	4.1	79	7.3
16	2.1	30	14.2	48	2.2	65	6.1	82	1.3
17	7.1	32	14.3	50	1.2	66	4.3	90	19.1
18	20.2	33	1.1	52	6.2	68	4.2	94	19.3
19	15.2	37	6.3	54	12.1	70	16.2		

November 30, 8:30-10am & 10:30-12 noon

[Tutorials 1 and 2, each 90 minutes long, run in parallel and repeated twice to allow for participants to attend both.]

Tutorial 1: Continuous Improvement / Kaizen**[Location mini DOME]**

Continual Improvement is very much the need today for most organizations. With challenges being continual in nature, improvements have to be continual too!

Kaizen is a culture that drives continual improvement. But here is the catch, Kaizen is improvements made WITHOUT investing more resources! It is about improving with existing resources! Now that calls for assessment of waste and waste elimination! Kaizen is about engaging people to identify waste and taking action. It is powerful, exciting and has far reaching impact.

This session will share some key insights into Kaizen... Exploring the How? Where? Who? Why? About the 'continual' element in the Improvement journey

Presenter: Gopinath Prabhu, Senior Consultant & Leader Training at Kaizen Institute Consulting Group, Ltd., India. Email: gprabhu@kaizen.com

Tutorial 2: Strengthening Vaccine Supply Chains with HERMES Modeling Software**[Location DOME]**

Many of the world's vaccine supply chains are broken and aren't getting life-saving and life-improving vaccines to adults and children who need them, especially in low- and middle-income countries. Vaccine supply chains are complex systems. Stakeholders and decision-makers need to pay close attention to these systems in order to understand and address the bottlenecks, stock-outs, and vaccine wastage that routinely occur – primarily in areas with limited resources. HERMES 1.0 is a systems modeling software application that allows users to analyze the complexities of a vaccine supply chain. HERMES can provide insight as to how the supply chain is functioning and determine the potential impact of making changes to the system.

This presentation will demonstrate the importance of taking a systems approach to assess vaccine supply chain design and performance as well as new technologies. Using HERMES 1.0, we will apply these concepts to understanding the steps needed to build a vaccine supply chain simulation model. Specific topics covered during the talk include understanding the complexities of vaccine supply chains and how each component interacts with each other; identifying common vaccine supply chain system issues; assessing the critical measures of a vaccine supply chain's "health"; and recognizing the benefits of modeling for assessing and strengthening the vaccine supply chain system. This session will provide a basic understanding of HERMES 1.0 and introduce them to supplemental resources (comprehensive tutorials and technical support) to facilitate in-country training and capacity building for vaccine supply chain systems modeling.

<i>Presenters</i>	Elizabeth Mitgang, MSc mitgang@jhu.edu +1410.502.2710	Patrick Wedlock, MSPH pwedloc1@jhu.edu +1410.502.3845
	HERMES Logistics Team, Johns Hopkins University	
<i>Lead Investigator</i>	Bruce Y. Lee, MD MBA, Associate Professor, Johns Hopkins University brucelee@jhu.edu	

Nov 28, 2018; 10:45-11:55am

Panel 1: Supply Chain Management & Anti-Microbial Resistance

Location: DOME

Anti-Microbial Resistance (AMR) is an increasingly serious threat to global public health that requires action across all government sectors and society. Without effective antibiotics, the success of major surgery and cancer chemotherapy would be compromised. In 2016 for example, 490 000 people developed multi-drug resistant TB globally, and drug resistance is beginning to complicate the fight against HIV and malaria, as well. The panel discussion brings to the summit discussion around the pharmaceutical value chain and AMR. Specifically, we will be answering questions on new approaches-systems and tools- to address AMR. The panelists for this panel discussion come from the pharmaceutical industry, leading international development partners, national governments, implementing partners and faith based organizations. At the end of the session the GHSC will come up with recommendations that would help both the donor community and recipient countries to address AMR issues.

Moderator: Dr. Lloyd Matowe, Program Director, Pharmaceutical Systems Africa

Panelists:

1. Mohan Joshi, MSH
2. Mirfin Mpundu, EPN
3. Linus Odoemene, FMOH, Nigeria
4. Gavin Steel, DOH, South Africa

Nov 29, 2018; 9:35-10:35am

Note Panels 2.1, 2.2, and 2.3 meet in parallel.

Panel 2.1: Scaling & Sustaining Innovation for Impact

Location: DOME

Low middle income countries are in a unique position to leverage innovation to address global health challenges. In the past few years we have seen the advent of mechanisms through which innovation has been sourced and the availability of grant funding enabling pilots in various areas of innovation including technology (e.g. drones) as well as business models. However few of these organizations are on the path to scale, and fewer yet have reached scale and sustainability of these innovations are unclear. Many issues contribute to this including a lack of sustainable business models, of follow on funding and startups lacking business experience to scale the organization.

In this session we will explore how to scale and sustain technology and business model innovation, what are the challenges and what are some of the potential opportunities to address these challenges. We will ask questions on whether it is realistic to expect scalability and sustainability and look at the role of government, donors and commercial investors.

Moderator: Professor Ravi Anupindi, University of Michigan, Ann Arbor, MI (USA)

Panelists:

1. Tracey Brett, Impact for Health
2. Walter Kerr, Zenysis, Chief of Staff
3. Justus Kilonzi, CEO & Founder, Savannah Informatics
4. Michael Jelinske, Investment Officer, Leapfrog Investments
5. Edward Charles Anderso, World Bank, Tanzania

Panel 2.2: Sustainability through ownership transitioning to the government

Location: Room 1

In this session, we will present a conceptual framework detailing key elements for evaluating the process of transitioning supply chain operations from a partner-led, donor-funded model to a government-led and funded model. The framework was derived from a combination of literature review, expert consultation and experiential learning in Mozambique. Using the framework as a lens, we will reflect on participants thoughts and/or experiences using participatory dialogue (café conversation style).

- Learning objective: Following this session, attendees will have an understanding of the key elements necessary for transitioning supply chain operations to government and the contextual factors which influence success in some contexts.
- Target audience: Government representatives, policy makers, donors, NGOs, academics, researchers and other stakeholders interested in transitioning partner-led operations to government.

Moderator: Dr. Bvudzai Magadzire, Village Reach (bvudzai.magadzire@villagereach.org)

Team members & collaborators:

1. VillageReach Nexgen iSC team Mozambique led by Aida Coelho (MPH)
aida.coelho@villagereach.org
2. VillageReach Nexgen iSC Global team led by Jessica Crawford (MA)
Jessica.crawford@villagereach.org
3. Ramos Mboane, Medical Chief (NIASSA), Mozambique Ministry of Health rmmboane@gmail.com

Panel 2.3: Meeting Supply Chain Talent Needs

Location: mini DOME

Supply chain talent is in short supply worldwide. This problem is even more acute in low and middle income countries in general and more specifically for the health sector. This has resulted from inadequate importance and attention to supply chain positions within health organizations, unclear long-term career trajectories for supply chain professionals in these organizations, and very few educational programs within the regions of focus. The shortage is further exacerbated by the change in the skillsets required for supply chain professionals working in the health sector. Competencies in logistics are no longer sufficient to run complex multi-country supply chains; ability to work with advanced data and analytics is becoming extremely crucial. This panel will review the current (regional & global) landscape of training & talent development for (health) supply chain excellence to meeting the needs of LMICs, discuss challenges and opportunities.

Moderator: Professor Jérémie Gallien, London Business School, London (UK)

Panelists:

1. Liz Igharo, Executive Director, IAPHL
2. Dominique Zwinkels, Executive Manager, PtD
3. Bonface Fundafunda, ARC Regional Lead
4. Dr. Daniel Zapata, Global Logistics Education, Kuehne Foundation
5. Prof. Yehuda Bassok, Marshall School of Business, USC

Nov 29, 2018; 1:30-2:45pm

Panel 3: Information System Design and Implementation: Successes & Challenges

Location: DOME

Moderator: Prof. Yehuda Bassok, University of Southern California (USA)

Panelists:

1. Dr. Florence Duperval-Guillaume, GHSC-PSM Haiti Country Director
2. Arun Ramanujapuram, CTO, Logistimo (TBC)
3. Denise Lapoutre Country Representative Nigeria
4. Linus Pharm Linus Odoemene Supply Chain Strategist/National Coordinator, i+Solutions

Nov 29, 2018; 3:15-4:30pm

Panel 4: The role and importance of Pharmaceutical companies is designing and managing in-country supply chains

Location: DOME

Moderator: Prof. Yehuda Bassok, University of Southern California (USA)

Panelists:

1. Catherine Decouttere, Access-to-Medicines Research Center, KU Leuven, Belgium
2. Nico Vandaele, Access-to-Medicines Research Center, KU Leuven, Belgium
3. Jo Tierens EHS Director Sustainability and Global Toxicology, External Manufacturing at Janssen Pharmaceuticals
4. Richard Lloyd, Chief Technology Office OPTEL Group
5. Julie Rochon, Director of OPTEL Impact & Industry leader for Africa

Plenary Speaker Bios



Dr. Kennedy Malama graduated from the University Of Zambia School Of Medicine as a Medical Doctor in 1994 and has worked for the past 24 years in the Zambian Public Health Care System holding various positions at district, Provincial and now national level as Permanent Secretary in the Ministry of Health.

He holds a Master's degree in Public Health from the University College Dublin in Ireland obtained in 1999. In 2004 he obtained an advanced certificate in Health Systems Strengthening using A Practical approach from Uppsala University in Sweden. In addition, he has attended many courses in Health Care Management including Health Care Financing, Health Systems Strengthening and Development.

From 1995 to part of 2016, he served as District Director of Health and Provincial Health Director in several districts in Zambia during which time he combined administrative and Clinical roles in both the rural and urban settings of Zambia.

As Provincial Health Director, he served from 2007 to 2014 in the Eastern Province of Zambia and during part of this period, provided leadership in the coordination, planning implementation, and monitoring for action of the Saving Mothers Giving Life initiative as two of the implementing districts under the SMGL initiative in Zambia where in Eastern Province namely Lundazi and Nyimba. At the Ministry of Health Headquarters, he served as Director Health Promotion Environment & Social Determinants and as Director Public Health from 2016 to August 2017.

In August 2017, His Excellency the Republican President of Zambia appointed him as Permanent Secretary of the Ministry of Health (Chief Executive Officer) the position he currently holds. He has received various awards of excellence in his work at various levels including the recognition as a 2014 PEPFAR Champion in Zambia denoting his great work in the HIV and AIDS platform



Dr Felix Olale is a Partner at LeapFrog and the firm's Global Co-Leader for Health Investments. He is also an entrepreneur and physician-scientist, renowned for his work building businesses and investing in healthcare in emerging markets.

Prior to LeapFrog, Dr Olale was Chairman of the Excelsior Group, a US-Africa based advisor and investor in health and technology companies. Dr Olale was also Senior Advisor to the International Finance Corporation (IFC) for their Health in Africa Initiative. In addition, Dr Olale was co-founder of the Institute for Healthcare Management at Strathmore Business School, and a founding member of Safaricom's Health Advisory Board.

Dr Olale began his career as a physician-scientist at Skirball Institute of Bio-molecular Medicine in New York, where he cloned two genes involved in organ asymmetry and regeneration. He then worked in venture capital with New York University's Office of Industrial Liaison and Technology

Transfer. Later, he was an Associate Partner at McKinsey & Company in New York, where he was a leader in the Pharmaceutical, Medical Products and Global Health practices.

Dr Olale holds a Bachelor of Arts (Hons.) in Molecular Biology from the University of Pennsylvania, where he was a University Scholar. He received his Medical Degree and Doctorate from New York University's School of Medicine. Dr Olale serves as a Board Trustee and Chairman of the Governance Committee for PATH, the leading global health innovator and is a Member of EMPEA's Africa Council.



Gavin Steel is Chief Director; Human Resources for Health at National Department of Health South Africa; previously he was Chief Director; Sector Wide Procurement for NDOH, S. Africa.

Program Chair: Professor Yehuda Bassok, University of Southern California, Los Angeles

Program Committee:

- Professor Ravi Anupindi, University of Michigan, Ann Arbor, MI (USA)
- Professor Sriram Dasu, University of Southern California, Los Angeles, CA (USA)
- Professor Jérémie Gallien, London Business School, London (UK)
- Liuchi Hara, Takeda Pharmaceuticals (Denmark)
- Professor Ananth Iyer, Purdue University, West Lafayette, IN (USA)
- Lloyd Matowe, Pharmaceutical Systems Africa (Liberia, Nigeria, & Zambia)
- Thidiane Ndoye, Task Order Director, Population and Reproductive Health, GHSC-PSM/Chemonics
- Dr. Noel Watson, OpsMend (USA)
- Dr. Prashant Yadav, Strategy Leader-Supply Chain Integrated Delivery, Bill & Melinda Gates Foundation (USA)

Zambia Local Committee:

- Lloyd Matowe, Faculty of Pharmacy, Lusaka Apex Medical University
- Marlon Banda, Churches Health Association of Zambia (**Local Committee Chair**)
- Derick Munkombe, College of Medicine, University of Zambia
- Ruth Mudondo, Pharmaceutical Manufacturers Association of Zambia
- Jerome Kanyika, Pharmaceutical Association of Zambia
- Daniel Muma Mwaba, Pharmaceutical Society of Zambia
- Moses Muyaba, Faculty of Pharmacy, Lusaka Apex Medical University

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