Overview: Five Themes

• Systems for health, beyond health systems: the determinants and producers of health extend beyond health systems.
• A convergence of macro-trends and macro-factors affecting both the demand-side and supply side of systems for health.
• Enduring and emerging challenges.
• The elusive balance between the roles of the state and the market, in financing, delivery and regulation of health services.
• The place of evidence in health policy; to what extent does evidence drive policy, and to what extent does politics drive evidence in global health?
Systems for Health: Beyond Health Systems
Determinants and Producers of Health Extend Beyond Health Systems

- Factors, actors and relationships...
- .... contribute to observable levels of and changes in health outcomes, health services,
- ....in sectors that lie outside the confines of the “health sector,”
- but influence needs for health services, and provide services that contribute to better health outcomes
Macro-trends and Macro-factors Affecting Systems for Health
Determinants and Producers of Health Extend Beyond Health Systems

Demographic Shifts

- Fertility rate (births per woman), 2015
- Life expectancy (years), 2015
- Pre-dividend countries
- Early-dividend countries
- Late-dividend countries
- Post-dividend countries
- No data

Globalization

- a. Individuals with mobile phone access
- b. Individuals with internet access
Determinants and Producers of Health Extend Beyond Health Systems (2)

Urbanization

Urban and Rural population

- Urban Developing
- Urban Developed
- Rural Developing
- Rural Developed

Cities with more than 10 million in 2030

Source: UN World Urbanization Prospects

Climate and Resources

Food demand
Percent change 2015-2030

Cereal yields
Tons/hectare, 2013

Global yields needed to feed world by 2030

Estimated crop yield changes due to climate change by 2050

Source: United Nations World Urbanization Prospects

Graph: ALEX ANDRUZ / BLOOMBERG VISUAL DATA

Tokyo and Osaka
Both are expected to lead population growth, with Tokyo expected to grow to 14 million by 2050, from 14.6 million in 2014, the fastest growth rate among the top-10 cities. Kinshasa is close behind.

Source: UN World Urbanization Prospects

Graph: ALEX ANDRUZ / BLOOMBERG VISUAL DATA

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Enduring and Emerging Challenges
Combined Burden of MCH, Infectious Diseases and NCDs

• Integrated care models: people at the core

• Cost trajectories: high or low?

• Financing, Equity and Benefit Incidence: Who pays, who benefits, and what is the social compact?
• Averting: building resilient systems, incorporating investments in disease surveillance and preparedness as part of health systems strengthening

• Responding: having systems and capacity in place for early identification of outbreaks and timely response
Antimicrobial Resistance

- Understanding the phenomenon: crucial to ensure effectiveness and access to life-saving antibiotics

Estimates show that universal provision of antibiotics could avert 445,000 deaths out of an estimated total of 590,000 deaths from pneumonia across 101 countries—a 75% reduction in deaths from pneumonia...

- Not just a biomedical matter, but a One Health issue (humans, animals, environment)

- Interconnectedness: Worldwide travel routes and emergence of AMR

...or scaling up vaccines against pneumococcus and *Haemophilus influenzae* type b (Hib), thereby conserving antibiotics and reducing selection pressure, could prevent up to 11.4 million days on antibiotics per year—a 47% reduction in days on antibiotics in 75 countries


Global ranking of risk factors for total deaths from all causes for all ages and sexes in 2015

*State of Global Health Report 2017. IHME and HEI*
• Associated health care costs:
  – 3% to 9% of global health spending in 2013
  – Cancer, chronic respiratory and cardio/cerebrovascular illnesses

Demographic Transitions and Migrations

• Post-Transition Countries face the challenge of aging / aged populations, with pressures on public financing

• Pre-Demographic Dividend and Intra-Transition Countries: dramatic population growth (118% increase in SSA between 2016 and 2050) but health systems not equipped to face this increase

• ...in addition, refugees and displaced populations

• Achieving UHC: rational promise or irrational exuberance?

Universal Health Coverage: Touchstone?
Good Health: Inherent Value or Instrumental?

• SDG 3
• Health as a human right
• Health and poverty
• Health and inequalities
• Country-specific value systems
Role of the State and the Market in Financing, Service Delivery and Regulation of Health Systems
Major Market Failures in the Health Sector

• Asymmetry of information between patients and doctors/nurses/midwives/pharmacists
• Adverse selection plagues health insurance
• Barriers to entry, as patent laws → near monopolies in the markets for medical technologies and pharmaceuticals

“The reason that the invisible hand often seemed invisible was that it wasn’t there...” Joseph Stiglitz

https://www.youtube.com/watch?v=9qjvwQrzmpk
Ergo, Must Government Do Everything?

• Given market failure, many countries turn to the government to regulate, finance, and provide health services.
• But Government failure is widespread, too.
• Yet, there persists a [misguided?] ideology that the pursuit of public health goals necessarily requires the use of public means in financing and service delivery...
When informing policy and practice on a large scale, we should always keep in mind:

- The goal in the context of social narratives
- The question, “compared to what?”
- When in doubt, insist on better equity

Ideological absolutism and romantic attachments to perfection are not virtues in the practice of public policy.
On the Future of Aid for Health

Current Allocation of Donor Financing for Health

Global public goods (e.g. R&D for neglected diseases)
Cross-border externalities (e.g. pandemic preparedness)
Leadership (e.g. priority setting)

Global: 20%
Country-specific: 80%

Annual total: $22 billion

Summers’s Case for Aid Reallocation

- 1st: “Donor support is inferior”
- 2nd: “Countries are getting richer”
- 3rd: “Global functions have the highest ROIs”

Where do these arguments lead?
Evidence in Global Health Policy: A Case Study
A Conceptual Breakthrough in 2004:

“a sustained **global** subsidy of [ACTs] in order to reduce malaria mortality ("saving lives") and delay resistance ("buying time") until new categories of antimalarials could be developed.”
Purpose of Affordable Medicines Facility-malaria (AMFm) Phase 1

• Reduce retail prices of ACTs
• Increase availability of ACTs
• “Crowd out” oral artemisinin monotherapies
• Increase use of ACTs
The Independent Evaluation

FINDINGS

“In all pilots except Niger and Madagascar, there were large increases in QAQCT availability (25.8-51.9 percentage points), and market share (15.9-40.3 percentage points), driven mainly by changes in the private for-profit sector. Large falls in median price for QAQCTs per adult equivalent dose were seen in the private for-profit sector in six pilots, ranging from US$1.28 to $4.82. The market share of oral artemisinin monotherapies decreased in Nigeria and Zanzibar, the two pilots where it was more than 5% at baseline.”

INTERPRETATION

“Subsidies combined with supporting interventions can be effective in rapidly improving availability, price, and market share of QAQCTs, particularly in the private for-profit sector. Decisions about the future of AMFm should also consider the effect on use in vulnerable populations, access to malaria diagnostics, and cost-effectiveness.”

“In November, 2012, the Board of the Global Fund will vote to either continue AMFm in a modified form after December, 2013, or terminate the programme. There is a strong push from donors (though not from countries) to integrate AMFm into the regular Global Fund model, whereby countries would choose how much of their country budget envelopes, which are already committed to other priorities supporting the public sector, to reallocate to AMFm. We believe that this approach will create instability in artemisinin demand, lower the number of ACT manufacturers, increase ACT prices, and abandon the millions who depend on AMFm-subsidized ACTs. Most importantly, it will kill a programme that, when fully implemented, rapidly met its benchmarks despite the many constraints, expectations, and unrealistic timelines imposed on it. We must acknowledge that an efficient approach to subsidising antimalarial drugs has worked, making them available in the private sector where people go to buy them.”

How well does global public health handle evidence?

https://www.youtube.com/watch?v=UXoNE14U_zM

• “The [Global Fund] Board decides to modify the existing AMFm business line by integrating the lessons learned from the operations and resourcing of Phase 1 of the AMFm into Global Fund grant management and financial processes by…”
  http://www.theglobalfund.org/Knowledge/Decisions/GF/B28/DP06/

• “This raises an awful lot of worries. I'm concerned that its decision is more determined by politics and ideology than a focus on how to deal with kids and adults with fevers in poor countries.” Barry Bloom, Harvard School of Public Health, 2012.

• “…. in what world does it make sense to abandon a simple program that saves lives?” Kenneth Arrow. Stanford University. 2012.
  http://www.nytimes.com/2012/11/14/opinion/saving-a-malaria-program-that-saves-lives.html?_r=0
For Reflection

What do these themes mean for the 2nd Century of a foremost public health school that is dedicated to “Saving Lives, Millions At A Time”?

• For teaching?

• For research?

• For policy?

• For programs that disproportionately benefit the poor?
Thank You