MIT Sloan 3-day SIP: Innovation sprint for Jan Swashtya Sahayog

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Plan for today

- Introduction and overview
- Global Health 101
- Meet your classmates
- About JSS
- Quick break
- Team formation
- Start working: read and discuss problem statements, personas
- Rapid lit review
- Plan for tomorrow's call

COURSE OVERVIEW

https://wikis.mit.edu/confluence/display/sastry/GlobalHealth+Innovation+SIP

Dashboard > sastry > ... > GlobalHealth Innovation SIP

GlobalHealth Innovation SIP

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Added by Anjali Sastry, last edited by Anjali Sastry on Mar 14, 2016 09:42 (view change)

We'll work with organization in India, Chhattisgarh-based Jan Swashtya Sahayog, which serves rural populations in India's poorest state. One of its founding physicians, the inspiring Yogesh Jain, and I have mapped out a fabulous opportunity for students.

Students scout for and assess ideas, technologies, contacts, connections, and information that could prove useful to JSS in four focal areas:

- 1. How can JSS make even better use of patient groups (currently they run over two dozen) to help the many patients it serves with chronic conditions, including alcohol addiction? What can we glean about how to do this effectively?
- 2. How to equip health workers to formulate better questions, search strategies, requests for help? Given that JSS, like many organizations in low-resource settings, relies on locally-educated 8th or 10th grade graduates for frontline care, how can they help support these workers, who are smart and dedicated, in honing their problem-solving, help-seeking, and other skills within the JSS system (which includes family home visits, camps, local clinics, and tertiary hospitals)—and to create shared learning across levels and locations?
- 3. Over the years, JSS staff saw many needs for appropriate technologies for healthcare, and have steadily built a collection of their own inventions in their home-grown lab. How can we help them do this even more efficiently and effectively—and leverage what we have access to here at MIT?
- 4. There are plenty of guidelines for good antenatal care, but the realities of frontline care in rural settings in India present a very different set of options. Can we help JSS design a sequence of visits, specify guidelines and tests, and think through the information gathering, communication, and planning requirements to make the most of their staff, clinics, hospitals, and other assets to ensure that all the mothers they serve get high-quality healthcare?

You may have learned of JSS from their innovations with community health workers pioneering the ASHA village health worker model, now nationally scaled; their investment in training rural nurses; their focus on hunger, TB, surgery, <u>NCDs</u> (Yogesh Jain serves on the Lancet Commission on NCDs and poverty, and is hosting the Commission in Bilaspur soon), their <u>chronic care innovations</u>, and more; their pro-poor policy advocacy in the state of Chhattisgarh and more broadly, up to the Indian Supreme Court; their need-driven local appropriate technology innovations; or their collaboration with Thoughtworks on <u>Bahmni</u>, an open-source hospital system for healthcare providers.

Key materials for all students (profiles of your JSS collaborators, for instance) and key context on the organization and its setting is in this introductory folder: <u>https://www.dropbox.com/sh/czqosgyhlo88r3a/AACn2NqJR-stirt9Sql9HPGRa?dl=0</u>

Collected resources and JSS materials for each team are here: https://www.dropbox.com/sh/30rcugb4xu0wcya/AACsIW2kJsIGL2wuuu 5Zfkxa?dl=0

Extra resources on systems thinking, behavioral perspectives, design thinking are here: https://www.dropbox.com/sh/ifwo1mb7e8bbyip/AAD-8X8iXkR4Vs5xh4GPKUE a?dl=0

youtube channel for students: https://www.youtube.com/playlist?list=PLLiX56tFrfnrTUMgzZUSIPtnpBHteT8VX

Wednesday deliverable: a focused deck or wellorganized word document (template on wiki shortly)

Key elements:

- Refined problem statement
- Prioritized set of new ideas gleaned from research, interviews, and team ideation (retain ideas you deem low-priority in appendix)
- Explain cogently how ideas address problem statement (bullets or table is fine; show your logic)
- For each: implications, open issues, etc., for both JSS as an organization and for the person in your profile
- Full list of people interviewed: contact info, title/bio, plus conversation notes. Flag those JSS should meet.
- Selected best references, websites, other sources

GLOBAL HEALTH 101

How I have learned about Global Health

- Developing and running *GlobalHealth Lab*
- Teaching Business Model Innovation in Frontier Markets: Global Health
- Great students, colleagues, alums, friends of MIT. And, of course, our partnering organizations.
- Research and teaching with Harvard's Global Health Delivery Project; collaboration with HMS colleagues (I am on the faculty of the Department of Global Health and Social Medicine)
- Board of Directors, Management Sciences for Health
- Medical Advisory Board, Wonderwork

Interested in innovating amid constraints?

Learn what works, what doesn't, and why in ambitious startups and inspiring leading-edge organizations that are remaking healthcare delivery across the globe



H1 graduate elective 15.232 Business Model Innovation: Global Health in Frontier Markets

Business case analyses completed

Access Afya, Kenya ADDOs, Tanzania Arogya Parivar (Novartis), India Ayzh, India and elsewhere BasicNeeds, various countries BlueStar, Ghana Clinicas del Azucar, Mexico ColaLife, Zambia D-tree International, various countries E-Health Point, India GS Memorial, India Heart Institute of the Caribbean, Jamaica Hygeia, Nigeria iKure, India Jacaranda, Kenya Jaipur Foot, India Janacare, India and US Last Mile Health, Liberia LifeBox, various countries LifeNet, Burundi Living Goods, Uganda Magrabi Hospitals, Saudi Arabia, Egypt, Yemen Maternova, various countries Medic Mobile, various countries Medicall Home, Mexico MedPlus, India Mi Farmacita Nacional, Mexico MTTS, Vietnam Noora, India Nyaya Health, Nepal Penda Health, Kenya Pro Mujer, various countries in Latin America **Right to Care, South Africa** Sana Mobile, various countries Shining Hope for Communities, Kenya SINA, Pakistan Smile Train, various countries Sproxil, various countries SughaVazhvu, India The Access Project/Health Builders, Rwanda Vaatsalya Hospitals, India Village Health Works, Burundi VisionSpring, various countries World Health Partners, India

GlobalHealth Lab

see http://groundwork.mit.edu

Since 2007, GlobalHealth Lab and related efforts have completed 77 practical projects designed to address healthcare delivery challenges with dozens of partners around the world

AAR Health Services, Nairobi, Kenya AMPATH, Eldoret, Kenya Baobab Health Partnership, Lilongwe, Malawi

BRAC, Dhaka, Bangladesh

Cambridge AIDS Alliance/Cambridge Cares, Massachusetts

CARE Hospitals, Hyderabad, India

CARE Rural Health Mission, Maharashtra and Andhra Pradesh, India

Careworks HIV Managed Care Solutions, Cape Town, South Africa

Carolina for Kibera, Nairobi, Kenya

CCBRT, Dar es Salaam, Tanzania

Centre for Infectious Diseases Research Zambia (CIDRZ), Lusaka, Zambia

ClickDiagnostics (project in South Africa), Boston

Comprehensive Community Based Rehabilitation in Tanzania (CCBRT), Dar es Salaam, Tanzania

Connaught Hospital (with Surgeons OverSeas), Freetown, Sierra Leone

Daktari Diagnostics (projects in Uganda, Botswana & Kenya), Cambridge, MA

Dimagi, Inc, Cambridge MA (project in South Africa).

Empowering Lives International, Eldoret, Kenva G S Memorial Plastic Surgery Hospital and Trauma Centre, Varanasi, India Gertrude's Garden Children's Hospital, Nairobi, Kenya

Gradian Health Systems New York, NY (projects in Uganda, Tanzania & Zambia)

Grassroot Soccer, Cape Town, South Africa.

Himalayan Health Care, Illam, Nepal Institute of Public Health with Gubbi taluk hospitals, Tumkur, India

International Committee of the Red Cross/Red Crescent (project on Senegal), Boston

Joint Task Force-Haiti (project in Haiti), US Military and Lincoln Labs

Kampala Family Clinic, Kampala, Uganda

KenCall, Nairobi, Kenya

Kyetume Community Based Health Care Programme, Mukono, Uganda

L V Prasad Eye Institute, Hyderabad, India.

LifeSpring Hospitals, Hyderabad, India

Living Room International, Eldoret, Kenya

loveLife, Johannesburg, South Africa

Mass Development Association, Dar es Salaam, Tanzania

Mennonite Economic Development Associates, Dar es Salaam, Tanzania Meridian Medical Centres, Nairobi, Kenya Misoprostol Access Project (Indonesia)

Muthaiga Paediatrics Clinic, Nairobi, Kenya

PSI-Tanzania, Dar es Salaam, Tanzania

Shining Hope for Communities, Nairobi, Kenya

Support for International Change, Arusha, Tanzania

Sustainable Household Income Project/Family Treatment Fund via MGH-Harvard-MUST Research Collaboration, Mbarara, Uganda

Total, Accra, Ghana and Nairobi, Kenya

Uganda Research Initiative (Mbarara University of Science and Technology & Mass. General Hospital), Mbarara, Uganda

Unjani (a project of RTT/Imperial Health), Johannesburg, South Africa

Up To Date (project on Lesotho and elsewhere) Waltham, Massachusetts

Village Reach, Mozambique

Viva Afya and Valentis Health Care, Nairobi, Kenya

Warmbaths Hospital, Bela Bela, South Africa

Western Cape Department of Health: Lotus River Community Health Clinic and Retreat Community Health Centre, Cape Town, South Africa

what is global health?

Global Disability-Adjusted Life Years 2013



http://vizhub.healthdata.org/gbd-compare/

Global Life Expectancy



source: http://www.thelancet.com/lancet/visualisations/life-expectancy

Global coverage (%) Interventions are slow to reach many



Product launch year is shown in parentheses. LMIC = Lower- and middle- income countries

http://www.fhi360.org/sites/default/files/media/documents/impsciencesymposium-9-2014-dallabetta.pdf Dallabetta, Gates Foundation. 2014.

Critical health interventions have historically faced slow uptake and low coverage

Gaps in coverage fall disproportionately on the poor, and amplify inequity



1. DOTS represents a new model to deliver older technologies (drugs), so uptake is faster than completely new interventions 2. Skilled birth attendance is an ancient intervention, but its introduction is measured from 1987, when the Safe Motherhood Initiative was launched. Skilled birth attendance is considerably lower in Sub-Saharan Africa, where it is only 44%.3. Average of 49 countries reporting ORS rates 1999-2005, weighted by population under 15 years old 4. NRTIs were first approved in 1987, which is used as the start date. NNRTIs were approved in 1997 while PIs were approved in 1995. 6 million people are estimated to need ARVs. 5. ACT coverage is overstated as numbers represent only those procured, not those properly administered. Source: WHO/UNICEF: World Bank: BCG analysis

http://csis.org/event/rajeev-venkayya-global-health-delivery-systems

REIGN

Vaccine-Preventable Outbreaks

EMBED V DOWNLOAD DA



http://www.cfr.org/interactives/GH_Vaccine_Map/index.html#map

It's not all bad news: Declines in child deaths





27 OUT OF 138 DEVELOPING COUNTRIES ARE LIKELY TO ACHIEVE THE MDG 4 TARGET OF A TWO-THIRDS REDUCTION IN CHILD MORTALITY FROM 1990 LEVELS BY 2015

MATERNAL EDUCATION + TECHNOLOGICAL AND OTHER ADVANCES + INCOME GROWTH = DECLINE IN CHILD DEATHS





LOOK AT BURDEN OF DISEASE

Global Disability-Adjusted Life Years (DALYs) 2010



Institute for Health Metrics and Evaluation

GBD 2010, released 3/2013

© 2013 University of Washingto

http://vizhub.healthdata.org/gbd-compare/

Table 2. Global DALYs Caused by the 25 Leading Diseases and Injuries in 1990 and 2010.

	2010		1990
Rank	DALYs (95% UI)	Rank	DALYs (95% UI)
	in thousands		in thousands
1	129,795 (119,218–137,398)	4	100,455 (96,669–108,702)
2	115,227 (102,255–126,972)	1	206,461 (183,354–222,979)
3	102,239 (90,472–108,003)	5	86,012 (81,033–94,802)
4	89,524 (77,595–99,193)	2	183,543 (168,791–197,655)
5	81,549 (74,698–88,371)	33	18,118 (14,996–22,269)
6	82,689 (63,465–109,846)	7	69,141 (54,547–85,589)
7	80,667 (56,066–108,723)	12	56,384 (38,773–76,233)
8	76,980 (66,210–88,132)	3	105,965 (88,144–120,894)
9	76,779 (66,000–89,147)	6	78,298 (70,407–86,849)
10	75,487 (61,555–94,777)	11	56,651 (49,633–68,046)
11	63,239 (47,894–80,784)	15	46,177 (34,524–58,436)
12	50,163 (40,351-59,810)	10	60,604 (50,209–74,826)
13	49,399 (40,027–56,009)	8	61,256 (55,465–71,083)
14	46,857 (40,212–55,252)	21	27,719 (23,668–32,925)
15	45,350 (31,046–64,616)	14	46,803 (32,604–66,097)
	Rank 1 1 2 3 4 5 6 7 6 7 8 9 10 11 12 13 14 15	2010 Rank DALYs (95% UI) in thousands 1 129,795 (119,218–137,398) 2 115,227 (102,255–126,972) 3 102,239 (90,472–108,003) 4 89,524 (77,595–99,193) 5 81,549 (74,698–88,371) 6 82,689 (63,465–109,846) 7 80,667 (56,066–108,723) 8 76,980 (66,210–88,132) 9 76,779 (66,000–89,147) 10 75,487 (61,555–94,777) 11 63,239 (47,894–80,784) 12 50,163 (40,351–59,810) 13 49,399 (40,027–56,009) 14 46,857 (40,212–55,252) 15 45,350 (31,046–64,616)	2010 Rank DALYs (95% UI) in thousands Rank 1 129,795 (119,218–137,398) 4 2 115,227 (102,255–126,972) 1 3 102,239 (90,472–108,003) 5 4 89,524 (77,595–99,193) 2 5 81,549 (74,698–88,371) 33 6 82,689 (63,465–109,846) 7 7 80,667 (56,066–108,723) 12 8 76,980 (66,210–88,132) 3 9 76,779 (66,000–89,147) 6 10 75,487 (61,555–94,777) 11 11 63,239 (47,894–80,784) 15 12 50,163 (40,351–59,810) 10 13 49,399 (40,027–56,009) 8 14 46,857 (40,212–55,252) 21 15 45,350 (31,046–64,616) 14

http://www.nejm.org/doi/pdf/10.1056/NEJMra1201534

Trends: 1990-2010 change in total DALYs



http://www.healthdata.org/infographic/percentchange-total-dalys-1990-2010

Quantifying the Burden of Disease from mortality and morbidity

Disability-Adjusted Life Year (DALY)

Definition

- One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of ٠ disease, can be thought of as a measurement of the gap between current health status and an ideal health situation where the entire population lives to an advanced age, free of disease and disability.
- DALYs for a disease or health condition are calculated as the sum of the Years of Life Lost (YLL) due to premature mortality in ٠ the population and the Years Lost due to Disability (YLD) for incident cases of the health condition:

Calculation

DALY = YLL + YLD

The YLL basically correspond to the number of deaths multiplied by the standard life expectancy at the age at which death ٠ occurs. The basic formula for YLL (without yet including other social preferences discussed below), is the following for a given cause, age and sex: YLL = N x L

where:

N = number of deaths

L = standard life expectancy at age of death in years

Because YLL measure the incident stream of lost years of life due to deaths, an incidence perspective is also taken for the ٠ calculation of YLD. To estimate YLD for a particular cause in a particular time period, the number of incident cases in that period is multiplied by the average duration of the disease and a weight factor that reflects the severity of the disease on a scale from 0 (perfect health) to 1 (dead). The basic formula for YLD is the following (again, without applying social

preferences):

YLD = I x DW x L

where:

I = number of incident cases

DW = disability weight

L = average duration of the case until remission or death (years)

http://www.who.int/healthinfo/global burden disease/en/



Global Burden of Disease (GBD)

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CALL FOR COLLABORATORS

The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) is the largest and most comprehensive effort to date to measure epidemiological levels and trends worldwide. We invite you to apply to be a GBD collaborator.

Apply here



Call for collaborators

The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) is the largest and most comprehensive effort to date to measure epidemiological levels and trends worldwide. With more than 1,000 GBD collaborator from 108 countries participating in the most recent update, we are always working to expand the collaborative network. Enrollment is now open for the next round of the GBD, which will produce estimates through the end of 2015. We invite you to apply to be a GBD collaborator if you are interested in participating in this next iteration of the GBD.



About GBD



GBD Technical Training Workshop

> THE GLOBAL BURDEN OF DISEASE: GENERATING EVIDENCE,

GUIDING POLICY



About

GBD Data Visualizations





Disparities

Crude death rate by broad cause group, 2000 and 2012 By WHO region





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http://www.who.int/gho/mortality_burden_disease/causes_death/region/en/

SEARCH FOR "BANG FOR BUCK"

Spotlight on leverage points: Potential life expectancies in the absence of selected risks to global health, 2004



http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf

Get to know DCP3!

DCP3 Disease Control Priorities economic evaluation for health	Contact Us Log Search	g In Q
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Home		
Volumes	About Disease Control Priorities, Third Edition	
Essential Surgery Reproductive, Maternal, Newborn, and Child Health Cancer Mental, Neurological, and Substance Use Disorders Cardiovascular, Respiratory, Renal, and Endocrine Disorders	<i>DCP3</i> presents its findings in nine individual volumes addressed to specific audiences. The first evolumes are structured around packages of conceptually related interventions, while the ninth provides an overview with main findings and conclusions about achieving health priorities. Similar to the first and second editions, <i>DCP3</i> includes an up-to-date comprehensive review of the efficacy, effectiveness, and cost-effectiveness of priority health interventions with the goal of influencing program design and resource allocation at global and country levels. In addition, <i>DC</i> volumes present systematic and comparable economic evaluation of selected interventions, delivery platforms, and policies, based on new analytical methods being developed specifically DCPN. The comprehensive economic evaluation incorporates evidence on intervention quality uptake, along with non-health outcomes such as equity and financial protection.	eight he <i>CP3</i> for and
AIDS, STIs, TB and Malaria Injury Prevention and Environmental Health Child & Adolescent Development	Series Editors	
Disease Control Priorities		

Top charities

These are evidence-backed, thoroughly vetted, underfunded organizations. We discuss the relative strengths and weaknesses of these organizations in this post. We discuss our process for reaching these recommendations below.

GiveWell

REAL CHANGE FOR YOUR DOLLAR

Against Malaria Foundation

Donate »

Print

🖂 Email

Preventing deaths from malaria in sub-Saharan Africa

Malaria is a major problem in sub-Saharan Africa. Over 1 million people – mostly children – die each year. Insecticide-treated bed nets prevent deaths and many other non-fatal cases of malaria and are relatively inexpensive – about \$5 per net. (For more details, see our full report on <u>bed nets</u>.) We believe that AMF effectively expands access to bed nets. <u>More</u>.

GiveDirectly

Donate »

Distributing cash to very poor individuals in Kenya and Uganda

Directly transferring money to poor individuals allows them to purchase that which they believe will help them most. Strong evidence indicates that cash transfers lead recipients to spend more on their basic needs (such as food) and may allow recipients to make investments with high returns, with no evidence of large increases in spending on items like alcohol or tobacco. (For more, see our full report on <u>cash transfers</u>.) We believe that GiveDirectly effectively distributes cash to extremely low-income individuals. <u>More</u>.

Schistosomiasis Control Initiative (SCI)

Donate »

Donate »

Treating people for parasite infections in sub-Saharan Africa

SCI supports programs that treat people for parasitic worm infections that cause short-term symptoms such as anemia, and may cause longer-term developmental problems. These worms are extremely inexpensive to treat. (For more, see our full report on <u>deworming</u>.) We believe that SCI cost-effectively expands access to deworming treatment. <u>More</u>.

Deworm the World Initiative (led by Evidence Action)

Treating children for parasite infections in developing countries

The Deworm the World Initiative (DtWI), led by Evidence Action, supports programs that treat children for parasitic worm

cost-effectiveness in global health



read this essay: Ord, 2013. The Moral Imperative toward Cost-Effectiveness in Global Health http://www.cgdev.org/publication/moral-imperative-toward-cost-effectiveness-global-health

the least effective HIV/AIDS intervention produces less than 0.1 percent of the value of the most effective

Surgical treatment for Kaposi's Sarcoma Antiretroviral therapy Prevention of transmission during pregnancy Condom distribution Education for high risk groups



Cost-effectiveness: DALYs per \$1,000

Find location-specific evidence, too: India example

	Extremely cost effective (<inr4400 [US\$100] per DALY averted)</inr4400 	Cost effective (INR4400–44 000 [\$ 100–1000] per DALY averted)	Less cost effective (>INR44 000 [\$1000] per DALY averted)
Population-wide interventions	Prevention and control of tobacco and alcohol use (through measures to reduce advertising, availability, and affordability of products, especially bidis and locally brewed alcohols); dietary salt reduction programme; screening for refractory error and provision of glasses	Screening for hearing loss and provision of hearing aids; road traffic injury prevention (enforcement of speed limits, drink-driving law, motorcycle helmet use, and seat belt use)	Bicycle helmet use by children
Primary-care interventions	Preventive drug treatment for high blood pressure (systolic blood pressure >160 mm Hg)	Preventive drug treatment for high cholesterol; preventive combination therapy for individuals at high risk of a CVD event; flu vaccination (for people aged >60 years) and smoking cessation programmes for people with COPD; brief interventions for alcohol misusers; depression treatment	
Secondary-care and tertiary-care interventions	Treatment of stage I breast cancer (lumpectomy and radiotherapy); extensive breast cancer programme (treatment of all stages and biannual screening for women aged 50–70 years)	Treatment of acute MI with aspirin or streptokinase; treatment of post-acute MI with aspirin, ACE-inhibitors, β blockers, or statins; treatment of post-acute ischaemic stroke with aspirin, statins, or blood-pressure-lowering drugs; treatment of CHF with ACE-inhibitors or β blockers; extracapsular cataract extraction with posterior chamber lens implant	Treatment of acute MI with ACE-inhibitors or β blockers; organised stroke unit care; treatment of severe COPD disease and exacerbations; intracapsular cataract extraction by use of aphakic glasses; schizophrenia treatment

This table only includes interventions for which cost-effectiveness estimates have been calculated. Daly=disability-adjusted life years. CVD=cardiovascular disease. COPD=chronic obstructive pulmonary disease. MI=myocardial infarction. ACE=angiotensin-converting enzyme. CHF=congestive heart failure.

Table 2: Intervention strategies categorised by level of health system and cost-effectiveness

http://www.thelancet.com/series/india-towards-universal-health-coverage

INVEST IN BETTER DATA

Civil registration coverage of cause of death (%), 2005–2011



boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines which there may not yet be full agreement. Data Source: World Health Organization Map Production: Public Health Information and Geographic Information Systems (GIS) World Health Organization



© WHO 2

http://gamapserver.who.int/mapLibrary/Files/Maps/Global CivilRegistrationDeaths 2005 2011.png

MONEY AND HUMAN RESOURCES: NEEDED INPUTS ARE MISSING

Doctors per person

- In Massachusetts? 4.69 (nonfederal) per 1,000
- In Malawi? 0.02

Health Expenditure Per Capita (PPP; International \$, 2010)



Data Not Available

http://kff.org/global-indicator/health-expenditure-per-capita/#

Flow of Development Assistance for Health From Source to Channel to Health Focus Area in Billions of 2014 US Dollars



JAMA. 2015;313(23):2359-2368. doi:10.1001/jama.2015.5825

humungous CAVEAT: Spending does not equal health outcomes

US spends two-and-a-half times the OECD average



1. In the Netherlands, it is not possible to clearly distinguish the public and private share related to investments.

Total expenditure excluding investments.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD Health Data 2012.

http://www.pbs.org/newshour/rundown/2012/10/health-costs-how-the-us-compares-with-other-countries.html

Primary care sector is not performing so well



Asthma hospital admission

COPD hospital admission



Note: 95% confidence intervals are represented by H. Source: OECD Health Data 2012.

Table 1. Health Status of the United States and Rank among the 29 Other OECD Member Countries.						
Health-Status Measure Infant mortality (first year	United States	U.S. Rank in OECD	Top-Ranked Country in OECD*			
All races	6.8 deaths/ 1000 live births	25	Iceland (2.7 deaths/ 1000 live births)			
Whites only	5.7 deaths/ 1000 live births	22				
Maternal mortality, 2001†						
All races	9.9 deaths/ 100,000 births	22	Switzerland (1.4 deaths/ 100,000 births)			
Whites only	7.2 deaths/ 100,000 births	19				
Life expectancy from birth, 200	3					
All women	80.1 yr	23	Japan (85.3 yr)			
White women	80.5 yr	22				
All men	74.8 yr	22	Iceland (79.7 yr)			
White men	75.3 yr	19				
Life expectancy from age 65, 2003‡						
All women	19.8 yr	10	Japan (23.0 yr)			
White women	19.8 yr	10				
All men	16.8 yr	9	Iceland (18.1 yr)			
White men	16.9 yr	9				

* The number in parentheses is the value for the indicated health-status measure.

† OECD data for five countries are missing. ‡ OECD data for six countries are missing.

http://www.nejm.org/doi/full/10.1056/NEJMsa073350

Watch this

<u>Reducing child mortality – a moral and</u> <u>environmental imperative</u>

[15 minutes run time] September 27, 2010

Many countries are making good progress towards MDG4 and it's time to stop talking about Sub-Saharan Africa as one place. So, it's not all bad news—and Rosling makes stats and data compelling! For more Rosling, see http://www.gapminder.org/videos



http://www.gapminder.org/videos/reducing-child-mortality-a-moral-and-environmental-imperative/

SO: WHAT DOES GLOBAL HEALTH NEED?

Kim, Farmer, Porter: Framework for global health delivery



MEET YOUR CLASSMATES!



WHAT HAVE YOU GLEANED ABOUT JSS?

Our focus

- Antenatal care
- Patient care groups
- Appropriate technology
- Mid-level health workers

Antenatal care package. There are plenty of guidelines for good antenatal care, but the realities of frontline care in rural settings in India present a very different set of options. Can we help JSS design a sequence of visits, prioritize guidelines and tests, and think through the information gathering, communication, case management, decision rules, and planning requirements to make the most of their staff, clinics, hospitals, and other assets to ensure the highestquality healthcare?

Patient groups. How can JSS make better use of patient groups (currently they run over two dozen) to help the many patients they serve who have chronic conditions, including alcohol addiction and epilepsy? What can we glean from others about how to do this effectively?

Mid-level health workers. How to equip health workers to formulate better questions, search strategies, requests for help, problem-solving methods, and diagnostic, referral, and action strategies—and in short enable them to guide their own learning? JSS relies on mid-level health workers, locally-educated 8th or 10th grade school graduates selected for their smarts and dedication. They are experienced and collaborate with others across the JSS system (which includes family home visits, camps, local clinics, and tertiary hospitals). JSS foresees a growing role for such mid-level workers along with the need for collaborative on-the-job learning methods.

Technology development and deployment.

Over the years, JSS staff saw many needs for appropriate technologies for healthcare, and have steadily built a collection of their own inventions in their home-grown lab. How can we help them do this even more efficiently and effectively—and leverage what we have access to here at MIT?

						Q	😳 Anjali Sastry 🗸
For groups		[⊕	Ē	Ø		Search	Q
SIP on global health • 3 members (1 outside of ghdLab)						<u>*</u> +	Settings
Name 🔺	Modified				Ad	ditional sharinį	3
for ANC group							
for health worker group							
for patient care group							
for technology group					0	9	

e

BREAK

Now to 4:15: seven ~10 minute tasks

- discuss personas and problem statements to sketch out team's INITIAL key questions
- divide and conquer the CONTEXT readings, assigning one per person
- read/skim your reading now
- discuss readings in your team to identify 3 or 4 that everyone agrees to read tonight
- explore your team folder together
- team discussion with Priyank Jain/Anjali Sastry
- Draft your email to JSS

> context and key materials		Ē	Ø		Search	Q
SIP on global health • 3 members (1 outside of ghdLab)					* +	Settings
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Context India Chhattisgarh						
Context India deeper addtnl						
Context JSS						
Context JSS deeper						
for all students						

Next steps

- Review the key materials and context folders tonight
 - Your JSS contacts are listed in the "for all students" folder
- Send an email to these contacts
 - Cc Tim
 - Intro yourselves
 - Confirming call Tuesday 5:45 pm IST
 - Initial 1 or 2 Qs

WRAP UP