IMPROVING HEALTHCARE QUALITY THROUGH PATIENT REGISTRIES

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GLOBAL FLOWS IN GLOBAL HEALTH
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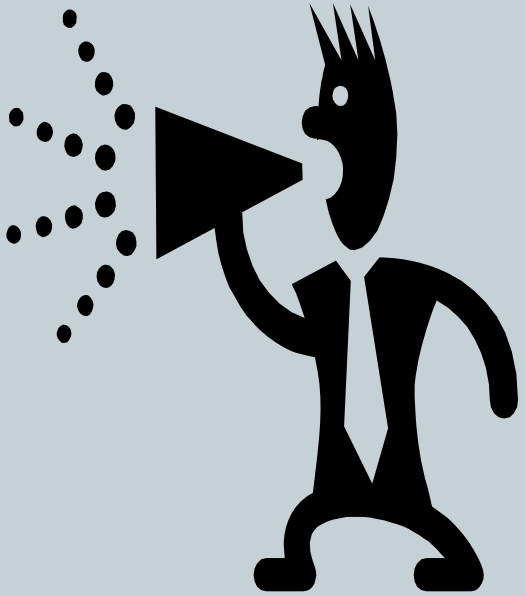
A loud call for data in global health, but…

	Number of indicators	Comment	Source
HIV/AIDS	142	57 general indicators for national programmes and six monitoring and evaluation guides for specific components	UNAIDS. National AIDS programmes: a guide to monitoring and evaluation (2000)
Tuberculosis	57		WHO. Compendium of indicators for monitoring and evaluating national tuberculosis programs (2004)
Malaria	29		Roll Back Malaria. Framework for monitoring progress and evaluating outcomes and impact (2000)
Reproductive health	148	Includes short list of 17 indicators; another compilation gives 250 indicators	WHO. Monitoring reproductive health: selecting a short list of national and global indicators (1997)
Adolescent reproductive health programmes	292		FOCUS on Young Adults. A guide to monitoring and evaluating adolescent reproductive health programs (2000)
Child health	102		USAID/MEASURE Evaluation. A guide for monitoring and evaluating child health programs (2005)
Essential drugs	98	Focusing on input, process, output of programmes	WHO. Indicators for monitoring national drug policies (1999)
Decentralisation process	83	Range of suggested indications cover input, output, and outcomes	PHR plus and MEASURE Evaluation. Monitoring and evaluation of decentralization reforms in developing country health sectors (2004)

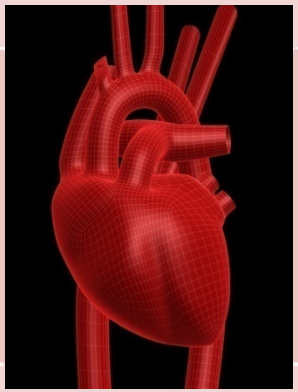
Table 2: **Number of indicators proposed for monitoring and evaluation of selected health and disease programmes**



Health statistics now: are we making the right investments? Boerma & Stansfield, Lancet 2007; 369: 779–86

…challenges remain

Lack of reliable data - even for MDGs!



Preoccupation with MDGs does not account for current global disease burden

Population-based surveys and estimates by global agencies lag and are disassociated from facility-based improvements

Facilities lack data for measuring and improving quality

Towards good practice for health statistics: lessons from the Millennium Development Goal health indicators
Christopher J L Murray Lancet 2007; 369: 862–73

The Potential Power of Outcomes Registries

- Detailed case report
  - Patient history and risk factors
  - Process measures related to the arrival, admission, and discharge
  - Presentation, primary and secondary diagnoses
  - Timing, dosing, and choice of drugs administered
  - Timing of diagnostics and treatment procedures
  - Complications and in-hospital mortality

- The first step in improving hospital-based quality
  - Provide accountability
  - Directs focus for improvement strategies
  - Allows for the evaluation of interventions
  - Surveillance for disease incidence/prevalence and outcomes
  - Enhances opportunities for applied research

Proven Impact on Quality of Care

- Identify factors associated with improved outcomes
- Identify prevalence of sub-standard or dangerous treatment patterns
- Quantifying disparities in treatment patterns

Why Here? Why Now?

- High burden of CVD in Egypt
- Healthcare delivery system poised to make improvements
  - Physical infrastructure (plant, equipment)
  - Human resources (healthcare worker density)
  - What is missing? Best next steps? Key investments?
- Without data, facility-level and system-level improvement efforts are blind with respect to prioritization or evaluation
- Benefits to BOTH partners in collaborative research
- But is it possible? Is it a good investment?

ACS Registry: Pilot Goals

- ☑ Technical feasibility: patients and data
- ☑ Operational/political feasibility
- ☑ Develop a data collection and management tools
- ☑ Estimate and identify resources
- ❑ Develop recommendations for a long-term plan

Center of Excellence ACS Registry Pilot

- Partnership between Yale University and the National Bank of Egypt
- A locally-adapted version of the NCDR ACTION registry for Acute Coronary Syndrome (also GULF RACE)
- Launched in June 2009, with 5 diverse pilot sites participating
  - Kasr al Aini (University - Private)
  - Bab al Sharaya (University – Public)
  - Hussein (University – Public)
  - Medinat Nasr (MOHP - Public)
  - Al Salema (Private)
- Consecutive patients admitted with elevated cardiac markers and a primary diagnosis of Unstable Angina, STEMI, or N-STEMI
- Goal: 500 patients in pilot

Focus on the "How"

- Collaborative development to build trust and improve the quality of the registry
  - Weekly visits with site leadership
  - Each hospital designated a senior resident from its CCU
  - Phone numbers/contact information for immediate feedback
  - Suggestion space on the data collection form
- The lessons learned presented here are a summary of the feedback received through these channels

Lesson #1: It is possible

- Lack of a consistent medical record meant that the data collection strategy had to occur in real time
- Allowing sites to innovate in operationalization lead to local problem-solving and rapid trouble-shooting
- A new opportunity for staff: the pilot teams were incredibly responsive and hard-working
- A tiny central office to support the pilot – scalable!

Lesson #2: Utilize rapid cycles of change

- Weekly updates to data collection tools showed that site suggestions were heard and honored; improved tool quality quickly (clarity and local “fit”)
- Quick wins as front-line staff engage in pilot data collection (different from top-down or centralized reporting requirements)
- Data feedback as incentive for high-quality data

Lesson #3: Build a culture of applied research and quality improvement

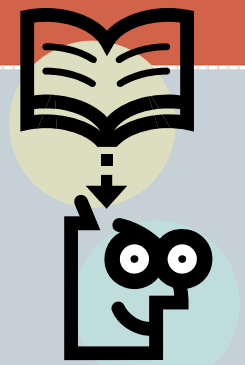
- Key motivators:
  - Opportunities to access the data for individual research
  - Direct measures of organizational improvement
  - Opportunities to benchmark
- Need to differentiate between the registry and a one-time study to justify methods and investment

Lesson #4: Model a non-punitive culture

- Continuing to navigate “social desirability bias” (actual vs ideal care practices)
- Clear consistent communication about data management strategies was key. Sites were concerned that hospital or individual performance would be shared.
- Outstanding Questions: What about missing variables? Hard-stops for required fields?

Lesson #5: Tackle the realities of human resource and IT Constraints

Physician/resident engagement → Nursing → Data abstraction → Analysis and reporting

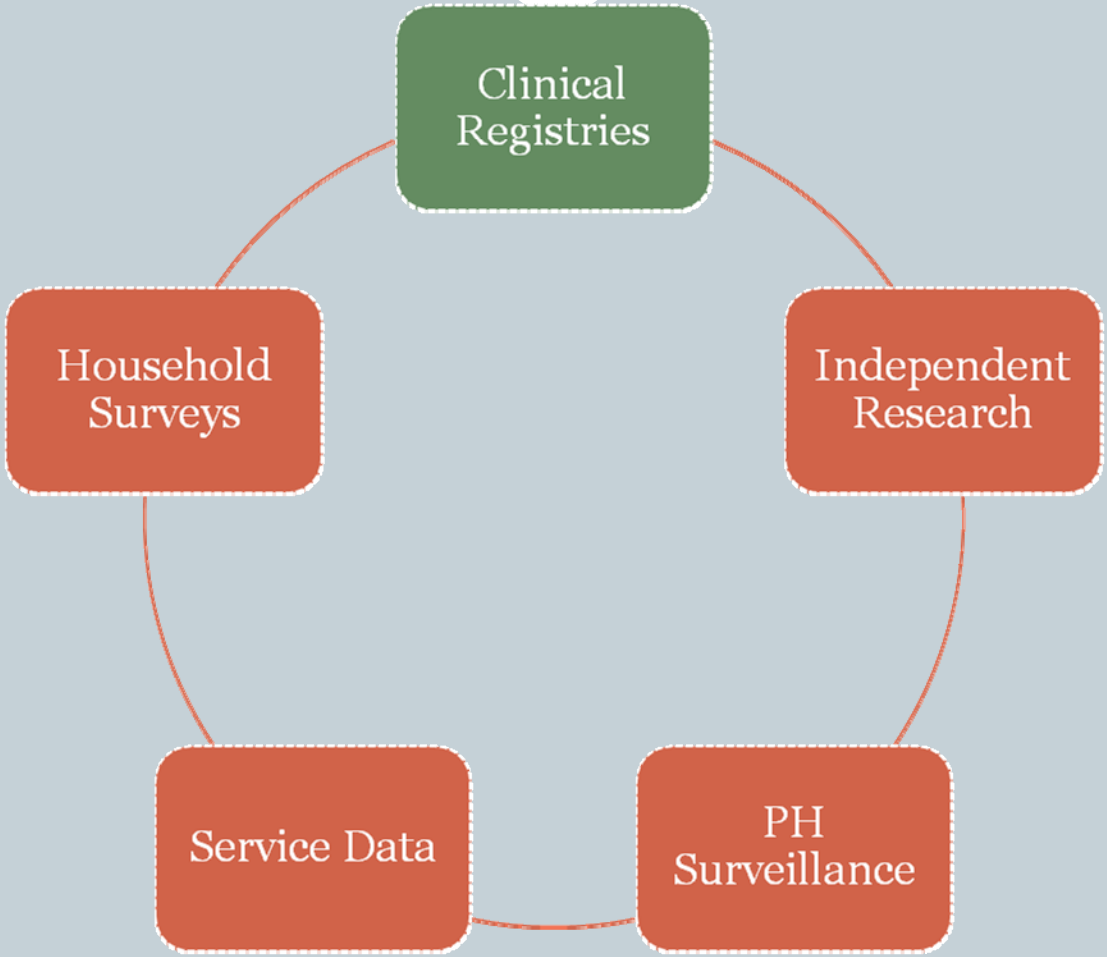


Which are key opportunities to leverage NOW for sustainable operations over the long term?

Global Flows: Inter-Asian Connections

- Health systems at a tipping point – key opportunity!
- Shared hospital-level approach to data
  - Comparison: Regional benchmarking
  - Development: Locally-appropriate treatment guidelines
  - A Voice: QI collaboratives driven by regional priorities
- Health workforce issues
  - How to embed QI into pre-service training for healthcare professionals?
  - Balancing health worker density issues and excess capacity
  - Regional training programs for researchers in clinical and health services research to support continued improvement

The missing link in global health data



Conclusions and Remaining Questions

- A feasible, cost-effective, scalable "missing link" in the call for data in global health, with direct links to applied quality improvement
- Factors for success: extended pilot to allow for adequate learning, rapid cycles of change/data feedback, great local partners/ownership
- Best "next steps" to building capacity in operational research?
  - Training scientists
  - Academic partnerships to develop infrastructure
  - Alignment with professional organisations
- Results of the Pilot to be presented at CardioEgypt (Feb 2010)

Thank you

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National Bank of Egypt

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- Yasmin Khalil

Pilot Sites

- Kasr al Aini
- Medinat Nasr
- Bab al Sharaya
- Hussein
- Al Salema