

## Future Partnership in Health and Wellness:

### Genomics Medicine in Thailand

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# Timeline of Genomics Thailand

June 2016

Meeting with NIH Director

October 2017

Genomics Thailand Consortium set up

31<sup>st</sup> January 2018

PMAC 2017 HGP Keynote Lectures

17<sup>th</sup> March 2018

MOU Signing on Genomics Thailand Research by Three Ministers

14-15<sup>th</sup> June 2018

1<sup>st</sup> Workshop for Drafting Thailand's National Strategic Plan on Genomics Thailand

7<sup>th</sup> November 2018

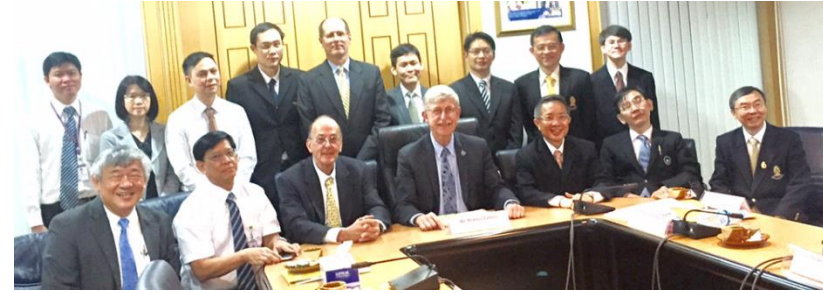
Genomics Thailand Steering Committee

3<sup>rd</sup> Jan 2019

PM Approval of "Genomics Thailand" ; Thailand 4.0 Committee

26<sup>th</sup> March 2019

Cabinet Approval of "Genomics Thailand"



# Genomics Thailand = Future of Medicine

- Insights from genomic data
- Whole genome sequencing



- **Paradigm shift**
  - Diagnostic
  - Prevention
  - Therapeutic



Family Planning

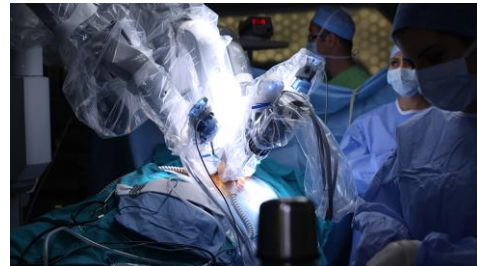
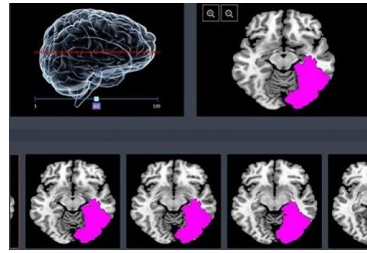
- Prevention
- Rare disease

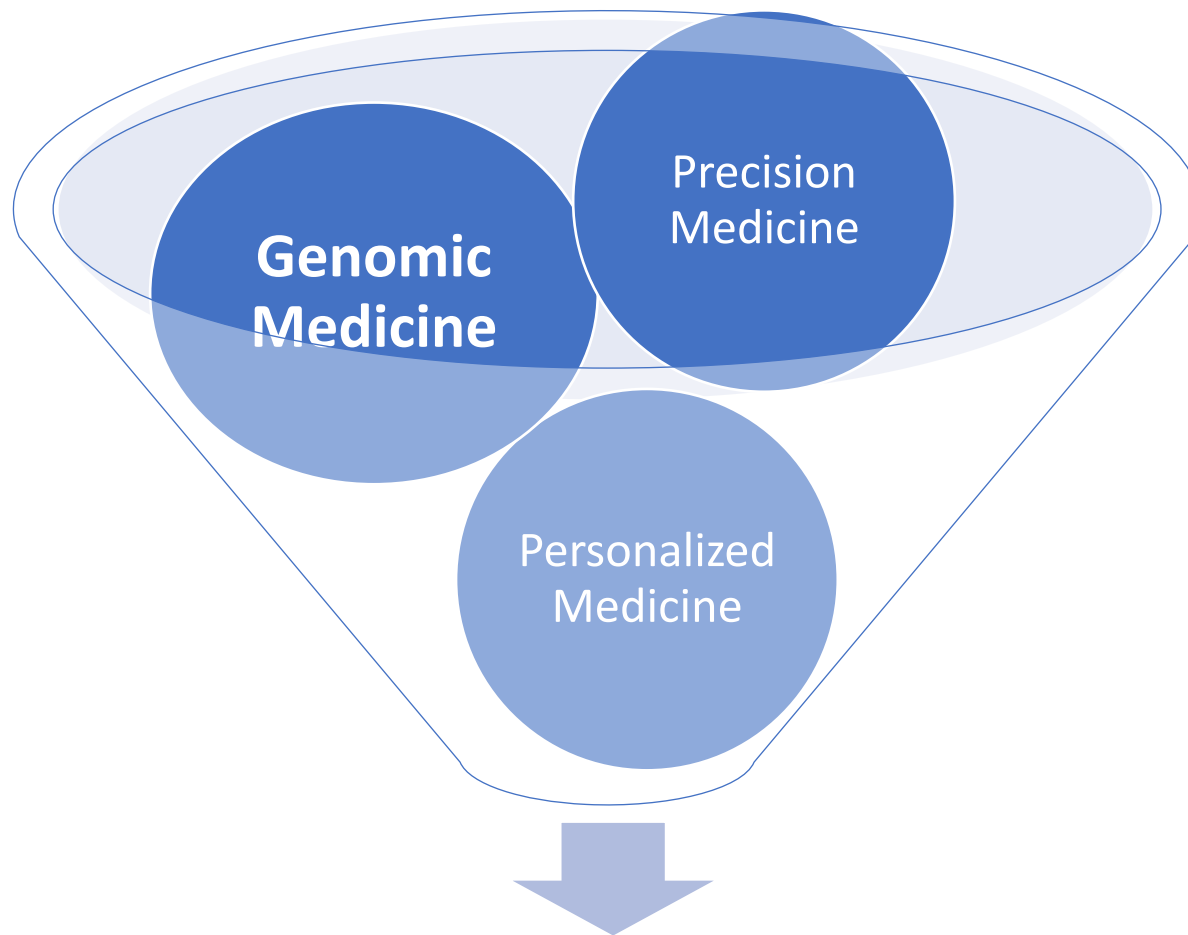
Treatment

- infectious disease
- Severe drug allergy

Treatment

- Cancer
- Non-communicable disease





## The Essential Components of Genomics Thailand

- Human resource management
- Genome sequencing facilities
- R&D
- Ethical standard and necessary legal framework.

# Genomics Thailand's GOAL



- Improvement in health and wellbeing of Thai people
- Reduction of treatment side effect and death rate
- Decrease expenditure on non-personalized treatment



- Development of medical technology and innovation
- To promote viable ecosystem for Thailand's next generation medical and healthcare



- Development of medical expertise and personnel
- Thailand to be a world-class regional medical hub

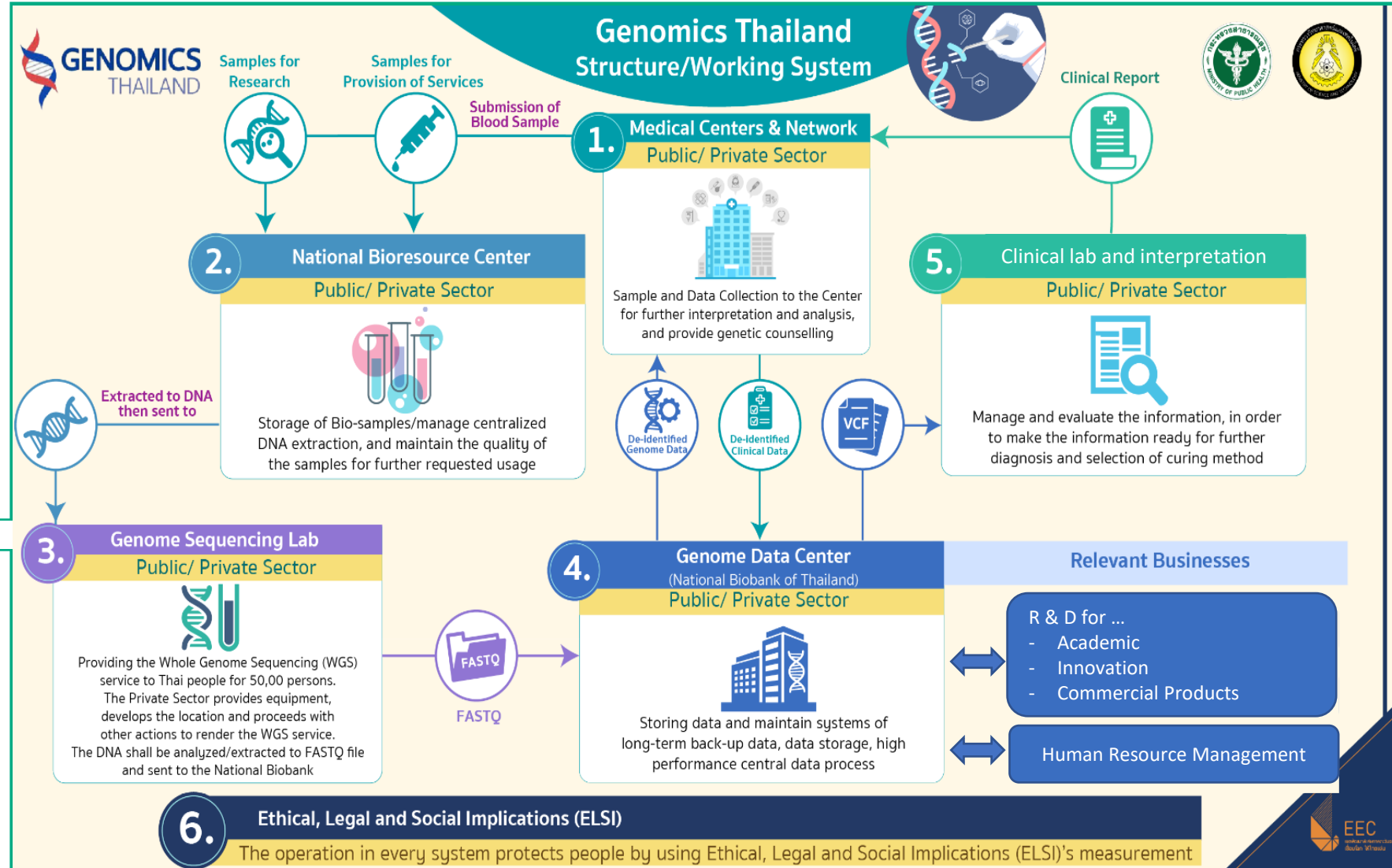
# Government Implementation Plan for Genomics Thailand

## 1st step

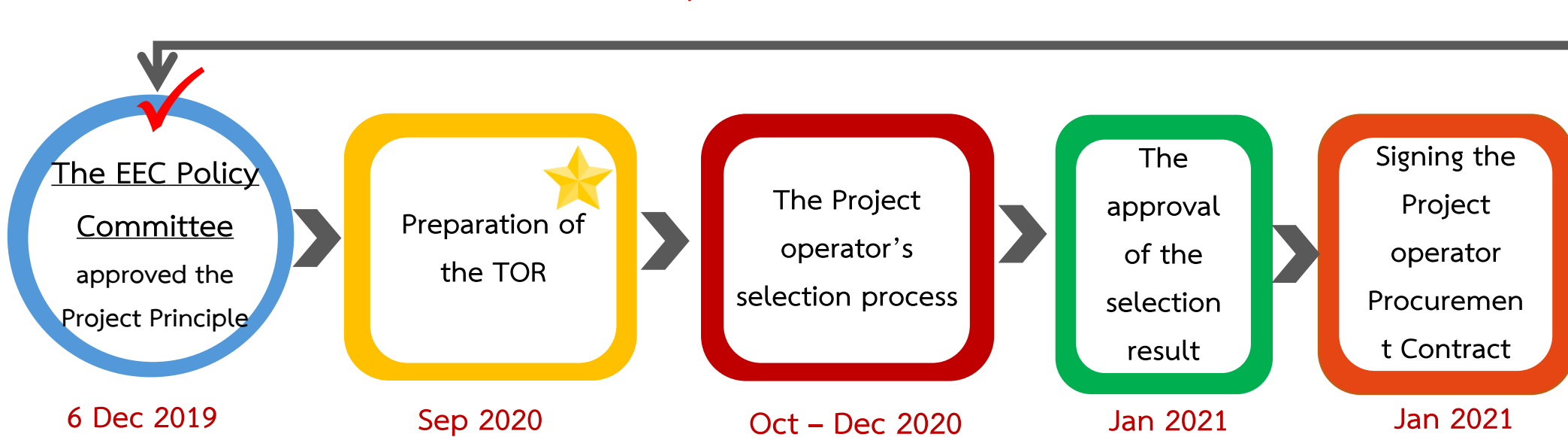
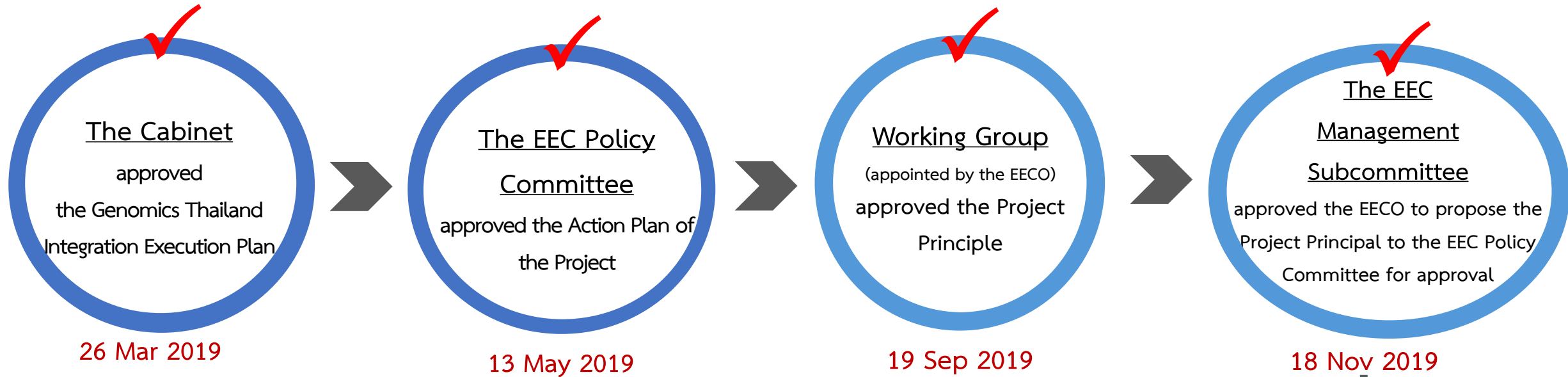
Develop **Thailand Genome Sequencing Center "Project"** in order to establish Genome Sequencing Lab in Thailand (system 3)

## Next step

- Strengthen the **overall systems**
- Develop the other systems and expand to the **second phase** of the Genome Sequencing Center
- Utilize the data to further **develop relevant businesses** (e.g. Academic R&D) in both commercial & social aspects



# Overall Procedure and Progress of the Project



★ = Current status

For further information of Whole Genome Sequencing Project : [sawitree@eco.or.th](mailto:sawitree@eco.or.th)

★ Cabinet endorsement

30 Dec 2014

- Concept Idea
- Support 11 centers
- Budget: 4,720 million THB

★ Cabinet endorsement

10 May 2016

Prime minister followed up the project progression

★ Cabinet endorsement

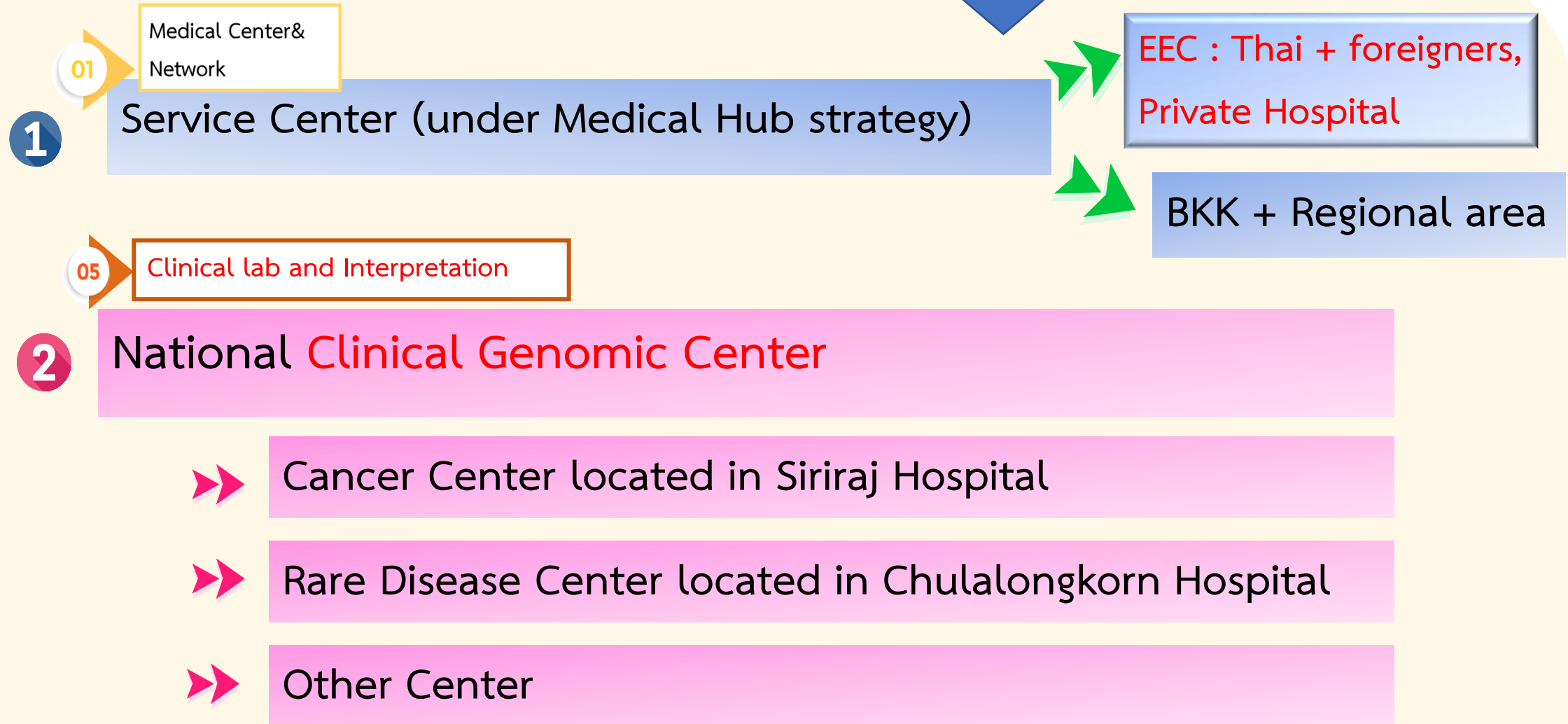
13 Sep 2016

- Medical hub strategy (2016-2025)
- Ministry of Public Health to focus on Academic hub in collaboration with  
➤ Ministry of Education
- Push the Institute of Personalized Genomics project

Next Step

Institute of Personalized Genomics





Thank  
you

