Closing the gaps: improving maternal and perinatal outcomes through building an integrated referral system in vast rural areas

Natalia Vartapetova, MD, PhD, DMedSci
GMNHC 2015
Russia MNCH Background:

- > 90% of deliveries in maternity hospitals
- Maternal mortality 6X higher than EU
- Infant mortality 2X higher than USA
- High prevalence of outdated and non-evidence based medical practices

USAID-funded JSI-led MNCH projects in Russia:

Promoted, implemented and scaled up effective care during pregnancy and childbirth to improve health outcomes
USAID-funded Projects regions 2000-2012: population over 35 million, more than 300 facilities involved

Institutionalizing Best Practices in Maternal and Child Health Project 2008 - 2012
Irkutsk and Tuymen regions: 60,000 deliveries/year and distances to maternal facilities up to 1,000 kilometers.

30 urban-type communities
5,071 rural communities

Issues:
Access
Quality of care
Approaches

- Establish clear criteria for designation of maternal units for levels of care integrating emergency response and preterm birth
- Develop policy and evidence-based practice guidelines/standards
- Continually train medical staff at all levels
Approaches

• Organize effective partnerships between the levels of care
• Establish Emergency Care Counseling Centers
• Establish transport plans and reliable communication system between facilities and transport teams, and facilitate return transport for mothers with newborns
Approaches

• Work with decision-makers and community to foster the development of regionalization and equitably distributed resources throughout the region, and health staff retaining mechanisms
Approaches: Audit the effectiveness of the system, maternal and perinatal outcomes and complications

Proper implementation of the Essential Newborn Care package in health facilities (% coverage)
Results: Tuymen region perinatal mortality, stillbirths and early neonatal mortality (per 1,000 live births)
Results: Irkutsk region perinatal mortality and early neonatal mortality (per 1,000 live births)

- Perinatal mortality
- Early neonatal Mortality
Results: Maternal mortality (per 100,000 live births)

- **2006/2007**
  - Irkutsk: 17.5
  - Tuymen: 17.4
  - Russia: 22.8

- **2008/2009**
  - Irkutsk: 12.3
  - Tuymen: 4
  - Russia: 21.3

- **2010/2011**
  - Irkutsk: 0
  - Tuymen: 7
  - Russia: 16.3
Russia MOH: perinatal deaths in the Russian Federation 2002-2012 (per 1,000 live births)

- Perinatal mortality
- Stillbirths
- Early neonatal mortality

Referral system

-30%
-36%
-12%
Thank you!