

Leading with Care – AMPATH Purdue Kenya Partnership





INDIANA UNIVERSITY



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Duke Hubert-Yeargan Center
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ampath
Leading With Care



JOHNS HOPKINS
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Icahn School
of Medicine at
**Mount
Sinai**



COLUMBIA UNIVERSITY
DEPARTMENT OF SURGERY
College of Physicians & Surgeons



**UNIVERSITY OF
ALBERTA**

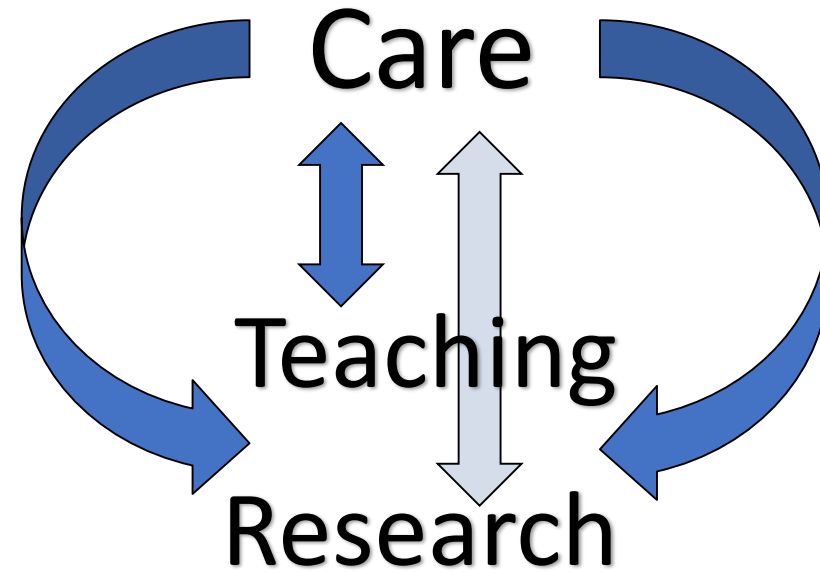
UCSF

University of California
San Francisco

PURDUE
UNIVERSITY



The Virtuous Cycle of Academic Engagement

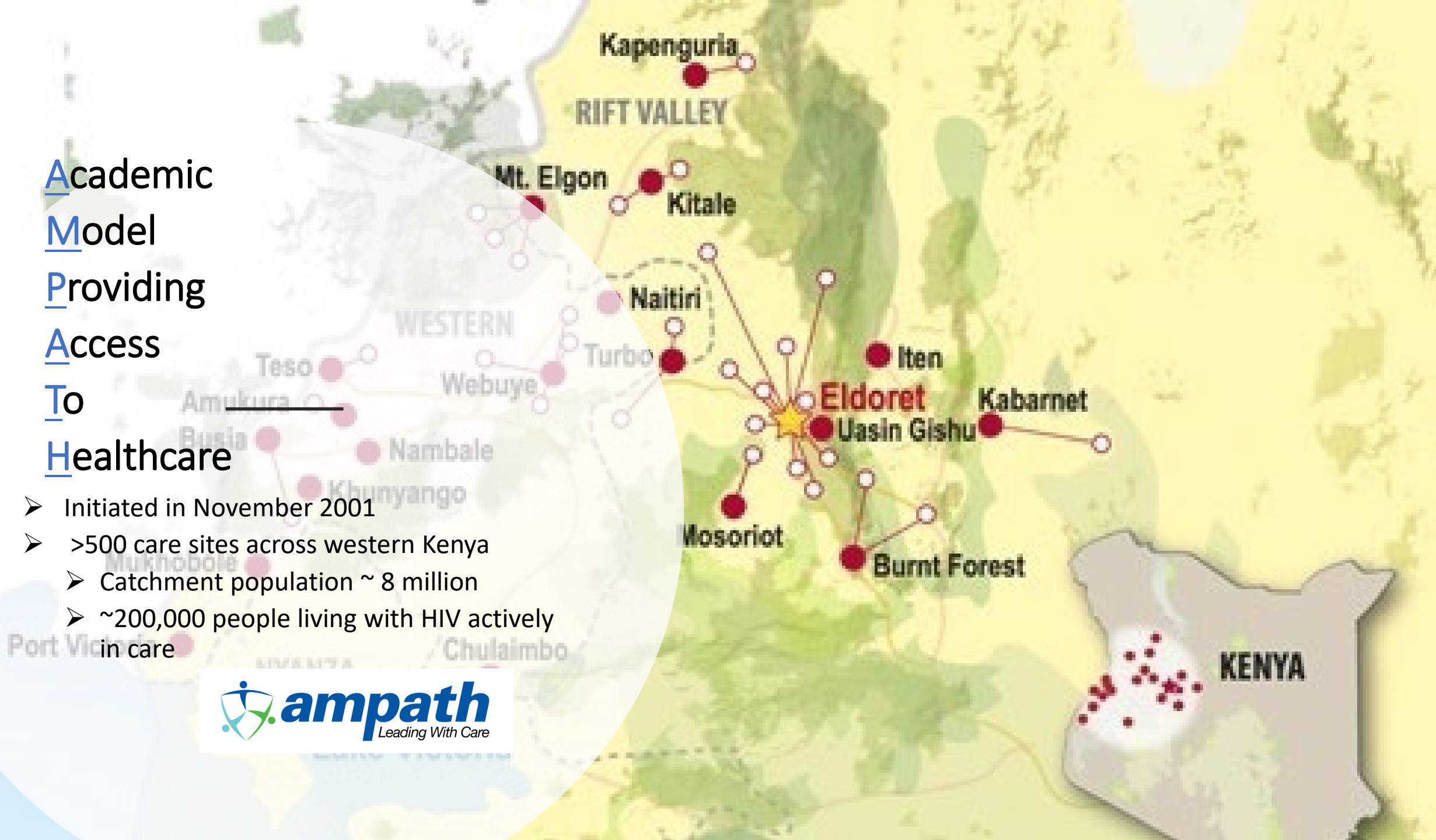




Leading with Care

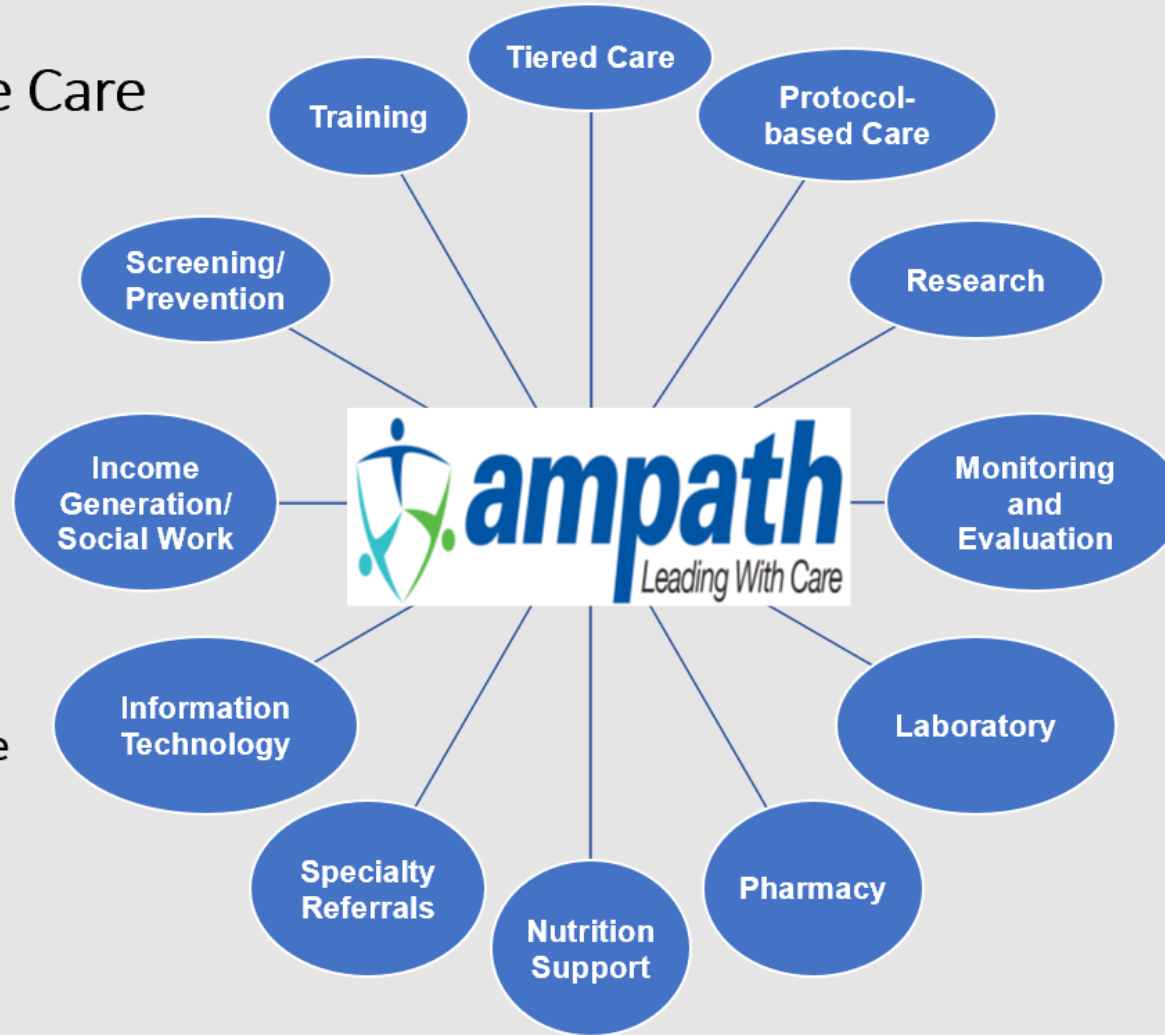
Academic
Model
Providing
Access
To
Healthcare

- Initiated in November 2001
- >500 care sites across western Kenya
 - Catchment population ~ 8 million
 - ~200,000 people living with HIV actively in care



AMPATH Comprehensive Care

- Chronic Disease Management
 - Hypertension
 - Diabetes
 - HIV
 - Mental Health
 - Cardiology
 - Pulmonology
- Specialty care
 - Tuberculosis, malaria prevention, palliative care
- Maternal and Child Health
- Cancer
- Surgery



Working Across the Health System to Deliver Comprehensive Services

National Referral Hospital - 1



District Hospitals - 36



Health Centers - 98

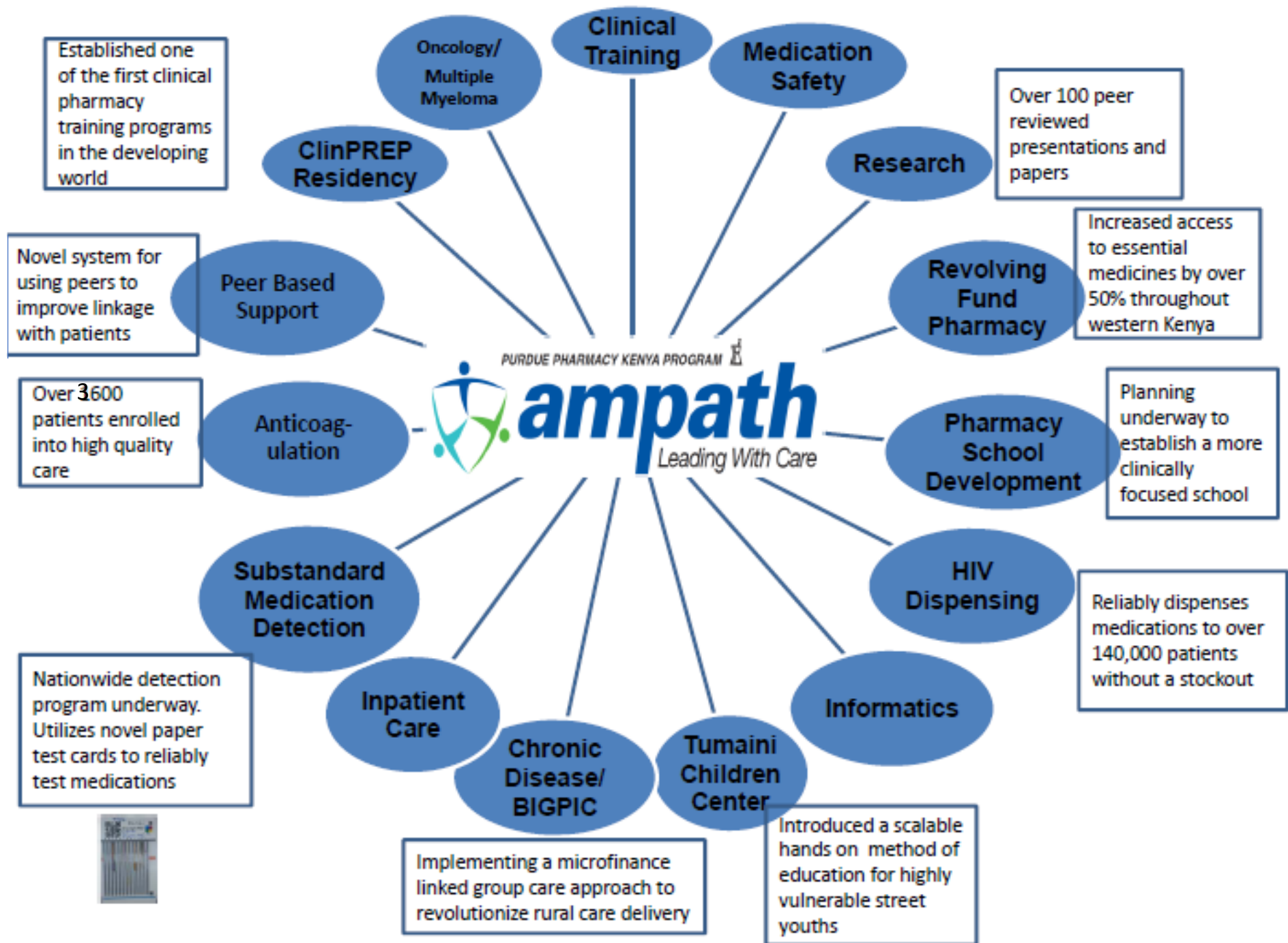


Dispensaries - 347

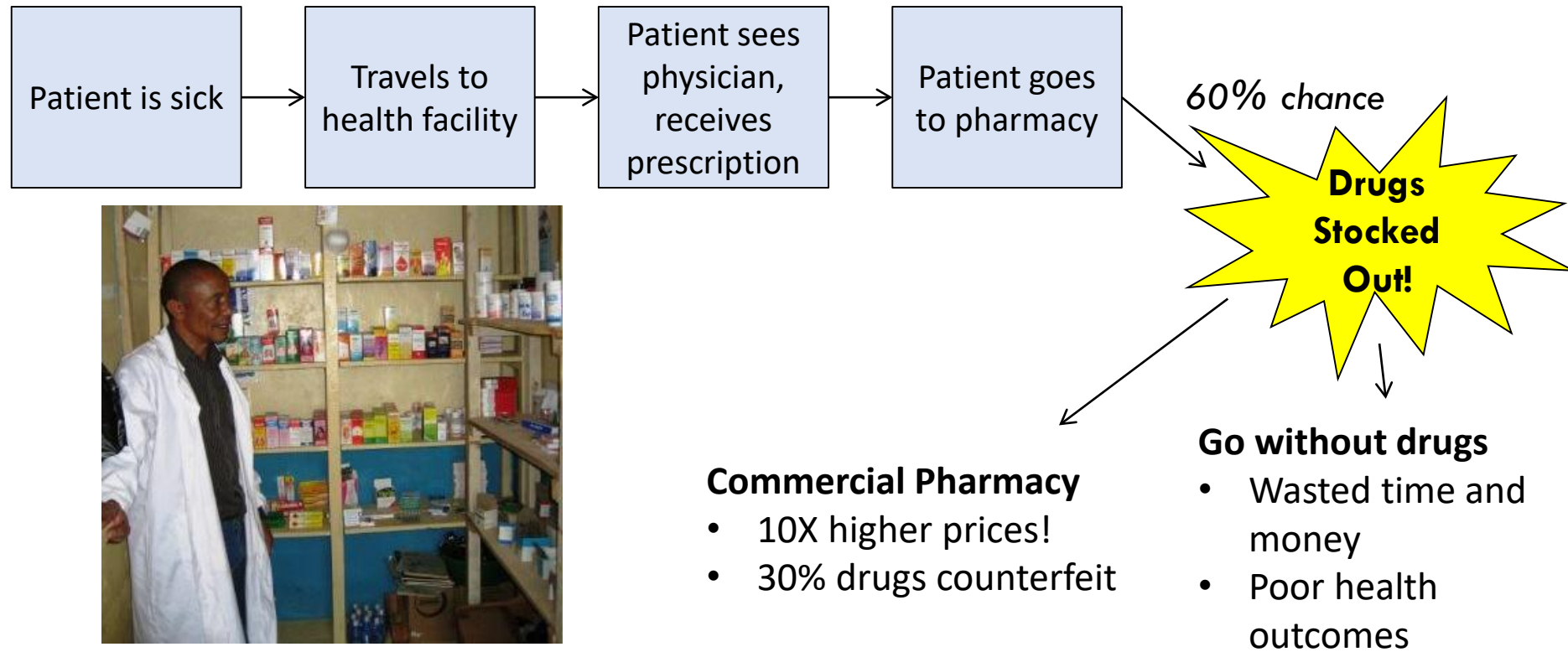


Community Network - ~1500





Supply Chain Limitations



Solution – Revolving Fund Pharmacy



Partners and Roles



Revolving Fund Pharmacy Team

- Provide oversight and management support
- Facilitate procurement of drugs

Ministry of Health

- Day-to-day operations management

Community Leaders

- Represent community voice
- Provide feedback
- Communicate accurately with community

Revolving Fund Pharmacies



Citation and short title

THE REPUBLIC OF KENYA
THE COUNTY GOVERNMENT OF BUSIA
HEALTH SERVICES FUNDING BILL 2014
A BILL FOR

An Act of Busia County Assembly to promote partnerships in the provision and delivery of health and pharmaceutical services in the County; to mobilize resources for the delivery of services; establish revolving funds in health facilities in the County to facilitate the acquisition of medicines, pharmaceuticals and diagnostics; and to ensure reliable and cost effective access to important medicines and connected matters.

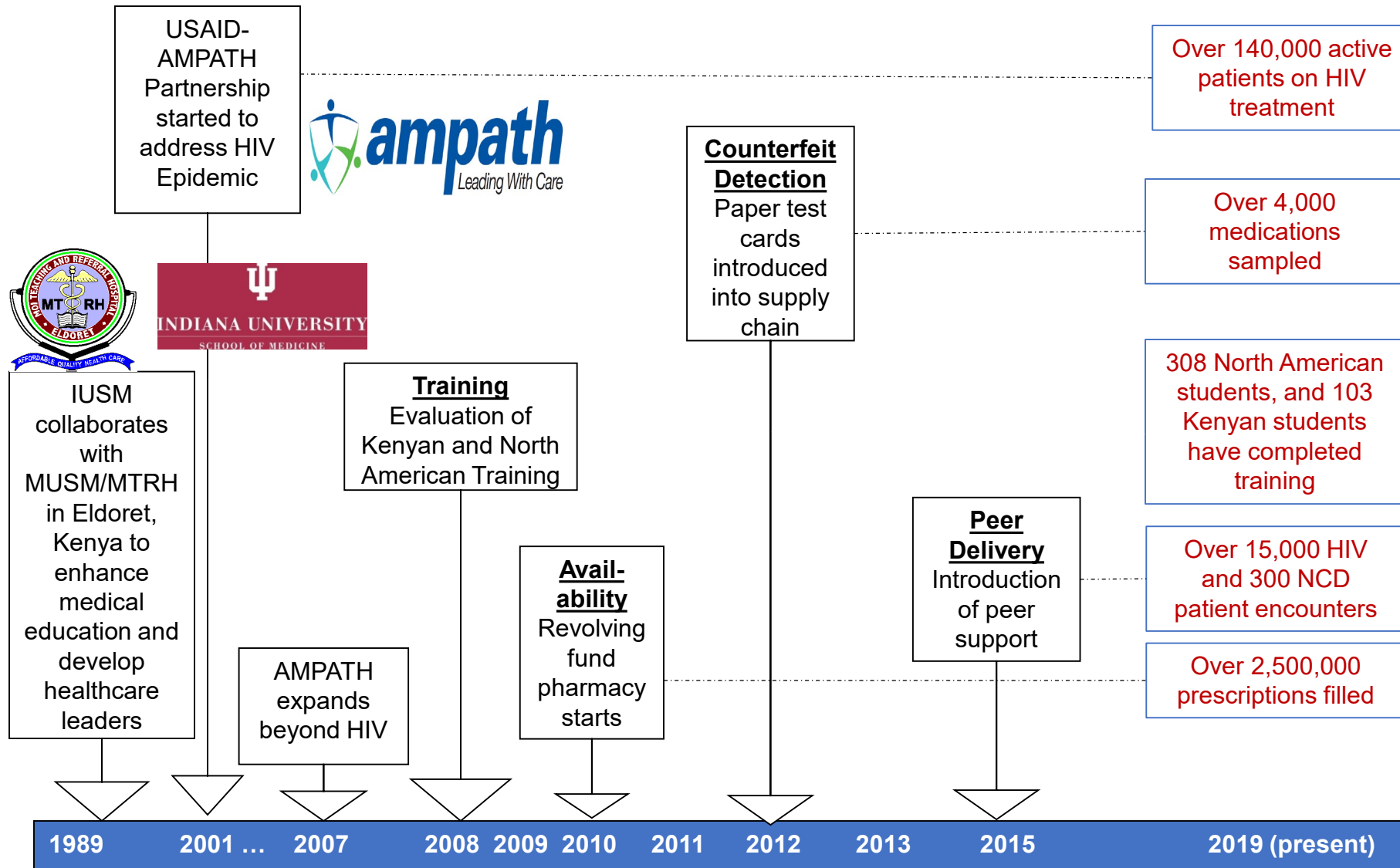
ENACTED by the County Government as follows:

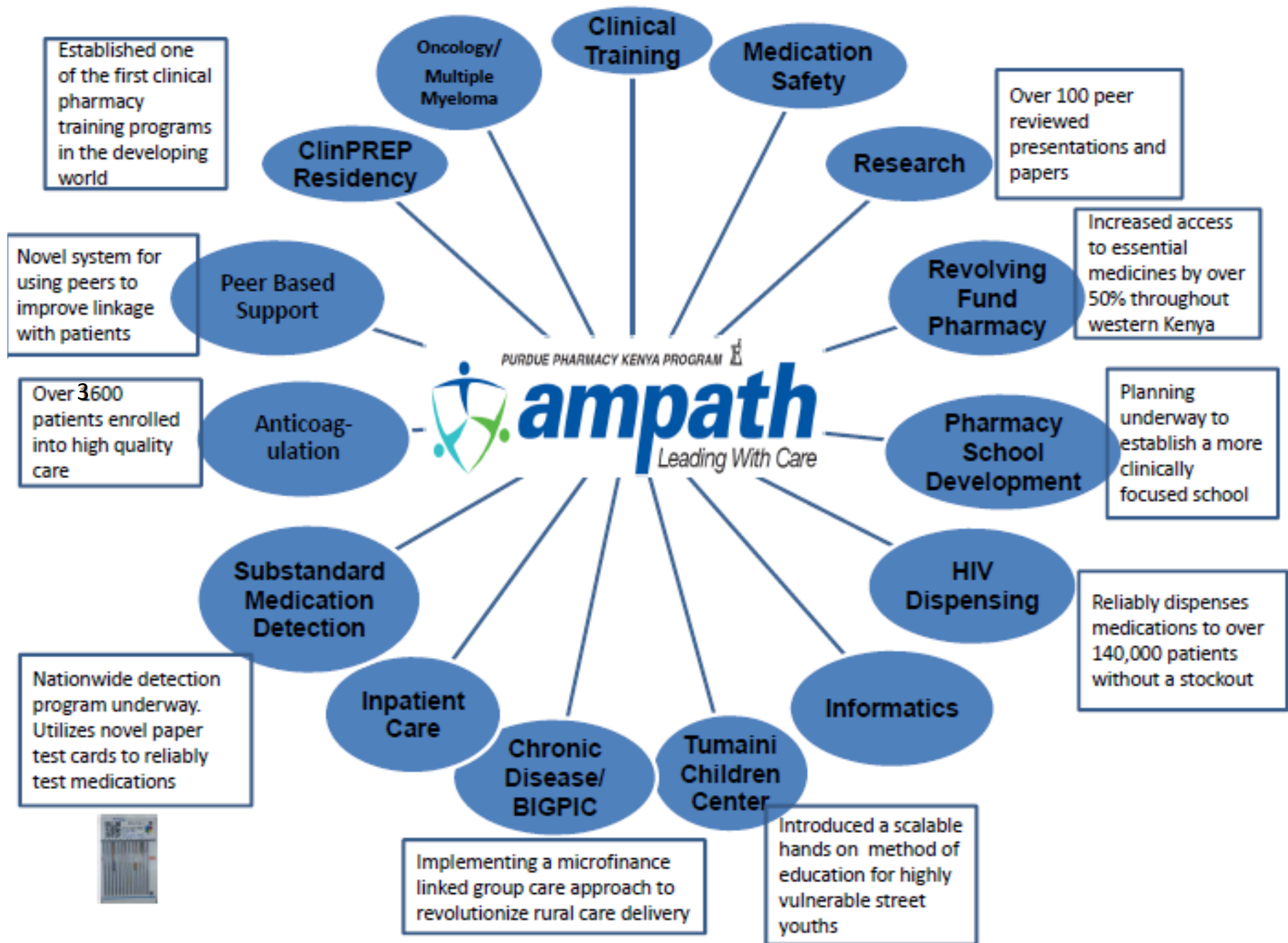
PART I - PRELIMINARY

1. This Act may be cited as the County Health Services Funding Act, 2014, and shall come into operation on such date as may be appointed by the Executive Committee Member and published in the Gazette.

Summary of Experiences

Supply Chain Timeline





AMPATH Training Approach





Moi Teaching & Referral Hospital Clinical Pharmacy Centre of Excellence

An ISO 9001:2015 Certified Hospital

Traditional Role of Pharmacist



Emerging Role of Pharmacist in Clinical Teams

Role of Pharmacist

The pharmacist sits in the pharmacy and doesn't meet patients



Clinical team **WITHOUT** pharmacist

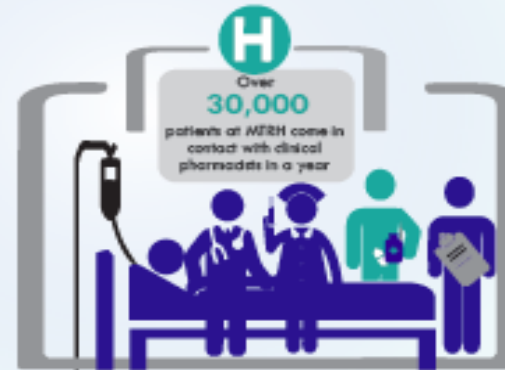


Led to:

- Poor use of medication
- Numerous side effects
- Increased cost of treatment

Role of Clinical Pharmacist

- Part of medical team providing direct patient care during ward rounds
- Recommend the best medication to give based on the symptoms and unique characteristics of the patient
- Counsel the patient and family on medication use
- Sensitize patients about side effects in order to monitor and identify them



Clinical team **INCLUDING** clinical pharmacist

Leads to:

Better medication use, less side effects, lower cost

About the Programme



Teaching

Creation of Clinical Pharmacy Training Programme

Six Months Clinical Pharmacy Internship

72 Pharmacists gone through internship at MTRH

One year Post graduate Diploma in Clinical Pharmacy

16 Clinical Pharmacists graduated

Three year Masters in Clinical Pharmacy

14 Clinical Pharmacy specialists in training



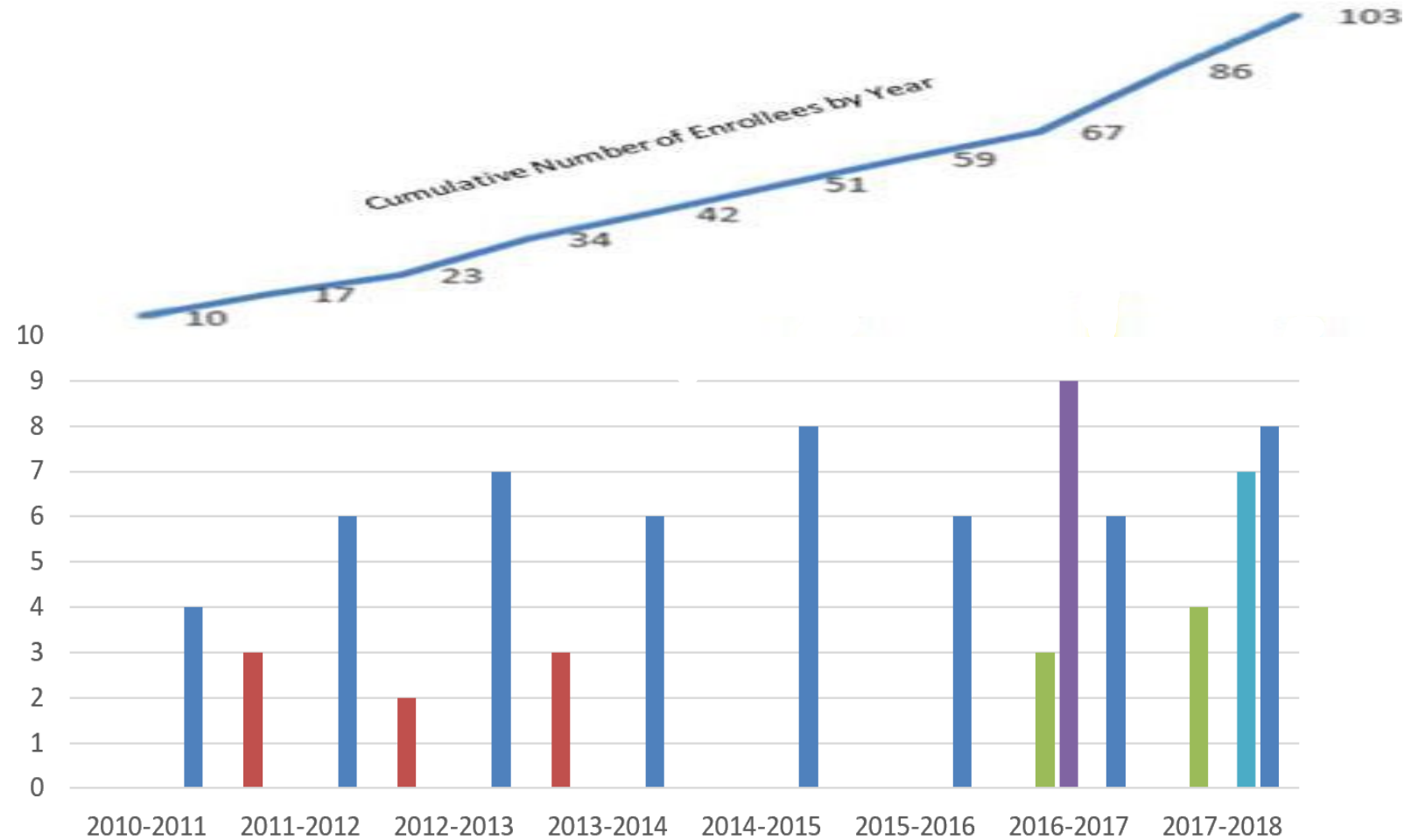
Research

Engage in Research to Optimize Care and Improve Quality of Care

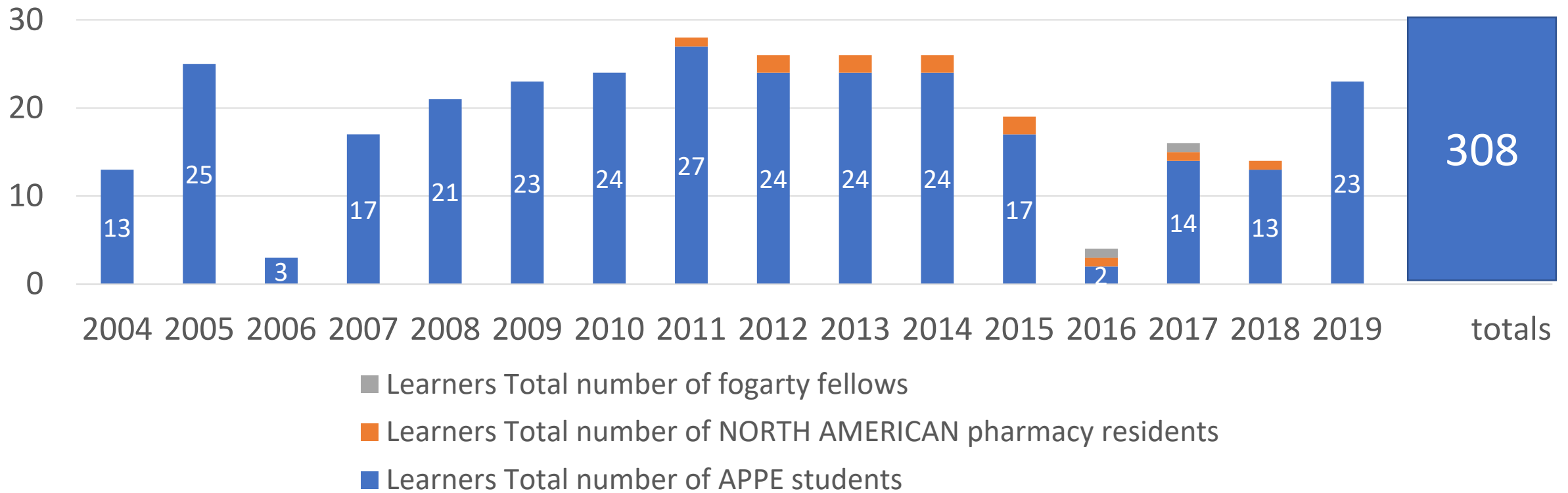
65 Scientific research articles and two book chapters published

MTRH Clinical Pharmacy Centre of Excellence

Expansion of Kenyan Clinical Pharmacy Trainees



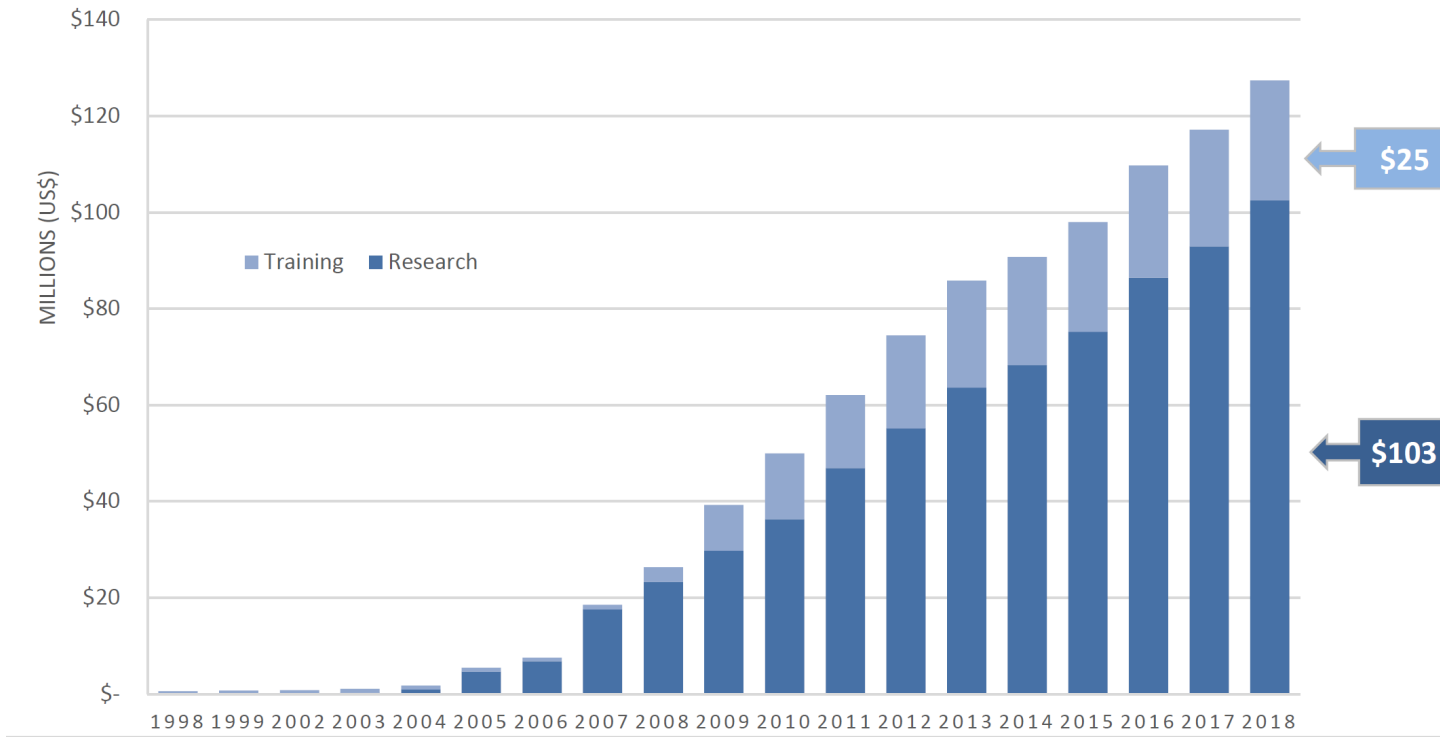
- Clinical Residency
- Post Graduate Diploma in Clinical Pharmacy
- Post Graduate Diploma in Clinical Pharmacy - PROFICIENCY COURSE
- Masters in Clinical Pharmacy
- Interns



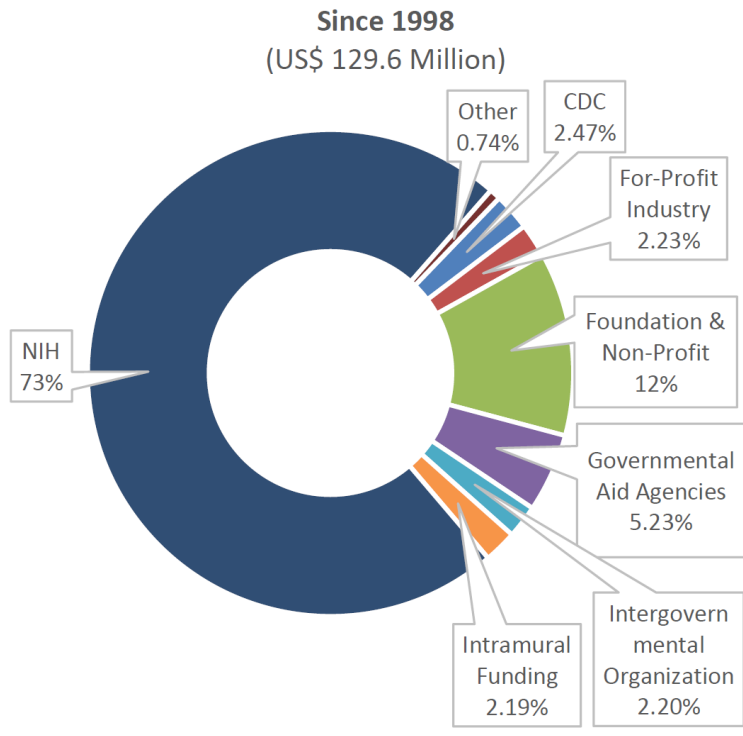
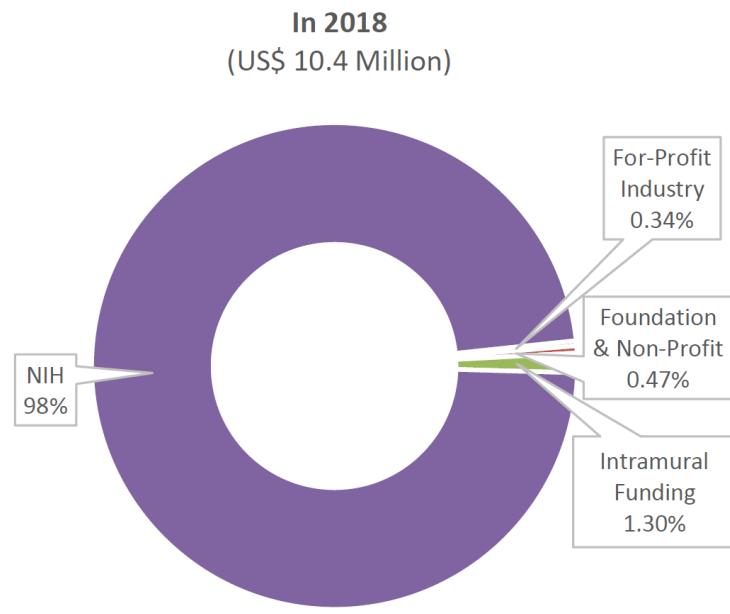
North American Learners within PKP



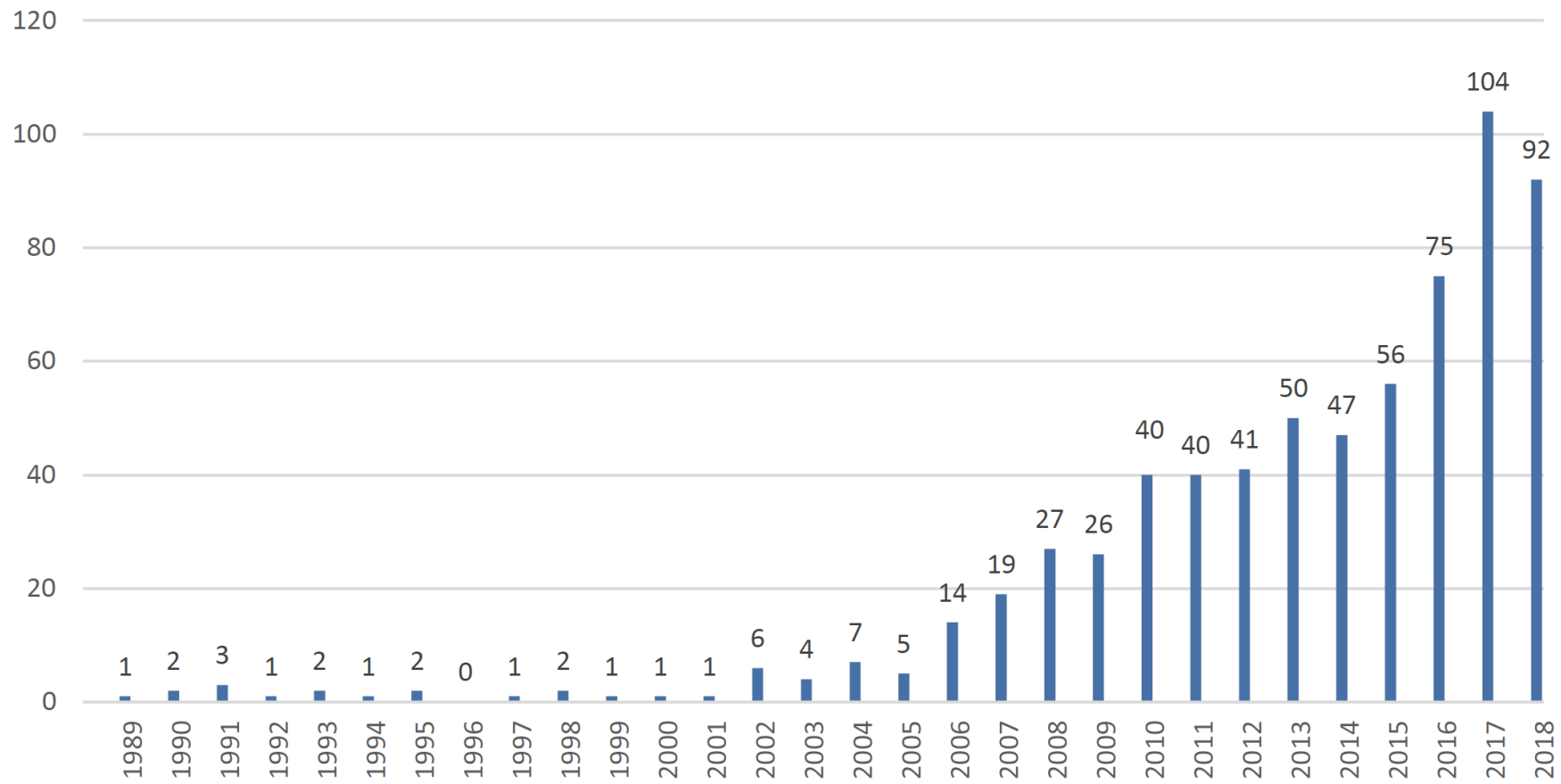
AMPATH Research



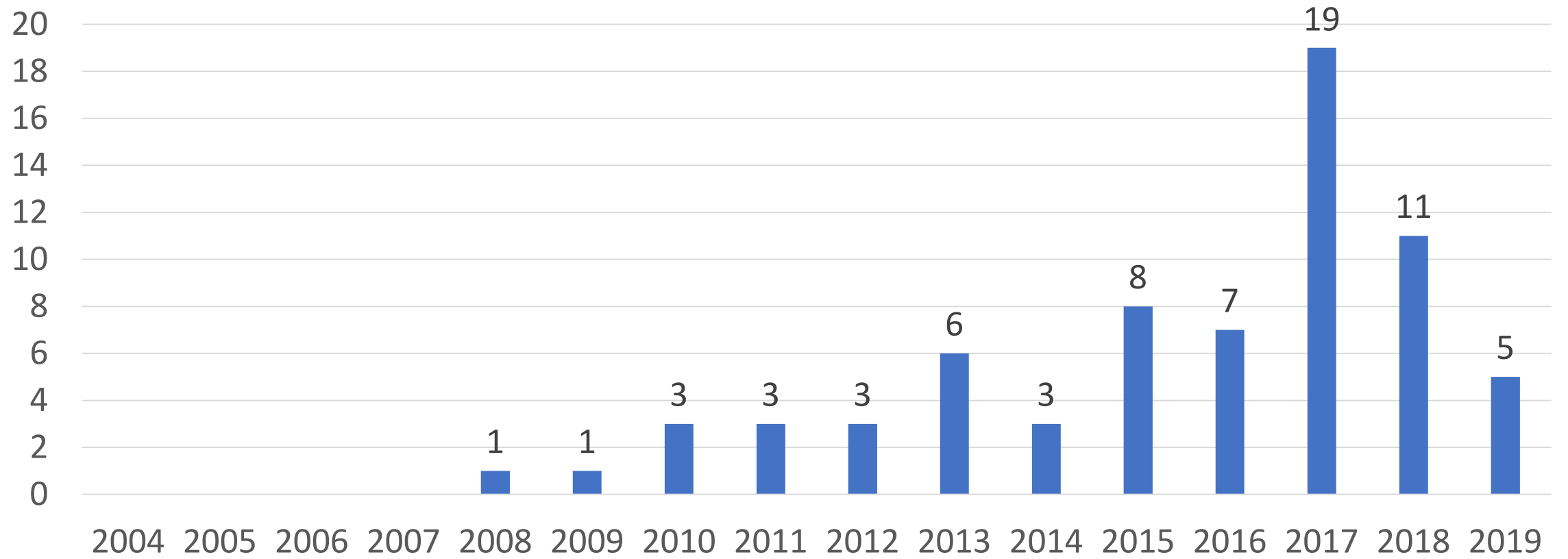
Cumulative AMPATH Research & Training Grants by Year
 (Direct Cost Total = \$129.6 million)



AMPATH Research Support by Funder Type in 2018 and Since 1998

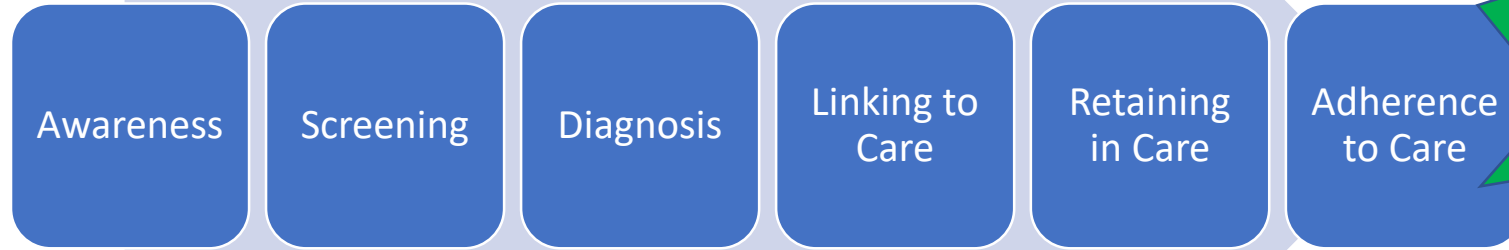


Publications from AMPATH since 1989
(n=671)



Publications from PKP since 2004 (n=70)

Research to Inform Practice



Effective
Chronic
Disease
Care

Pastakia et al. *Globalization and Health* 2013, **9**:21
<http://www.globalizationandhealth.com/content/9/1/21>



The Lancet Diabetes & Endocrinology Commission

RESEARCH

Open Access

Screening for diabetes and hypertension in a rural low income setting in western Kenya utilizing home-based and community-based strategies

Sonak D Pastakia^{1,2,3,4*}, Shamim M Ali^{2,3}, Jemima H Kamano^{3,4}, Constantine O Akwanalo^{3,4,5}, Samson K Ndege^{3,4,6}, Victor L Buckwalter^{7,8}, Rajesh Vedanthan⁹ and Gerald S Bloomfield^{4,5}

Pastakia et al. *BMC Endocrine Disorders* (2018) 18:97
<https://doi.org/10.1186/s12902-018-0324-5>

BMC Endocrine Disorders

THELANCETDE-D-16-00353 UNLINKED
52213-8587(16)30086-9

Diabetes in sub-Saharan Africa: from clinical care to health policy

Rifat Atun*, Justine I Davies*, Edwin A M Gale*, Till Barnighausen, David Beran, Andre Pascal Kengne, Naomi S Levitt, Florence W Mangugu, Moffat J Nyirenda, Graham D Ogle, Kaushik Ramaiya, Nelson K Sewankambo, Eugene Sobngwi, Solomon Tesfaye, John S Yudkin, Sanjay Basu, Christian Bommer, Esther Heesemann, Jennifer Manne-Goehler, Iryna Postolovska, Vera Sagalova, Sebastian Vollmer, Zulfiqarali G Abbas, Benjamin Ammon, Mulugeta Terekegn Angamo, Akhila Annamreddi, Ananya Awasthi, Stéphane Besançon, Sudhamayi Bhadriraju, Agnes Binagwaho, Philip I Burgess, Matthew J Burton, Jeanne Chai, Felix P Chilunga, Portia Chipendo, Anna Conn, Dipealema R Joel, Arielle W Eagan, Crispin Gishoma, Julius Ho, Simcha Jong, Sujay S Kakarmath, Yasmin Khan, Ramu Kharel, Michael A Kyle, Seitz C Lee, Amos Lichtman, Carl P Malm, Maimouna N Mbeye, Marie A Muhimpundu, Beatrice M Mwangombwa, Kibachio Joseph Mwangi, Mohit Nair, Simon P Niyonsenga, Benson Njuguna, Obiageli L O Okafor, Oluwakemi Okunade, Paul H Park, Sonak D Pastakia, Chelsea Pekny, Ahmed Reja, Charles N Rotimi, Samuel Rwunganira, David Sando, Gabriela Sarriera, Anshuman Sharma, Assa Sidibe, Elias S Siraj, Azhra S Syed, Kristien Van Acker, Mahmoud Werfalli

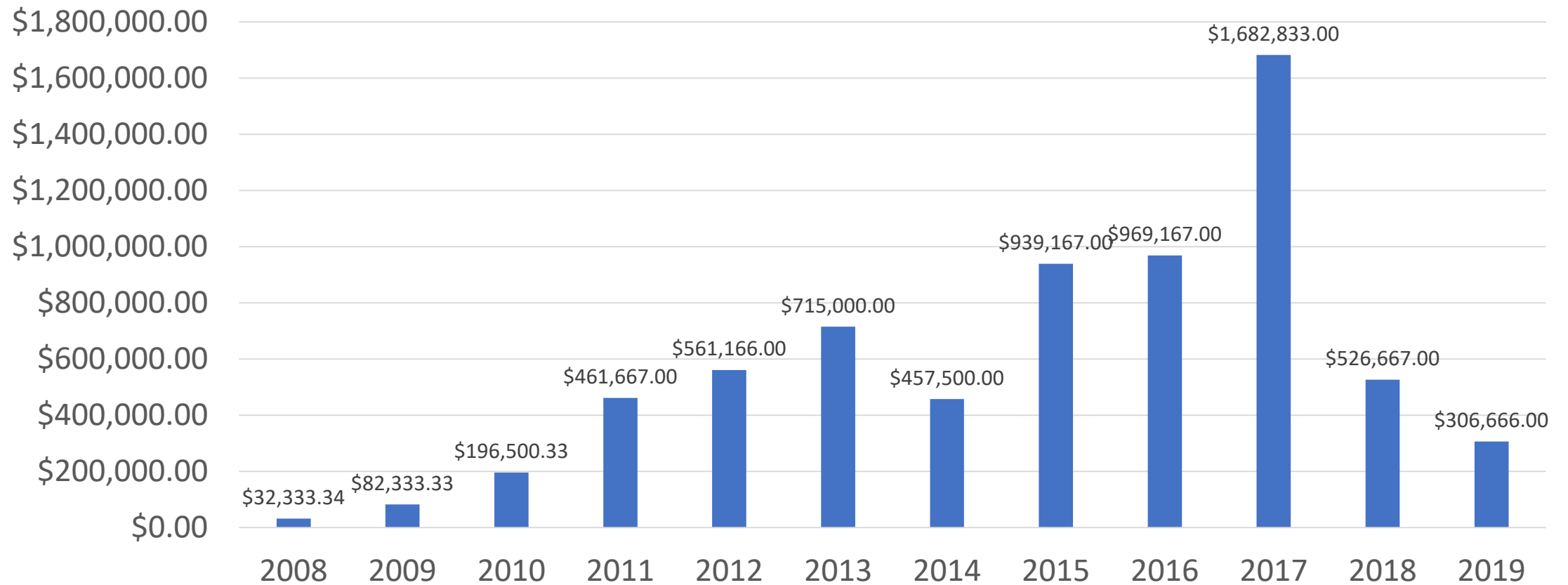
Comment

LR

Diabetes in rural Africa: what can Kenya show us?



1 of 7



PKP Grantsmanship since 2008
(Total=\$6,931,000 in Cash Grants)

Multi-sectoral Partnerships





Delivering Population Health



MOH-AMPATH Vision

Achieve optimal health and social well-being for the population of Western Kenya through improved access to services that promote health and wealth, prevent and manage disease, and provide high-quality care at all levels of the health care delivery system.

What is Population Health?

Population health is an integrated model of care delivery aimed at improving outcomes of health and social well-being by comprehensively addressing the biological, social, and structural determinants of health using a community-centered approach for a defined geographic population.

STRATEGIC OBJECTIVE

Maximize the Power of Community Groups

Create the maximum number of community groups within the model catchment and use them as an entirely new platform of healthcare delivery. This requires us to completely re-envision what healthcare can look like in rural populations.

Create a Seamless Care System

Create a seamless care system from village to tertiary center inclusive of a fully deployed electronic information system supporting care and self-correction.

Fully Partner with NHIF

Assist the National Hospital Insurance Fund (NHIF) in adapting the MOH/AMPATH care network into a fully functioning health insurance scheme responsive to the needs of the poor.

DISCUSSION

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Sonak Pastakia – spastaki@purdue.edu

