GACD DM Research Program Highlights

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Why is diabetes important globally?

- Estimates obtained in 2018 for 45 countries representing almost 90% of the world population show……

- There are more than 500 million prevalent cases of type 2 diabetes worldwide

- Prevalence is comparable between high- and low-income countries

- Prevalence will increase in all countries between 2018 - 2028

- Greatest growth will be experienced in LMICs

*Kaiser et al. Global Prevalence of Type 2 Diabetes over the Next Ten Years (2018-2028); Diabetes Jul 2018, 67 (Supplement 1) 202-1 Family Medicine
GACD DM Research Program

• Started in 2014

• 162 researchers from 27 Countries

• 17 separate projects

• Now 8 scale up projects also involve DM too
GACD DM Projects

• Developed in 24 places around the world
• Most of them LMICs
• 35% involve 2 or more countries
• 65% in isolated places
Quick facts about the projects

- 59% focus on improving systems of health care
- 41% use mhealth/mobile health technology
- 82% involve LMICs and HICs together
- 41% 5 year projects
- 24% 2 year projects
- 80% in progress
- 20% completed
Contexts and their differences/similarities

• Remote/rural
  – Extending health control in GDM in remote areas

• Community
  – Community-based intervention to prevent cardiovascular complications in DM patients
  – Community-based interventions and mhealth to improve prevent and control of type 2 DM

• Connectivity
  – Increase connectivity between patient data and the primary care physician to improve patient follow-up.
  – Use mhealth with text messages to improve follow-up of treatment in DM patients

• Technology
  – Implementing mhealth systems to better control glycaemia in DM2
  – Technological tools improve treatment adherence in CAD patients
  – Mhealth skin sensors to prevent complications of DM
Populations and their differences/similarities

- Gestational DM
  - Prevention of DM2 in newborns from mothers with GDM
  - Modification of lifestyles in women with GDM to prevent T2DM
- Workers
  - Use of technology in the workplace to prevent DM
- Whole families
  - Family-based interventions to promote a healthy lifestyle to prevent type 2 DM
- Individuals
  - Interventions and self-care to prevent DM and improve treatment
  - Implementation of mobile app to improve monitoring of glucose levels and complications in DM patients
  - Integrated model of the microfinance medical visit focused on barriers, facilitators and contextual factors to better control of DM patients
Lessons learned across contexts/populations

• With implementation
  – High turnover of personnel
  – Recruitment failure; loss to follow-up of the DM patients
  – Administrative problems
  – Political and social barriers

• With people
  – Language barriers
  – Lack of motivation of patients

• With technology
  – Use of different electronic platforms
  – People cannot use technology

• With knowledge translation/publication
  – Lack of measurement of the impact of at population level
  – Problems in publishing negative results and/or small samples
Success

• 62 publications
• 3.64/ group
• 12.4 / year!
Other successes

- To be discovered as we share our stories in the next few days together