## Transforming Lives & Health Outcomes for At-Risk Children in Rwanda

September 14, 12 p.m. EDT

#### **Speakers**

#### Erick Baganizi

Director of Maternal, Newborn, Child & Adolescent Health at Inshuti Mu Buzima

#### **Moderator**

#### **Leslie Friday**

**Director of Content** 

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Inshuti Mu Buzima Pediatric Development Clinic Program Manager



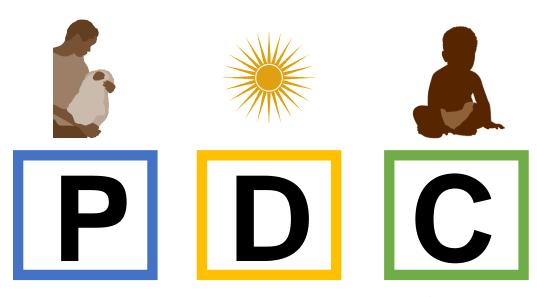




https://www.youtube.com/watch?v=2vdb5yeyhmk&t=2s







The Pediatric Development Clinic

# A Model to Support Early Childhood Development for High-Risk Children Under Five



















### **Background**

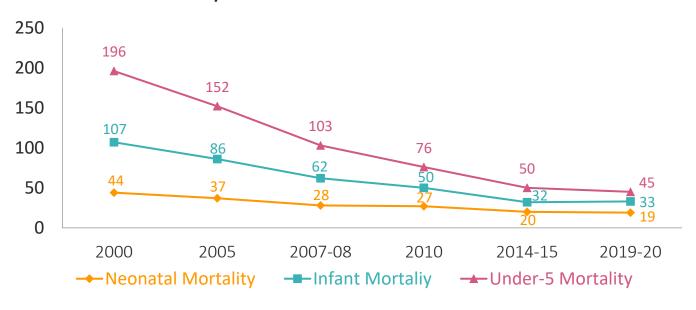
- Over the last decade there has been improved neonatal survival and increasing focus on longer-term outcomes for newborns... for all newborns to thrive!
- Neurodevelopmental impairment is common after newborn conditions\*
- Early identification and intervention is crucial to improve outcomes and support families, however, there is limited access to specialized services in many LMICs
- Discrimination and exclusion are commonly experienced by families and are additional barriers to accessing services
- Empowering parents and HCW with knowledge and skills is essential to improve care and outcomes





### **Rwanda Context**

Tremendous improvement in neonatal survival





- Emerging group of vulnerable infants at higher medical, nutritional, and developmental risks long-term disability
- Need for systematic follow-up and integrated early interventions





### **Vulnerabilities of High-Risk Infants**



#### **Poor Nutrition**

- Feeding difficulties
- Malnutrition and stunting



## **Poor Development**

- Developmental delays: motor and speech
- Cerebral palsy
- Hearing and vision problems
- School problems: learning disabilities, attention deficits



#### **Poor Health**

- Infections
- Chronic lung disease
- Non-communicable diseases:
  - Cardiovascular diseases
  - Insulin resistance, diabetes



Increased risk of mortality in infancy and early childhood





### Pediatric Development Clinic (PDC) 1

- Started in 2014 in Rwinkwavu by PIH/IMB in collaboration with MOH and UNICEF; expanded to Kirehe in 2016
- PDC: Integrated model of structured medical, nutritional & developmental follow-up for highrisk infants, 0 – 5 years
  - Low birth weight & prematurity
  - Brain injury (encephalopathy following asphyxia)
  - Hydrocephalus
  - Cleft lip/palate
  - Trisomy 21
  - Global developmental delay
  - Severe acute malnutrition <12 months old child</li>
  - Post-CNS infection (cerebral malaria, meningitis)

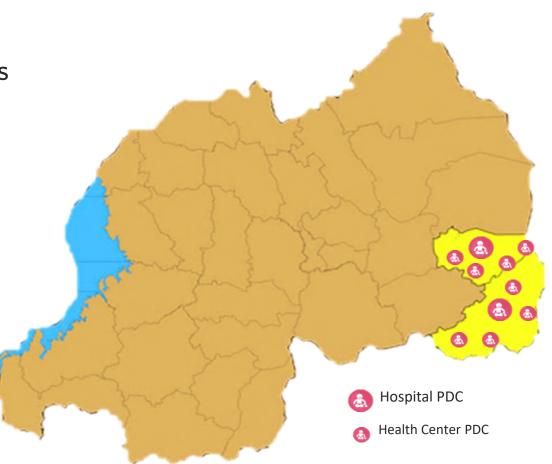






### Pediatric Development Clinic (PDC) 2

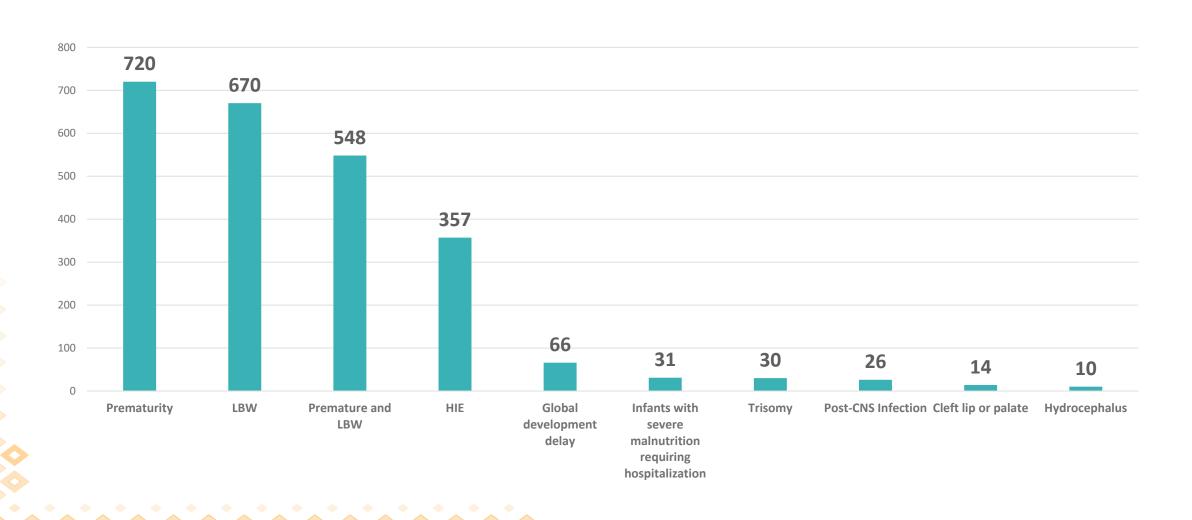
- Integrated into public health facilities
- Using task-shifting approach trained nurses and social workers to deliver PDC services
- 10 clinics operating in 2 districts Kayonza and Kirehe districts in Eastern province of Rwanda
- Over 2,600 children enrolled to date







### **PDC Enrollment**





## The Approach





# Pediatric Development Clinic (PDC) Approach for Follow-up Care of Small and Sick Newborns

Children born preterm, low birth weight or with other perinatal conditions are referred to PDC

#### RISKS

Poor health status and early mortality

Malnutrition

Sub-optimal development or disability

Sub-optimal home environment (stigma, poor caregiver mental health)

#### TARGETED NURTURING CARE INTERVENTIONS IN PDC Enhanced Growth monitoring & feeding assessment Nutrition counselling Routine clinical check-ups Supplementation and Developmental monitoring management Managing children with feeding difficulties Components of Nurturing Parenting Coaching Individual counselling Group counselling • Play and Communication Home visiting Engaging fathers SECURITY & SAFETY · Early intervention Program Integrated social support

· Parents' support groups

#### GOAL

Children **thrive** and reach their full developmental potential





### **Pediatric Development Clinic Visit Flow**

### Group Counseling

Health, nutrition, and development topics, with the opportunity for play, communication practice, and peer support



## Clinical Consultation

- 1. Medical monitoring and care
- 2. Growth monitoring, feeding assessment, and interventions
- 3. Development monitoring
- 4. Referral



## Social Worker Consultation

- 1. Social risk assessment
- 2. Additional Social Support Determination:
- Individual counseling
- Nutritional support
- Home visits







### Impact of the Pediatric Development Clinic



#### **IMPROVED SURVIVAL**

Children in PDC had

50% fewer deaths

after neonatal unit discharge



#### **IMPROVED CAREGIVER MENTAL HEALTH**

21% reduction in symptoms of anxiety and depression

which were strongly associated with violent discipline



#### **IMPROVED NUTRITION**

Children in PDC had

10% less stunting







#### **EMPOWERING CAREGIVERS**

"I was taught how to interact with my child. Before I thought my child couldn't learn anything [...] Before coming here I did not know I should do this.

Now I see that he can still learn."

#### Mother in PDC Program

"We learnt a lot from here, how we should look after and take care of children. [...] We should help eachother. There shouldn't be any dispute [in the family] about who should be looking after the kids. That is not reserved to women only."

Father in PDC Program





### **Important Cross-Cutters**

#### Stigma, exclusion & discrimination

- High social and emotional impacts. Stigma and exclusion are common
- Traditional beliefs around etiology of developmental disability contribute to blame, stigma, and exclusion

#### Gender

- Mothers are frequently the primary caregivers
- Fathers are the decision makers and gatekeepers, but also advocates, if engaged and empowered

#### **Literacy & language**

 Low levels of literacy, particularly amongst women, are a barrier to program access and fidelity

#### **Poverty**

 High cost of care and substantial loss of income due to care needs and exclusion/discrimination - barrier to impact

#### Access to care

 Low levels of confidence & knowledge about caring for children with disability means they are often turned away from care..."nothing can be done"

#### COVID

Need a risk-based approach to facilitate group activities and community visits







# Early Intervention Program (EIP)

Parents' Support Groups for Children with Developmental Disabilities & Their Families









### **Early Intervention Program (EIP)**

- A 10-modular, participatory group-based rehabilitation program facilitated by a trained expert parent and health care provider
- Uses a participatory approach to engage all and make learning practical and fun











### Aims:

- Promoting inclusion and participation of children with disability within the family and community
- Maximizing a child's developmental potential, optimizing health and quality of life
- Promoting empowerment of caregivers through information sharing and peer support
- Understanding the child and family experience, and particularly addressing stigma
- Promote the human rights of children with disability





## Early Intervention Program (EIP) CONTENT







# Referral to and Enrollment in Pediatric Development Clinic (PDC)

High-risk infant identified at birth and referred to the hospital neonatal unit

Newborn managed in neonatology until stable and safely gaining weight

Newborn discharged from hospital and referred directly to PDC for outpatient follow-up

Child enrolled at the PDC closest to their home and starts regular follow-up schedule







### Follow-up and Monitoring in the PDC During Routine PDC Visits

Child has severe developmental delay/disability

Child is enrolled in Early Intervention Program (EIP) parents' support groups Caregivers participate in a group education session

Child's health and nutrition monitored, and interventions provided as needed

Child's development monitored using GMCD\*

Child has mild to moderate delay

Parents receive targeted counseling to address mild/moderate delay

Child is developmentally on-track

Parents receive counselling on ECD and health/nutrition promotion

Child attends regular PDC follow-up until age of discharge

Co-facilitated by a trained

10 modular, participatory

**Early Intervention Program** 

group rehabilitation program

expert parent and a PDC health care provider

CHILD CONTINUES TO RECEIVE PDC FOLLOW-UP



## **Next Steps and Plans**





### **Next Steps and Plans (1)**

- PDC policy advocacy at the national level for its adoption across Rwanda
- PDC decentralization to new 14 HCs in Kirehe for TOTAL DISTRICT COVERAGE
- Integration of hearing and vision screening
- Strengthen habilitation-rehabilitation interventions for children with disability – diagnosis & treatments, regular occupational therapy outreaches, equipment













### **Next Steps and Plans (2)**

- Strengthen and expand early intervention program (EIP) parents' support groups for children with disability and their families
  - Scale up the program
  - Pilot tablet app providing an INTERACTIVE resource for both Facilitators and Families with DYNAMIC & ACCESSIBLE content







### **Next Steps and Plans (3)**

- Gender, Equality & Empowerment:
  - Engage fathers learn from RWAMREC experiences to enhance our programming with gender transformative interventions
- Social inclusion and community engagement





### **PDC Impact Story 1**





- ELBW and VLBW preterm twins born from a delayed 4-day interval
- Deliveries at Kirehe MCH COE in September 2020
- Both twins stayed for 2 months in NCU, safely reached discharge, and are now followed in PDC at their nearest HC



### **PDC Impact Story 2**



- Born on August 12th, 2016 and did not cry at birth
- Neonatal encephalopathy, hospitalized and received care at PIHsupported Kirehe Hospital NCU for 2 months
- Followed up in PDC
- Identified with cerebral palsy
- B's mother had just started her dream career in education, where she was a mathematics teacher at a local primary school. She had to quit to take care of her child full-time.
- "I miss my students a lot, but I have to find ways to repress that feeling. It's difficult!"
- Mother trained as an expert parent to support other caregivers with children with developmental disability in early intervention program
- Child continues to receive occupational therapy and rehabilitation care





