Maternal Concept Lab HST.S14 Project

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- World's best practices within MNCH available in highly accessible, standards-based formats
  - High-quality MNCH content reused across multiple projects, organizations and countries.

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- **MDG 4** – Reduce by two-thirds the under-5 mortality rate

  - U5MR (under-5 mortality rate)

  - IMR (infant morality rate)

- **MDG 5** – Reduce by three-quarters the maternal mortality ratio; Achieve universal access to reproductive health

  - MMR (maternal mortality rate)

  - Births attended by skilled health personnel

  - Contraceptive prevalence

  - Antenatal care coverage

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Interventions are known!

Chart of packages of interventions for pregnancy care removed due to copyright restrictions.

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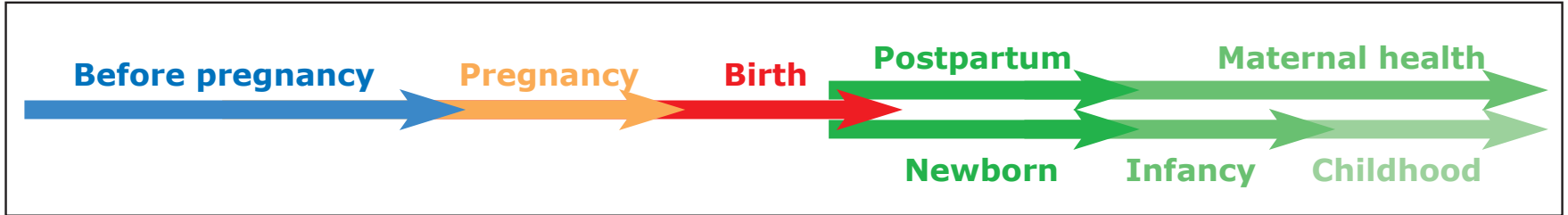In Health

MNCH Best Practices…

Image by MIT OpenCourseWare.

- PAHO, Perinatal Clinical Record

- UNICEF/USAID, Community Integrated Management for Childhood Illness

- FHI, Family Planning Protocols

PAHO Perinatal Clinical Record

Clinical record removed due to copyright restrictions.

...standards-based formats...

- Medical Terminology

  - Concept dictionary with 200,000 terms mapped to international reference terminologies
    - SNOMED
    - ICD-10
    - HL7
    - LOINC
    - RxNorm

  - Partnership with Columbia University International eHealth Laboratory

  - Data → Information → Indicators

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Concept Search Tool

- Multiple Dictionaries
- Concept ID
- Concept Synonyms
- Concept Set
- Descriptions
- Question/Answer Sets
- Class and Dataype
- Mappings
- Concept Lists
- List Highlighting
- Advanced Filters

MCL Search Example

Concept Mapping

Core Dataset and Indicators

MCL:Core

Patient Counseling — Drugs/ Medications — Referrals

Breastfeeding

Vaccinations/ Immunizations

OPV

Tetanus Toxoid

...
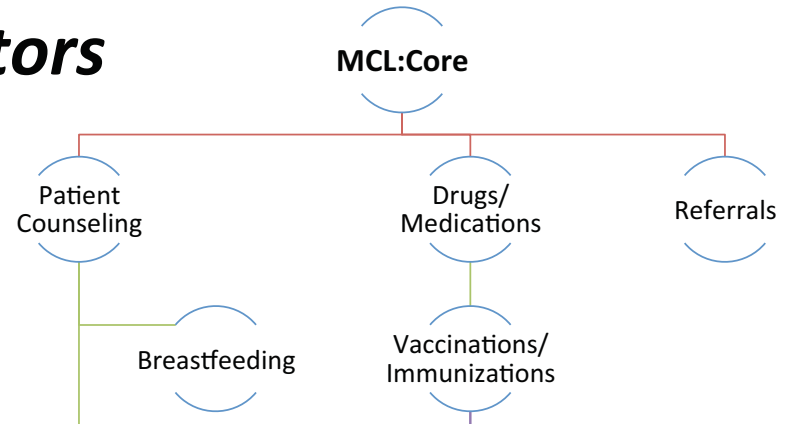
Indicator	MDG	Description	Unit
Maternal mortality ratio (per 100 000 live births) - interagency estimates	5	The maternal mortality ratio (MMR) is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified year.	Deaths per 100 000 live births
Births attended by skilled health personnel (%)	5	The proportion of births attended by skilled health personnel. Numerator: The number of births attended by skilled health personnel (doctors, nurses or midwives) trained in providing life saving obstetric care, including giving the necessary supervision, care and advice to women during pregnancy, childbirth and the post-partum period; to conduct deliveries on their own; and to care for newborns. Denominator: The total number of live births in the same period.	N/A
Contraceptive prevalence (%)	5	The percentage of women aged 15-49 years, married or in-union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.	N/A
Contraceptive prevalence, among women aged 15-19 (%)	5	The percentage of women aged 15-19 years, married or in-union, who are currently using, or whose sexual partner is using, at least one method of contraception, regardless of the method used.	N/A
Adolescent fertility rate (per 1000 girls aged 15-19 years)	5	The annual number of births to women aged 15-19 years per 1,000 women in that age group. It is also referred to as the age-specific fertility rate for women aged 15-19.	Births per 1000 women in the respective age group
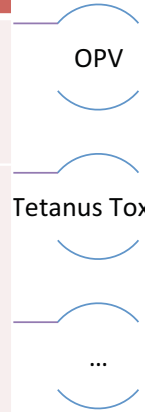
...highly accessible formats...

- Compatible with Common Platforms

  - JavaRosa Compatible Xforms

  - OpenMRS

  - DHIS2 – SDMX-HD

- Packaged for re-use

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The Project

Prepare selected MNCH best practices for re-use while contributing to the development of a platform and processes for use of standard interface terminologies.

1. Map selected MNCH best practices to the dictionary

2. Develop core dataset and link to WHO Indicators

3. Select and design delivery platform (paper, mobile, OpenMRS, etc.)

4. Design relevant reports, tools, processes to support delivery of the tool

5. Package for reuse

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HST.S14 Health Information Systems to Improve Quality of Care in Resource-Poor Settings
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