





CUGH Faculty Development Webinar Series

Teaching Global Health Through an Interprofessional Lens

Moderated by: Jessica Evert, MD

Executive Director, Child Family Health International (CFHI)

Assistant Clinical Professor, UCSF Department of Family and Community Medicine

Affiliate Faculty, UCSF Global Health Sciences

Chair, CUGH

Competency Sub-Committee

Child Family Health International





Goals of the Webinar Series

Equip faculty to integrate other disciplines approaches to Global Health in their courses and programs.

Present vocabulary, concepts and approaches that disciplines use when engaging in Global Heath.

Provide case studies on how disciplines have approached Global Health challenges and contributed to understanding and addressing Health Disparities.

Child Family Health International





PREVIOUS INSTALLMENTS

Global Health & Law
Virginia Rowthorn JD LLM
University of Maryland

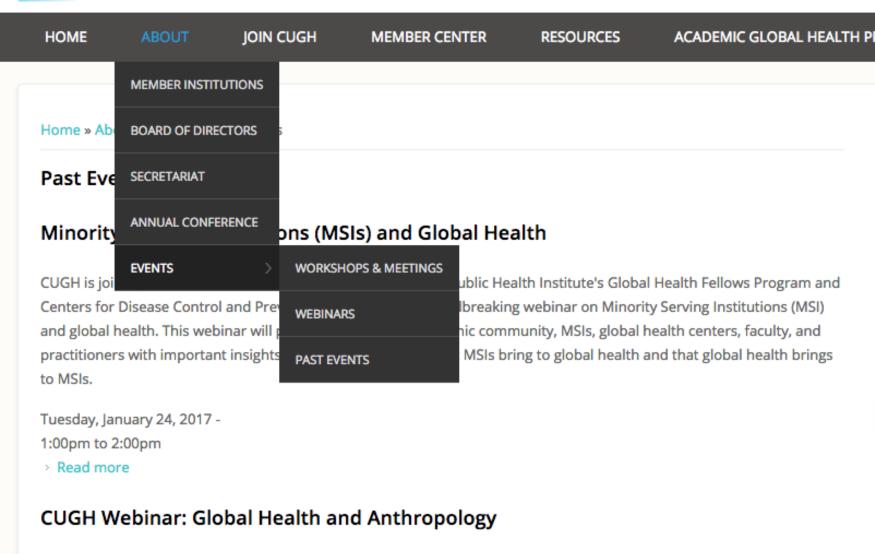


Global Health & Anthropology
Peter Brown PhD
Emory University



Global Health & Engineering
Shannon Marquez MPH PhD
Drexel University







n/events

MEXICO

OAXACA

 Realities of Health Access & Inequities

MEXICO

PUERTO ESCONDIDO

- Tropical Medicine & Community-Based Care
- Women's Reproductive Health

INDIA

MUMBAI/PUNE

- Confronting Tropical Disease Challenges
- Maternal & Child Health

INDIA

RURAL HIMALAYAS

- Rural/Urban Himalayan Rotation
- Intro to Traditional Medicine

ECUADOR

Quito/Puyo/Chone

- Amazon Community
 & Indigenous Health
- Andean Health
- Implementing Universal
 Healthcare
- Reproductive Health
- Urban & Rural
 Comparative Health
- Infectious Disease
 Eradication
- Sonrie Ecuador-Dental Program

BOLIVIA

LA PAZ

 Pediatric Health & Adolescent Medicine

BOLIVIA

TARIJA

 Healthcare in Remote Southern Bolivia

SOUTH AFRICA

DURBAN

HIV/AIDS & Healthcare

SOUTH AFRICA

CAPE TOWN

Healthcare Challenges

INDIA

NEW DELHI

- Public Health & Community Medicine
- Sight for All-Ophthalmology Rotation



let the world CHANGE you

Argentina • Bolivia • Ecuador • India • Mexico • South Africa • Uganda • Ghana • Philippines • Tanzania

CUGH GLOBAL HEALTH AND BUSINESS

AMY LOCKWOOD, STRATEGIC ADVISOR AT THE UCSF INSTITUTE FOR GLOBAL HEALTH SCIENCES

& LECTURER AT THE UNIVERSITY OF GLOBAL HEALTH EQUITY

KARA PALAMOUNTAIN, RESEARCH ASSOCIATE PROFESSOR | LECTURER OF GLOBAL HEALTH
KELLOGG SCHOOL OF MANAGEMENT AT NORTHWESTERN UNIVERSITY

November 16, 2017

MEET OUR PRESENTERS

As a Strategic Advisor at UCSF's Institute for Global Health Sciences, Amy Lockwood supports strategy, business development, and operations for the AIDS Research Institute and Global Health Delivery and Diplomacy. She is also helps lead work at Born Free Africa, private sector-led initiative with the sole objective of accelerating progress towards the elimination of mother-to-child transmission of HIV. She is a Lecturer at the University of Global Health Equity in Rwanda and serves on the Board of WeRobotics, a global network of robotics labs that accelerate the impact of aid and development efforts. Concurrently, Amy is pursuing her PhD in Global Health Sciences at UCSF, with research driven by the hypothesis that there is a causal link between the quality of leadership and management of global health programs and health outcomes with the long-term goal to develop materials to teach global health professionals leadership skills and advocate for changes in the way that global health programs are managed and funded.

Ms. Lockwood has background spanning the business, nonprofit and academic sectors. She has experience developing strategies, managing, and evaluating development projects and organizations throughout Africa, Asia and Latin America. Previously, she was the Deputy Director of the Center for Innovation in Global Health at Stanford, the Executive Director of Project Healthy Children (an NGO focused on micronutrient malnutrition), and the Director of the Pediatric HIV/AIDS Program and India Deputy Country Director for the Clinton Foundation. Prior to work in global health, she was a strategy consultant with a specialty in branding and communication. In addition to her current doctoral work at UCSF pursuing a PhD in Global Health Sciences, Ms. Lockwood holds a MBA from Stanford, a BS in Communications and a MS in Marketing, both from Northwestern University.



MEET OUR PRESENTERS

Kara Palamountain is a Research Associate Professor at the Kellogg School of Management (KSM). Her primary area of interest is the development and adoption of medical technologies in Africa. She has collaborated with a number of organizations, including commercial diagnostic companies, the Bill & Melinda Gates Foundation, the National Institute for Health, USAID's Center for Accelerating Impact and Innovation, Johns Hopkins School of Public Health, Makerere University (Uganda), Mbarara University of Science and Technology (Uganda), University of Ibadan (Nigeria), University of Lagos (Nigeria), FIND, and Rice University (US). She has authored numerous publications in peerreviewed journals, including PLOS One, Journal of Infectious Diseases, and Diagnostics.



WHAT DO WE MEAN BY "BUSINESS"?

business / bIznəs/ (noun)

The activity of making, buying, or selling goods or providing services in exchange for money

In global health, business is sometimes used to mean private-sector and often that means an organization or activity with a profit motive

However, some business principles and private-sector strategies can be used without a profit-motive by NGOs, foundations, and other organizations



























Johnson Johnson





























The Aga Khan University Hospitals





















BILL&MELINDA GATES foundation















Design Revolution









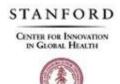
GLOBAL HEALTH

Innovation Insight Series

http://csi.gsb.stanford.edu/global-health-innovation-insight-series

STANFORD Program in BUSINESS Healthcare Innovation







A GLOBAL HEALTH BUSINESS IS COMPLICATED

Multiple stakeholders—patients, providers, payers—with distinct yet overlapping interests

A variety of regulations and requirements imposed by each government and sometimes specific to particular healthcare providers

Diverse geographies, each with different infrastructure, customs, and market dynamics

Limited resources—financial, physical, and human—that impact requirements for pricing and collaboration

KEY CHALLENGES TO CONSIDER



Identifying and validating needs



Understanding market and stakeholder dynamics



Getting to a market ready product or service



Sales, marketing, and distribution

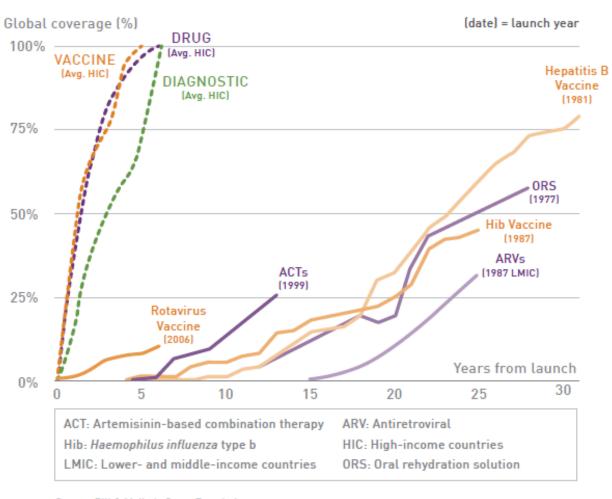


Defining a viable business model



Securing adequate funding

CRITICAL HEALTH INTERVENTIONS HAVE FACED SLOW UPTAKE & LOW COVERAGE



Source: Bill & Melinda Gates Foundation



Research & Development



Manufacturing



Clinical & Regulatory



Sales



Order Fulfillment



Training Personnel



Service & Maintenance





CII'S IDEA TO IMPACT SERIES







IDEA to IMPACT

Identifies priority activities and provides project management oversight across four stages of the product development continuum to help practitioners think through, plan, and execute on delivery-related activities

Social entrepreneurs, innovators, implementers, and funders who are developing and launching a global health innovation

READY, SET, LAUNCH

Supports practitioners in selecting initial launch country(ies) and creating a comprehensive strategy and operational launch plan to achieve scale

Social entrepreneurs, innovators, implementers, and funders ready to pivot from product development to actual introduction into a given geography

PATHWAYS to SCALE

Provides organizational guidance for innovators in selecting the most relevant business model and partnership options to be best positioned to scale

Social entrepreneurs and innovators building an organization and/or partnering in preparation for launch and scale

POTENTIAL LIVES SAVED



LYNX Infant HIV Test

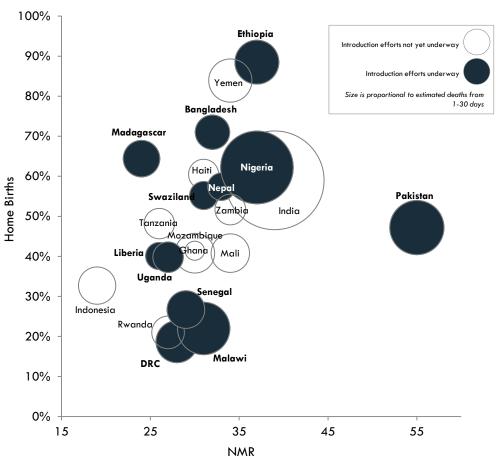
- >1.4M infants born to HIV positive mothers each year
- 90% in 20 countries where transmission rates from mother-to-child (MTCT) is $\sim 17\%$
- Without diagnosis, 45% die in 1st year, 59% die in 2nd year
- Only 35% access to testing
- Only 17.5% receive test results
- Potential for 115K lives saved per year in 20 countries with high MTCT



Chlorhexidine

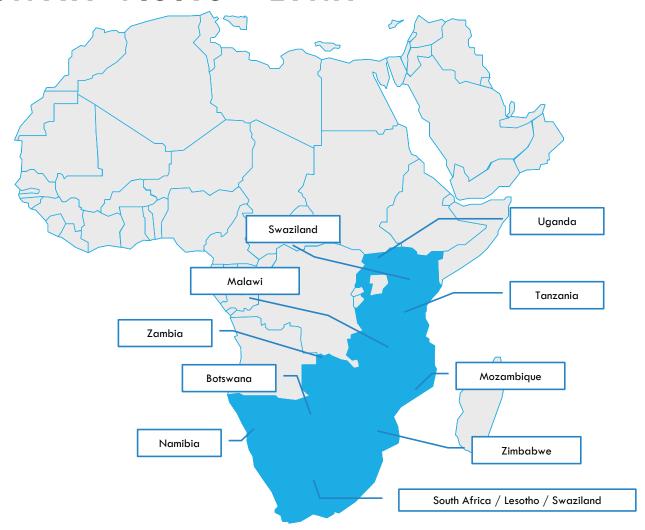
- 36% of all neonatal mortality caused by infection
- 36% of infection caused by infection of the umbilical cord stump
- Chlorhexidine has demonstrated 20-40% reduction in neonatal mortality in countries with high neonatal mortality rates
- Potential for 315K lives saved per year in 24 countries with high neonatal mortality rates

INITIAL COUNTRY SELECTION - CHLORHEXIDINE



Source: DHS data. Analysis adapted by Center for Accelerating Innovation and Impact (CII) across 24 priority countries (Afghanistan and S.Sudan not shown)

COUNTRY VISITS - LYNX



COUNTRY VISITS

Who are the key stakeholders in this country?

What roles do these stakeholders play in the commercialization process?

What do key stakeholders think of my product?

COUNTRY VISIT PREPARATION

Approval

- What international regulatory approvals are required / preferred?
- What sort of local pilots / evaluation / licensing / registration is required?
 Who does this? Who pays for this?
- What prompts a change in the diagnostic tests recommended in Swaziland's clinical quidelines?

Procurement

- What is the concentration of lab consumable and/or equipment customers in Swaziland?
- What is the budgeting / forecasting and / or tender process for lab consumables and /or equipment in Swaziland?
- How frequently are lab consumables and equipment ordered / paid for with the manufacturer?
- Are imported lab consumable and equipment taxed?

Distribution

- What is the concentration of government versus private distributors in Swaziland?
- What incentives are in place for distributors of lab consumables and equipment?
- Are there shelf-life requirements for lab consumables?

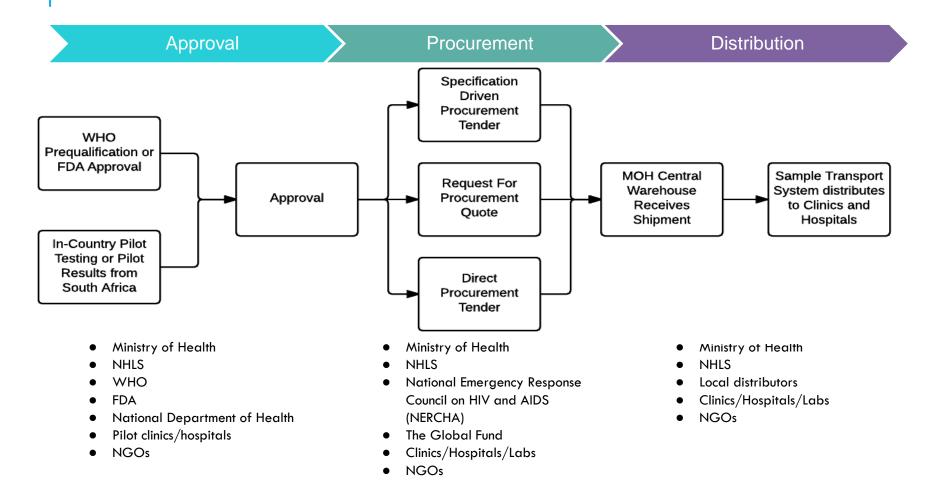
Service & Maintenance

- How is service & maintenance on lab equipment identified, resolved and financed?
- Does Swaziland place restrictions on the exchange of inoperative equipment?

Training Personnel

- Who provides / finances initial product training?
- Who provides / finances ongoing product training?
- What are the innovative diagnostic test training programs in Swaziland?

COUNTRY VISIT RESULTS



COUNTRY VISIT RESULTS

The NHLS loved the single dose buffer and believed it would eliminate potential for error.

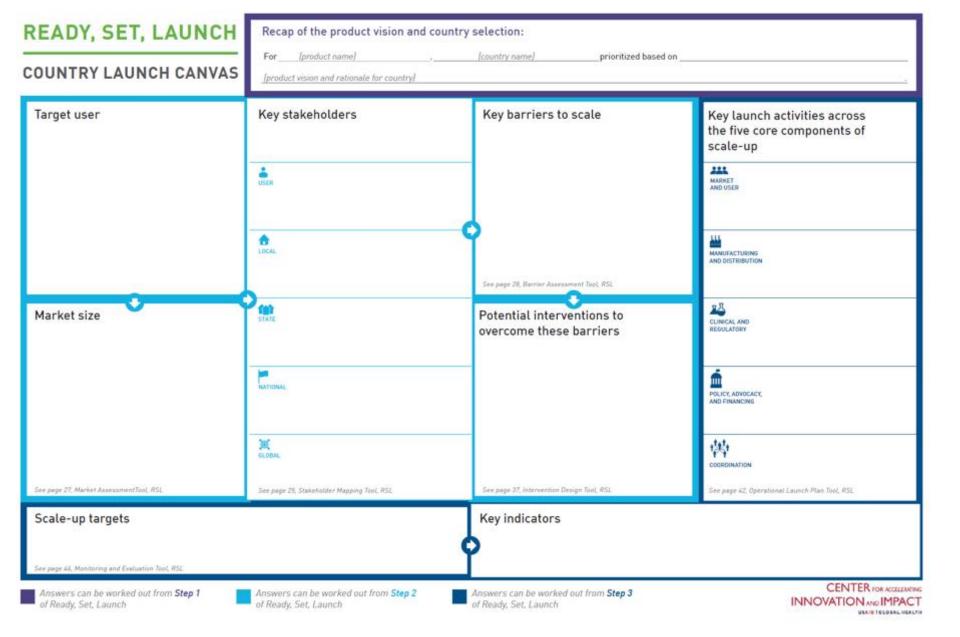
The possibility of p24 antigen testing & the plasma separator was new and exciting for the stakeholders.

Most stakeholders were pleased with it's size, portability and price.

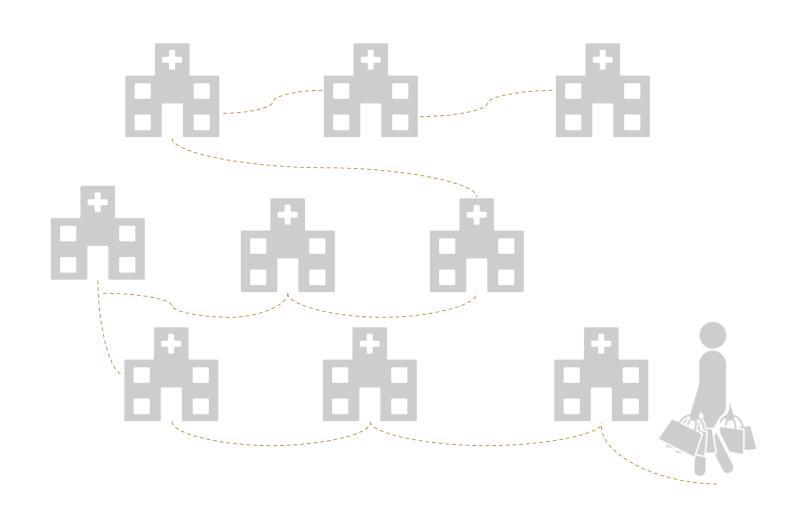


Some concerns around overall testing time and complexity of steps.

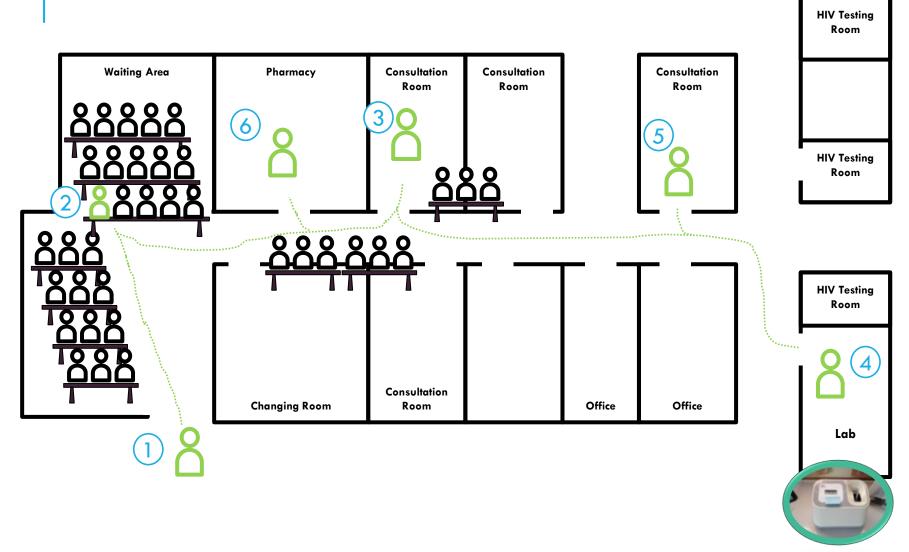
Because the test is qualitative, there were concerns around quality control and accuracy of results.



FACILITY SALES & DISTRIBUTION

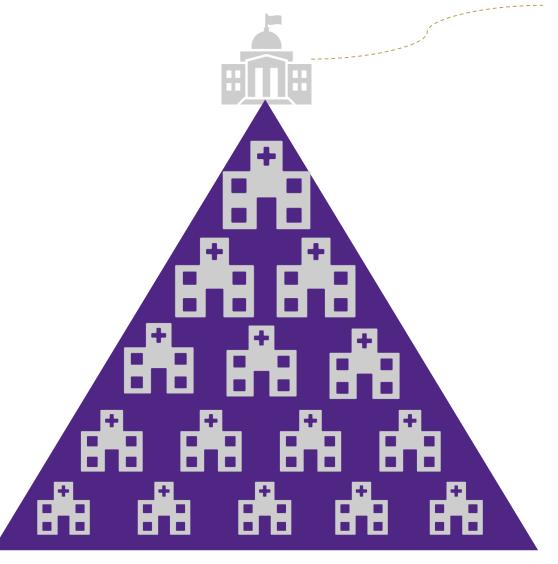


FACILITY WORKFLOW

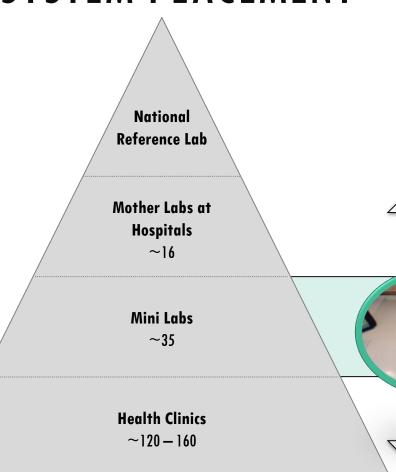


SYSTEM SALES & DISTRIBUTION





SYSTEM PLACEMENT



Why not higher in the system?

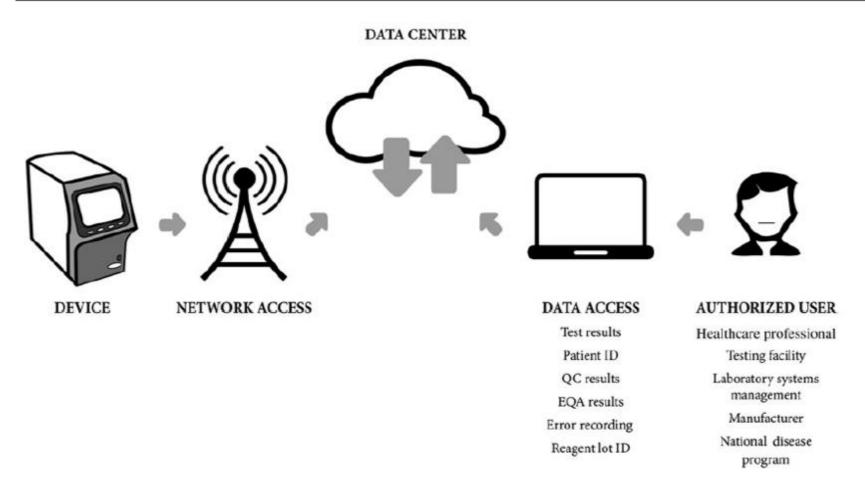
 Higher throughput needed: LYNX would need to be able to process greater volume or process more quickly

"Phlebotomists are staffed in the mini labs. It is preferred that the phlebotomists do the point of care because they are trained."

Why not lower in the system?

- Liability: NRL concerns with non-lab workers managing processes given potential liability
- "Nurses could be trained and might want to perform tests because they have an interest in infant HIV testing; however, it is more of a political battle."

CONNECTIVITY



Source: Kara M. Palamountain, Jeff Baker, Elliot P. Cowan, Shaffiq Essajee, Laura T. Mazzola, Mutsumi Metzler, Marco L. Schito, Wendy S. Stevens, Gloria J. Young, and Gonzalo J. Domingo Perspectives on Introduction and Implementation of New Point-of-Care Diagnostic Tests. The Journal of Infectious Disease 2012: jis203v2-jis203.

LESSONS LEARNED

What is the investment case for people buying your product? Who is your biggest competitor? Why are you better?

What is the break even volume you need to remain sustainable? How do you hit this volume ASAP?

What countries do you target first to hit this volume?

What other products are in the same place and are used at the same time as your products?

What partners do you need?

What do partners need from you?

QUESTIONS & DISCUSSION

USE THE QUESTION BOX AT THE RIGHT HAND CONTROL PANEL