

# Translating Health Data into Community Change

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*11th Caribbean Conference on Health  
Financing  
Bonaire, 2016*



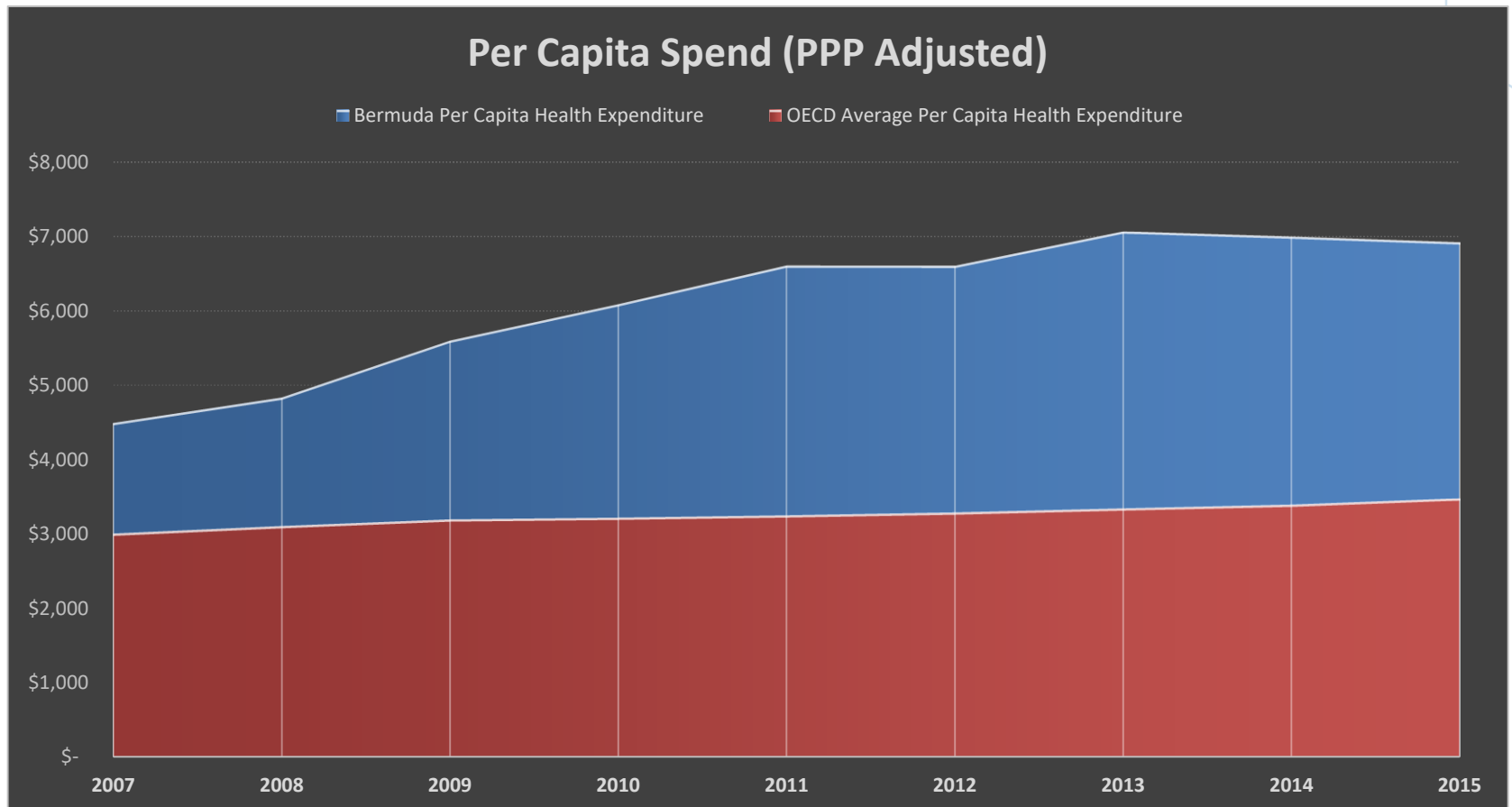
# Topics

- ❖ The Need for Claims Analysis
- ❖ Select Data Findings
- ❖ Using the Findings to Promote Policy Development
- ❖ Lessons Learned from the Process

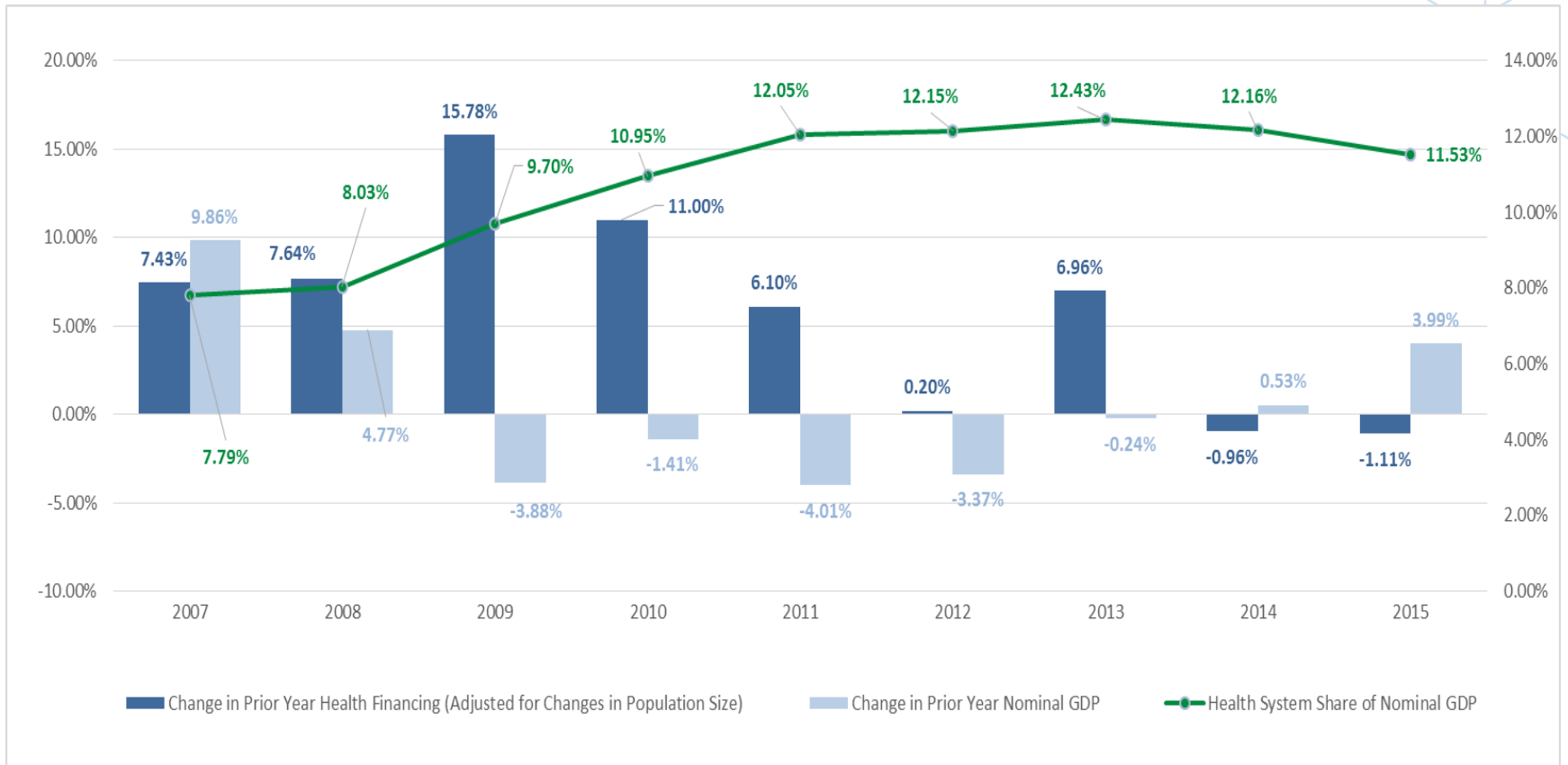
**Bermuda's Health Strategy 2014-2019** Mission is to –

*“Provide Affordable and Sustainable Healthcare For All Bermuda Residents”*

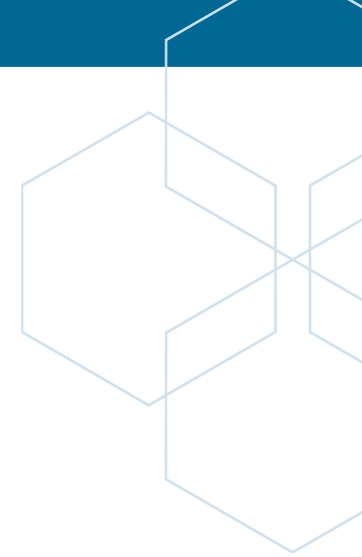
# Comparing Healthcare Investment Trends



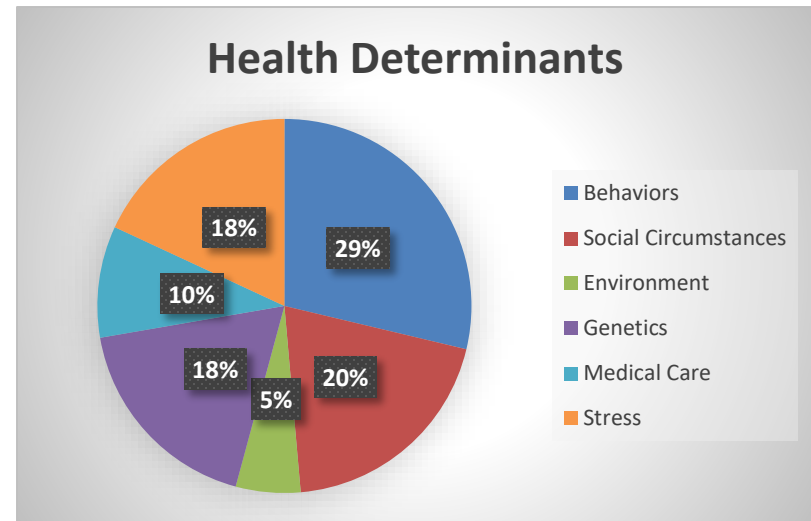
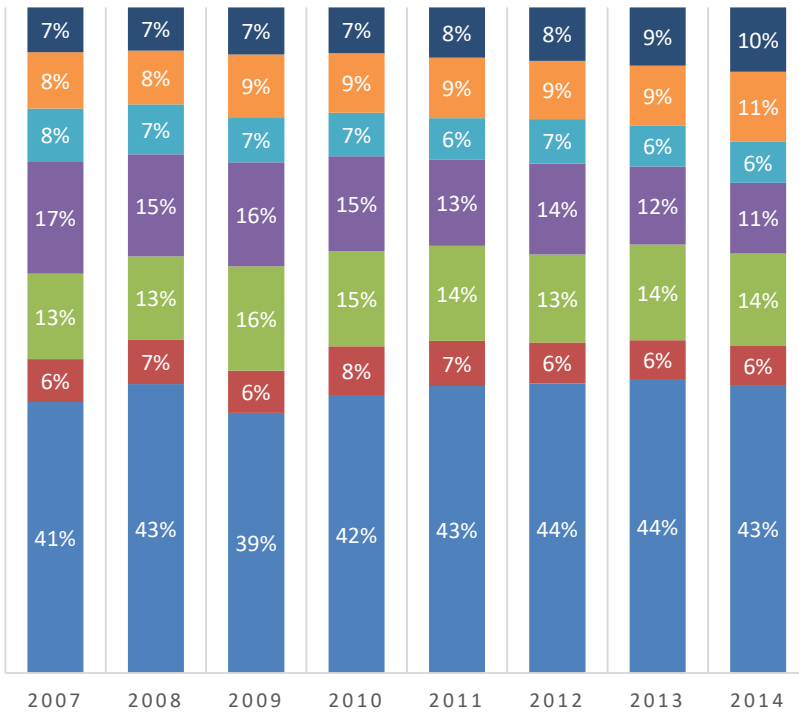
# Linking Healthcare to the Economy



# Spending Wisely?



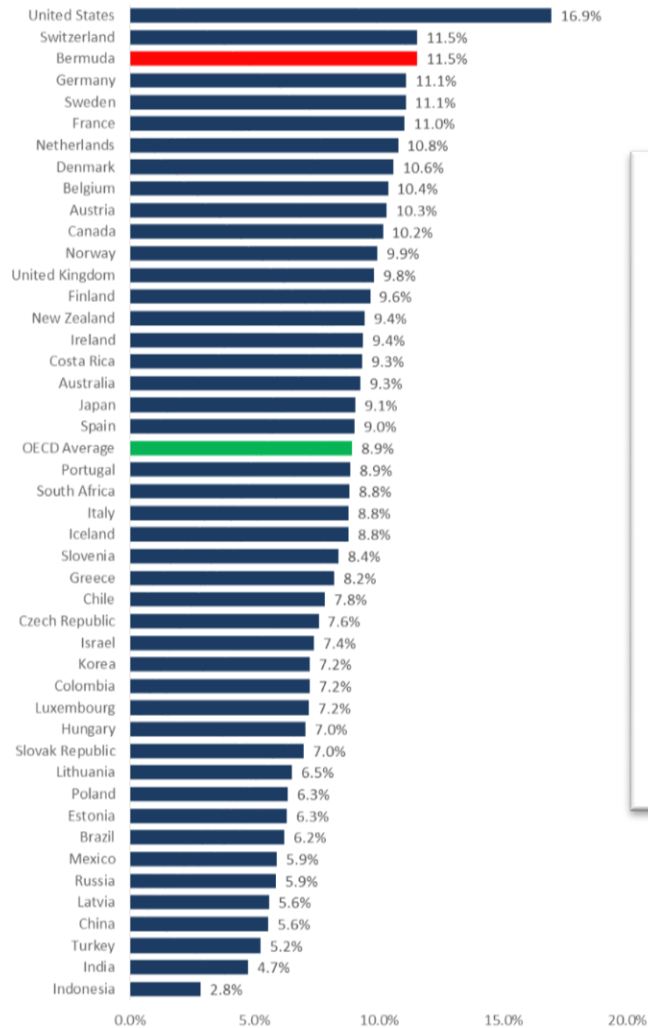
- Bermuda Hospitals Board
- Ministry of Health
- Overseas Care
- Local Practitioners
- Prescription Drugs
- Other
- Administration



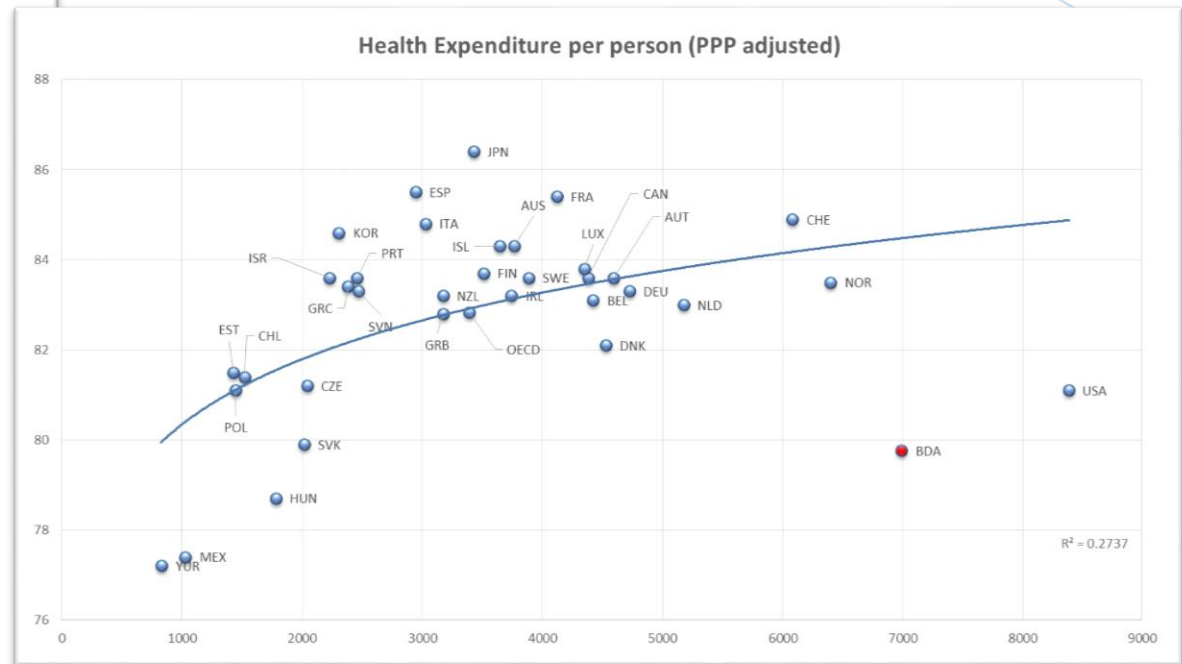
Source: McGovern et al. (2014)

**US Spends less than 9% on Prevention**

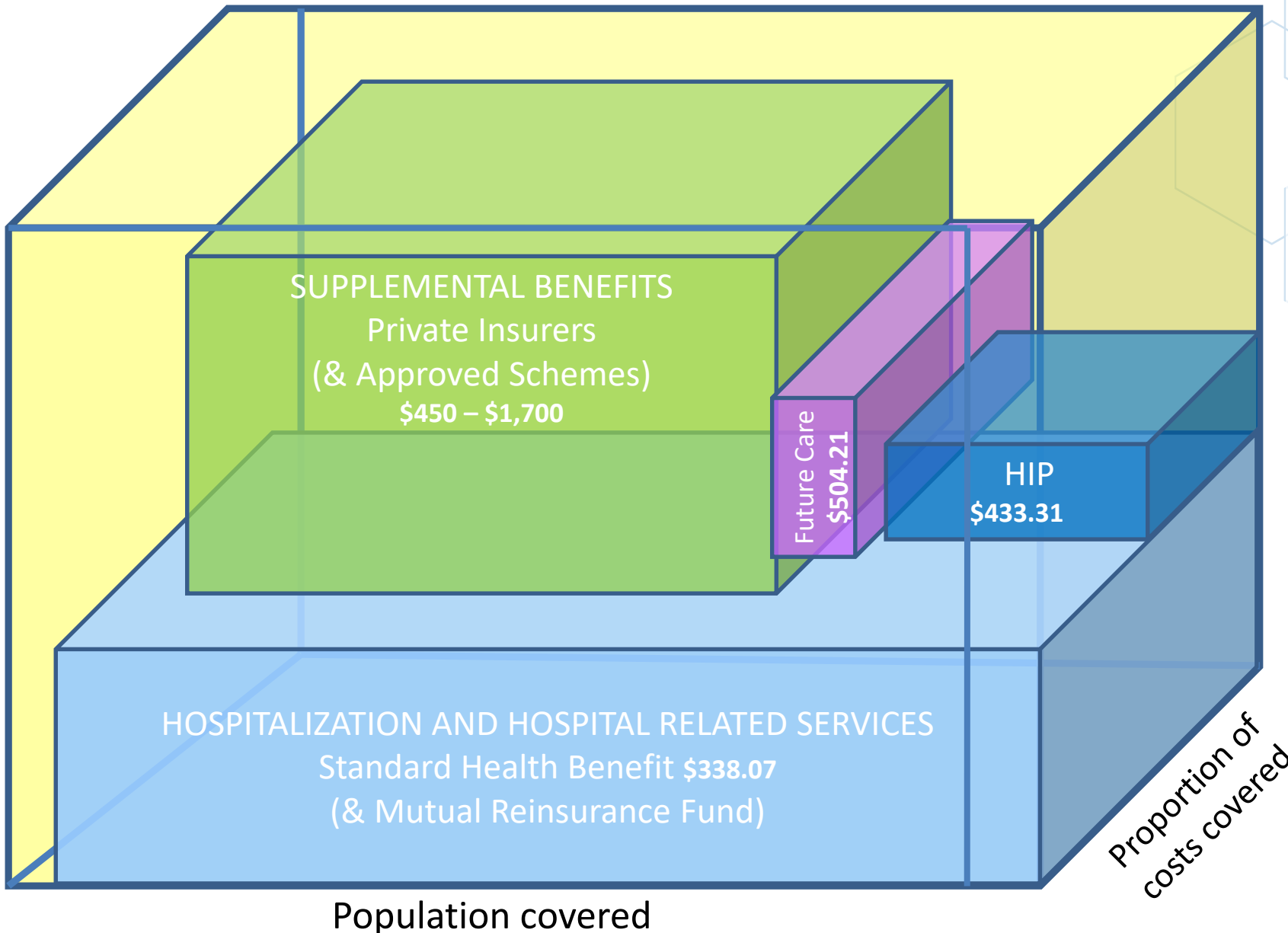
# Obtaining Value for Money



11.5% of Bermuda's Gross Domestic Product – However Healthcare is a Key Contributor to Jobs



Per Capita Healthcare Spend of Over \$11,000 USD



Services covered

Proportion of costs covered

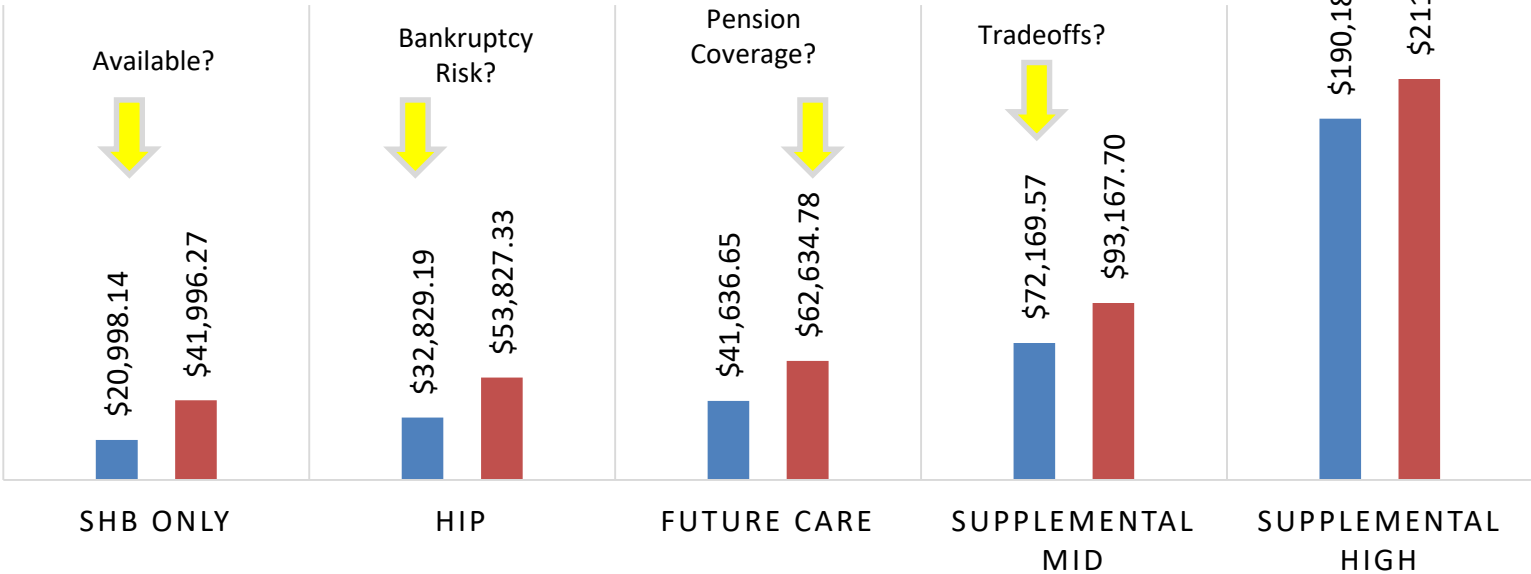
Population covered

Adapted from  
WHO 2010

# Public Affordability

## INCOME REQUIREMENT FOR AFFORDABILITY

■ Yearly Employed ■ Yearly Not Employed



An estimated 21% of households in Bermuda earn under \$3,154 per person per month or \$37,848 per year

Bermuda 2014: \$51,012  
Relative Low Income Threshold



# Quarterly Data Submission

PendedClaims - Excel

Ricky Brathwaite

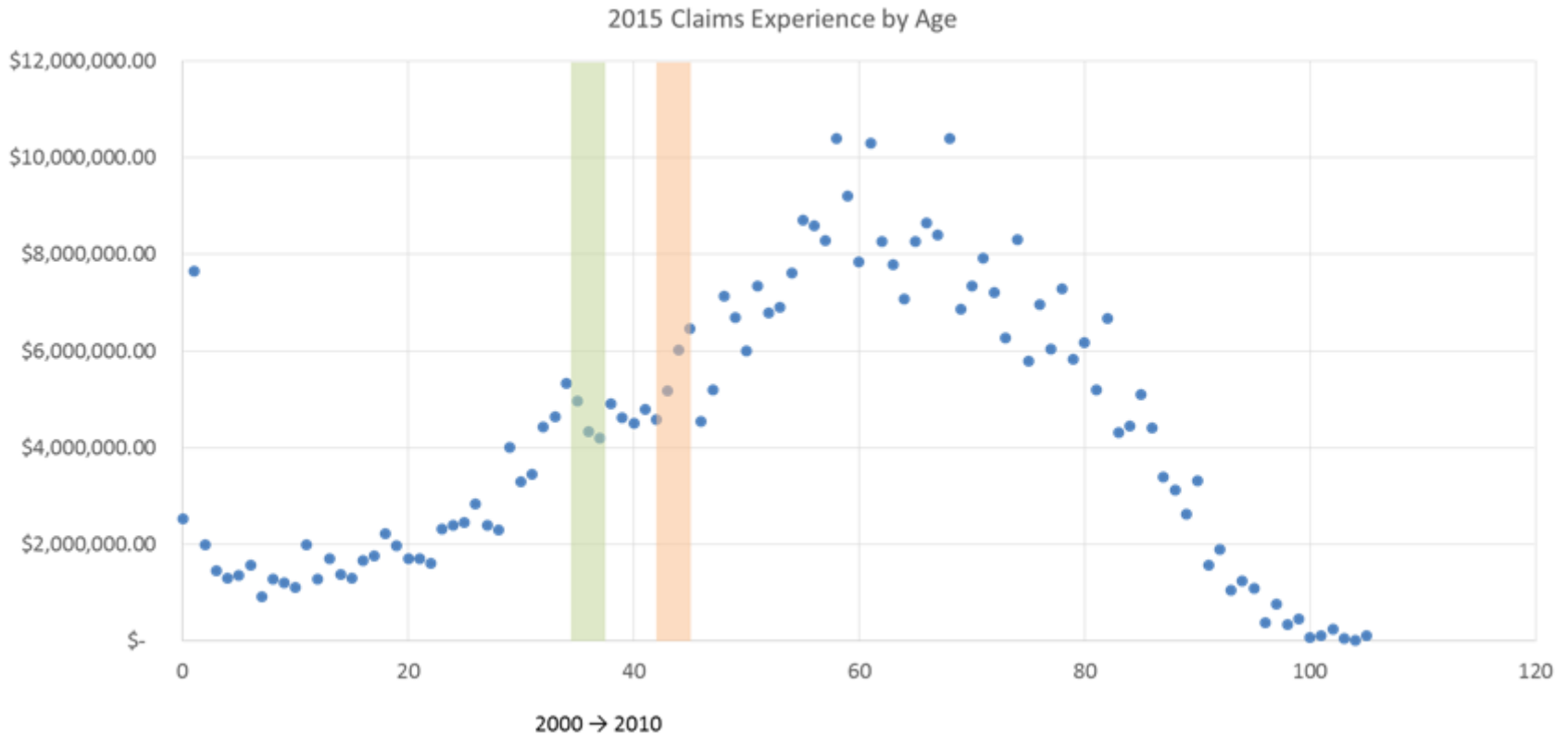
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Person ID	Date of service
Insurance Product	Overseas facility
Sex	Charges, claims and paid amounts
Age	Service dates
Place of Service	Processing status and date
Service Provided (e.g., CPT)	Payment date
Diagnosis codes	Provider name and provider type

# Understanding the General Population



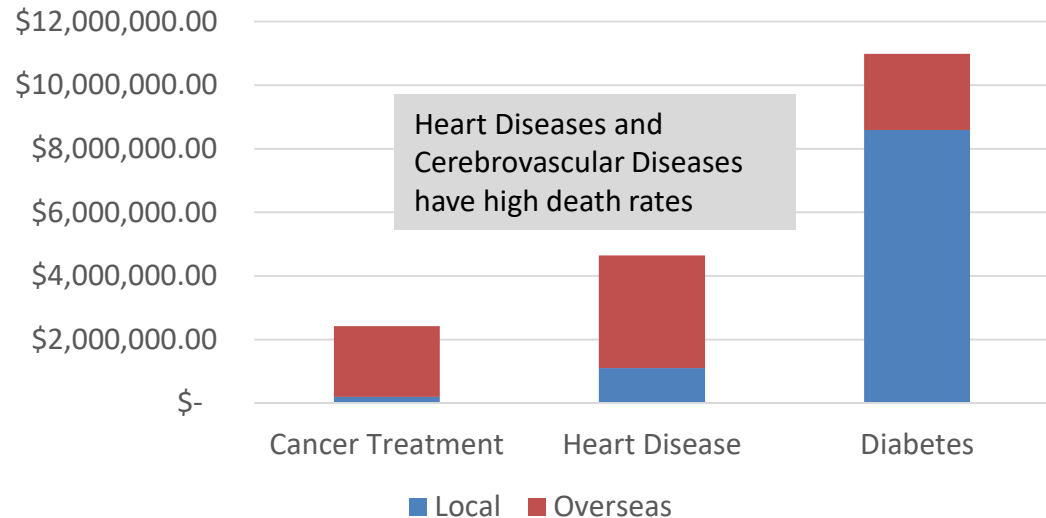
Claims help us better understand the cost of care by age in a rapidly changing environment

# Priority Setting in Chronic Disease

Approximately 190 dialysis patients at costs of \$200,000 per patient per year

Only 8% of the \$2.4M of Cancer treatment dollars were spent on island

- Cancer is the leading cause of death in Bermuda
- Diabetes ranks in the top 5 of leading causes of death in Bermuda and has a 13% prevalence (OECD average 8.9%)
- In the U.S., people with diagnosed diabetes, on average, have medical expenditures approximately 2.3 times higher than what expenditures would be in the absence of diabetes
- Heart Disease can lead to strokes and other disabling complications

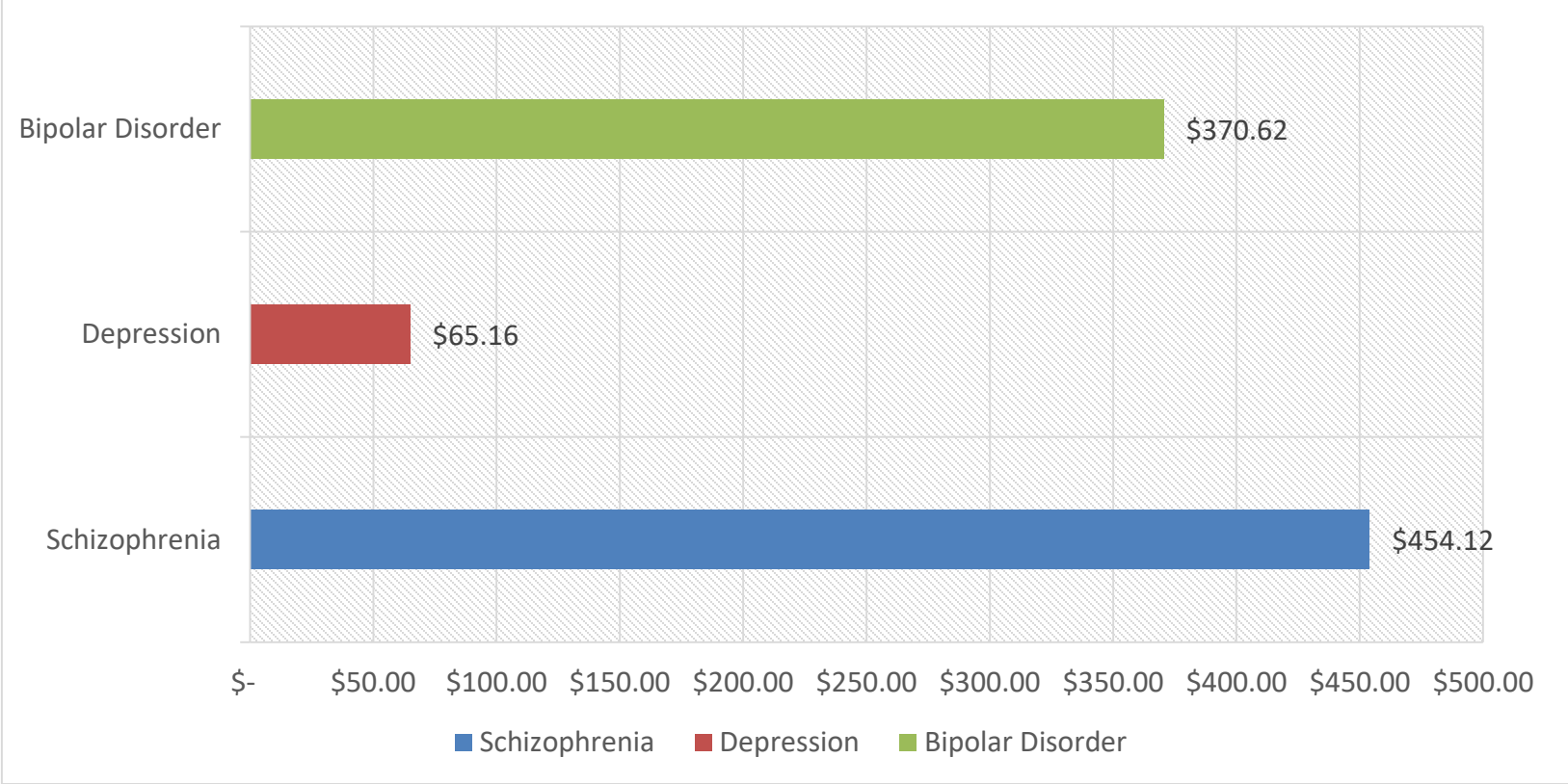


Heart Diseases and Cerebrovascular Diseases have high death rates

Claims for Diagnosed Diabetes were 5 times higher than Cancer

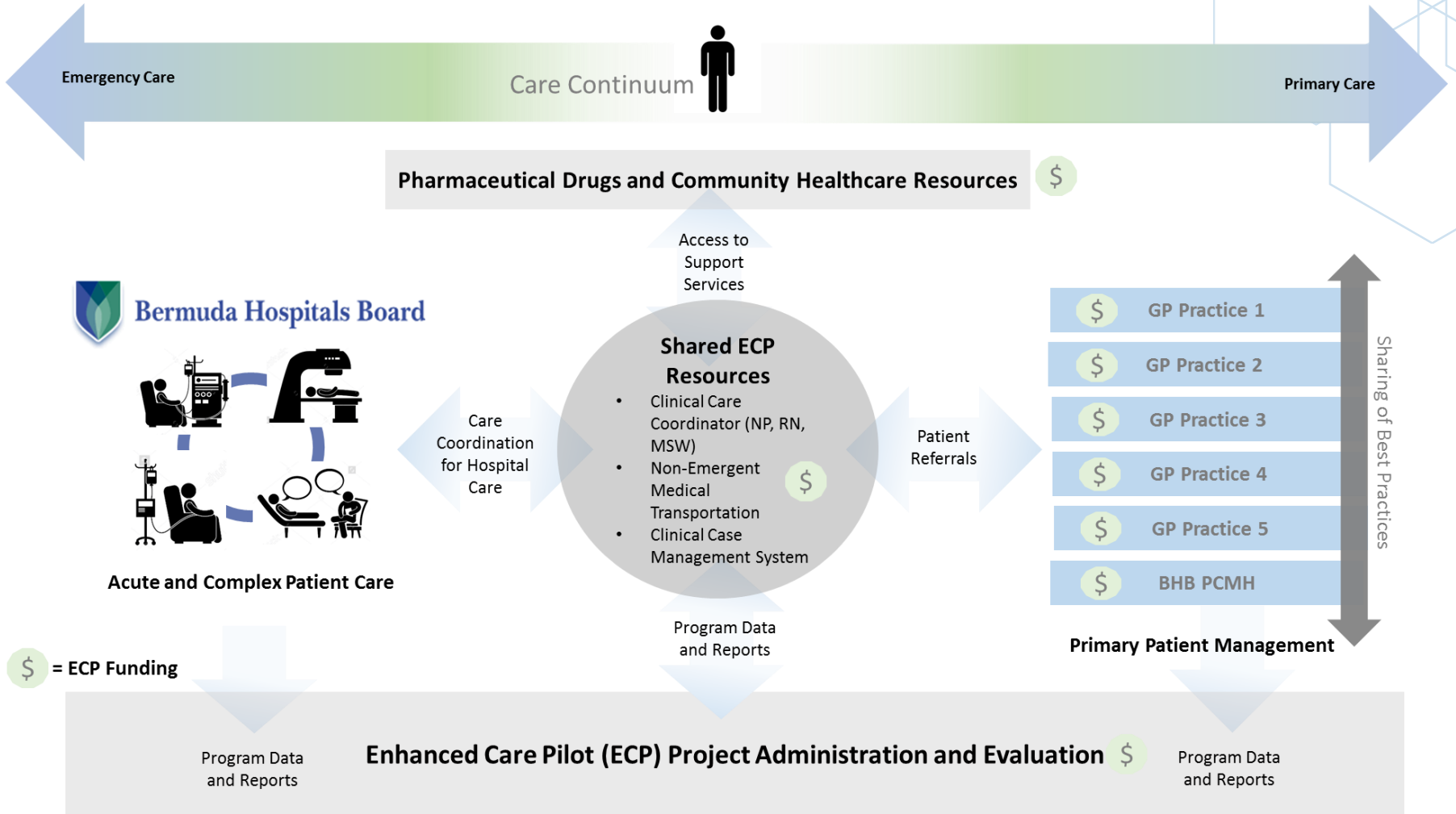
Mental Health Disorders rank in the top 5

# Improving Mental Health Policy



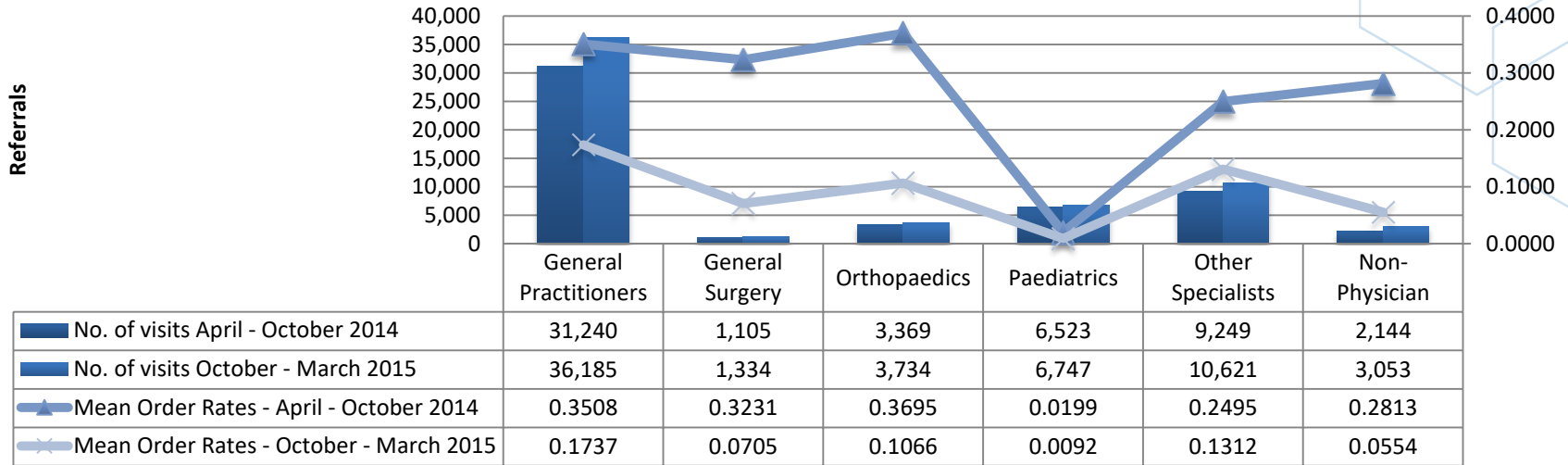
Utilized regression analysis controlling for individual patient characteristics and place of service

# Creating Innovative Programs

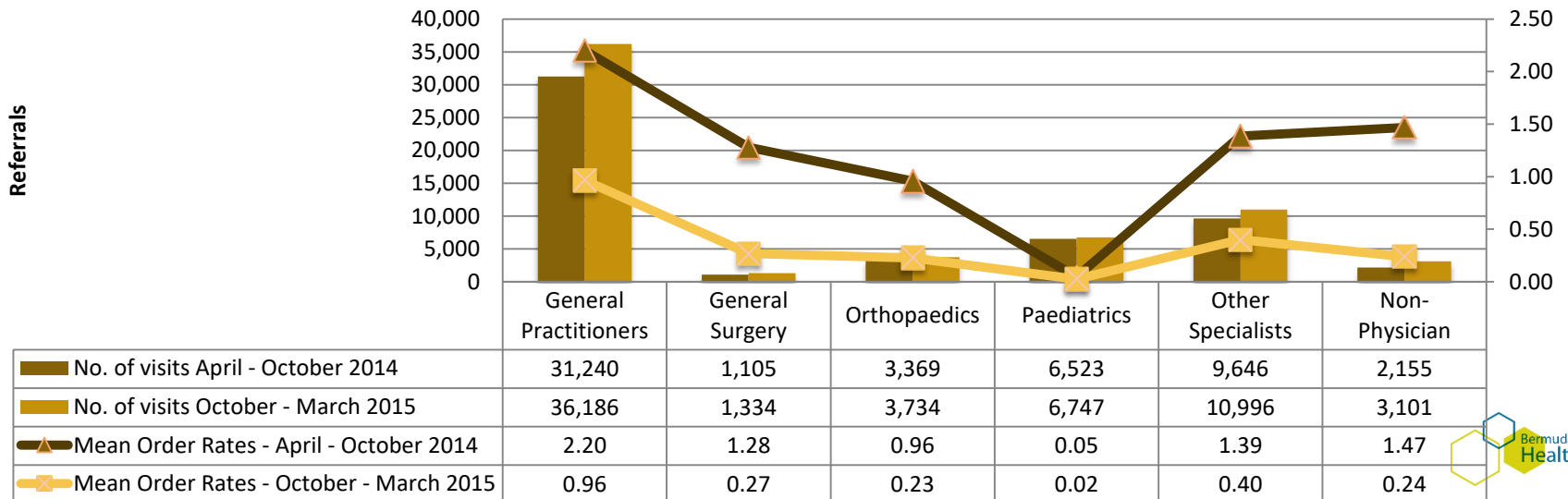


# Monitoring Testing Rates

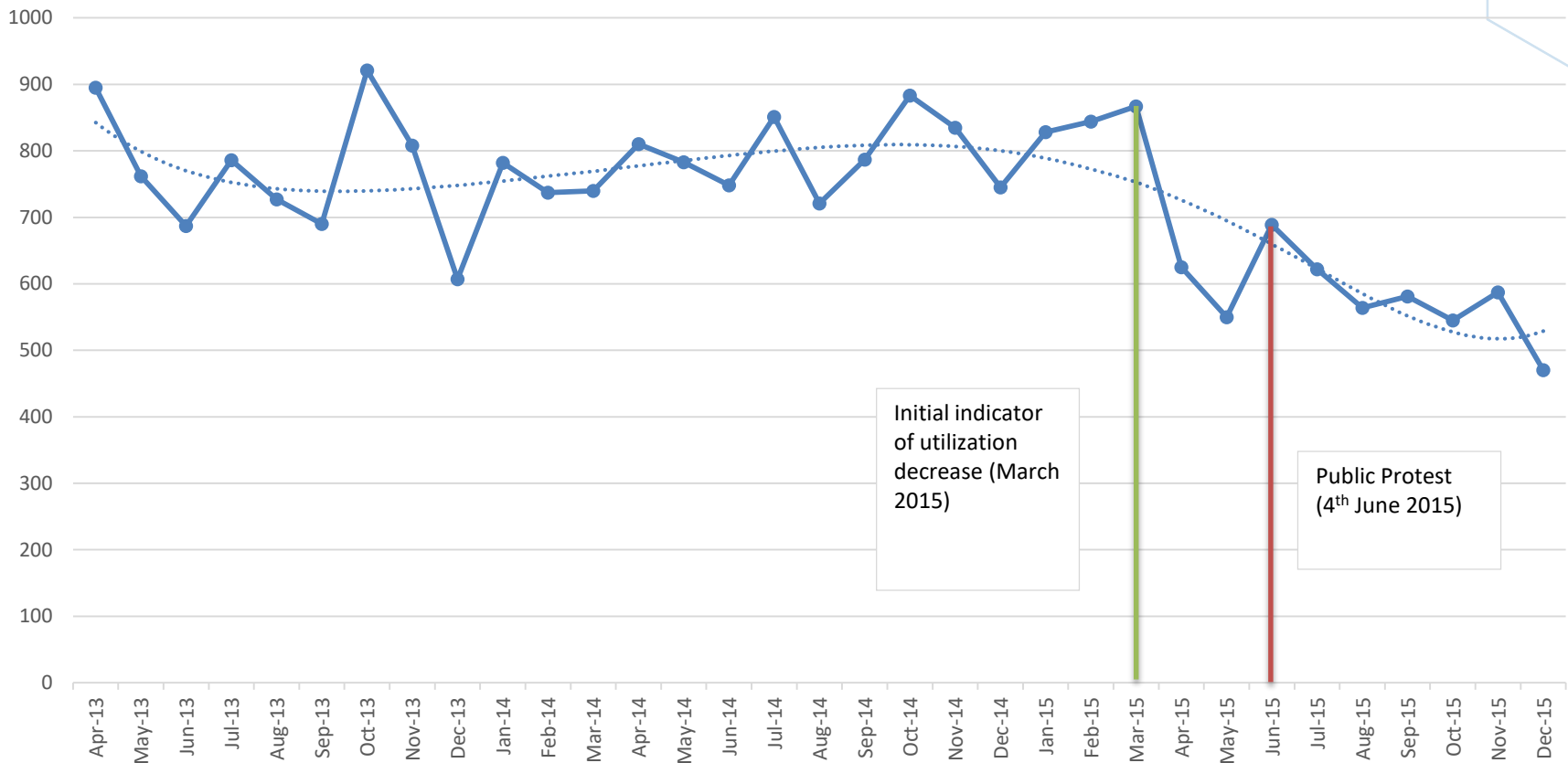
## DI Test Order Rates YoY Comparison



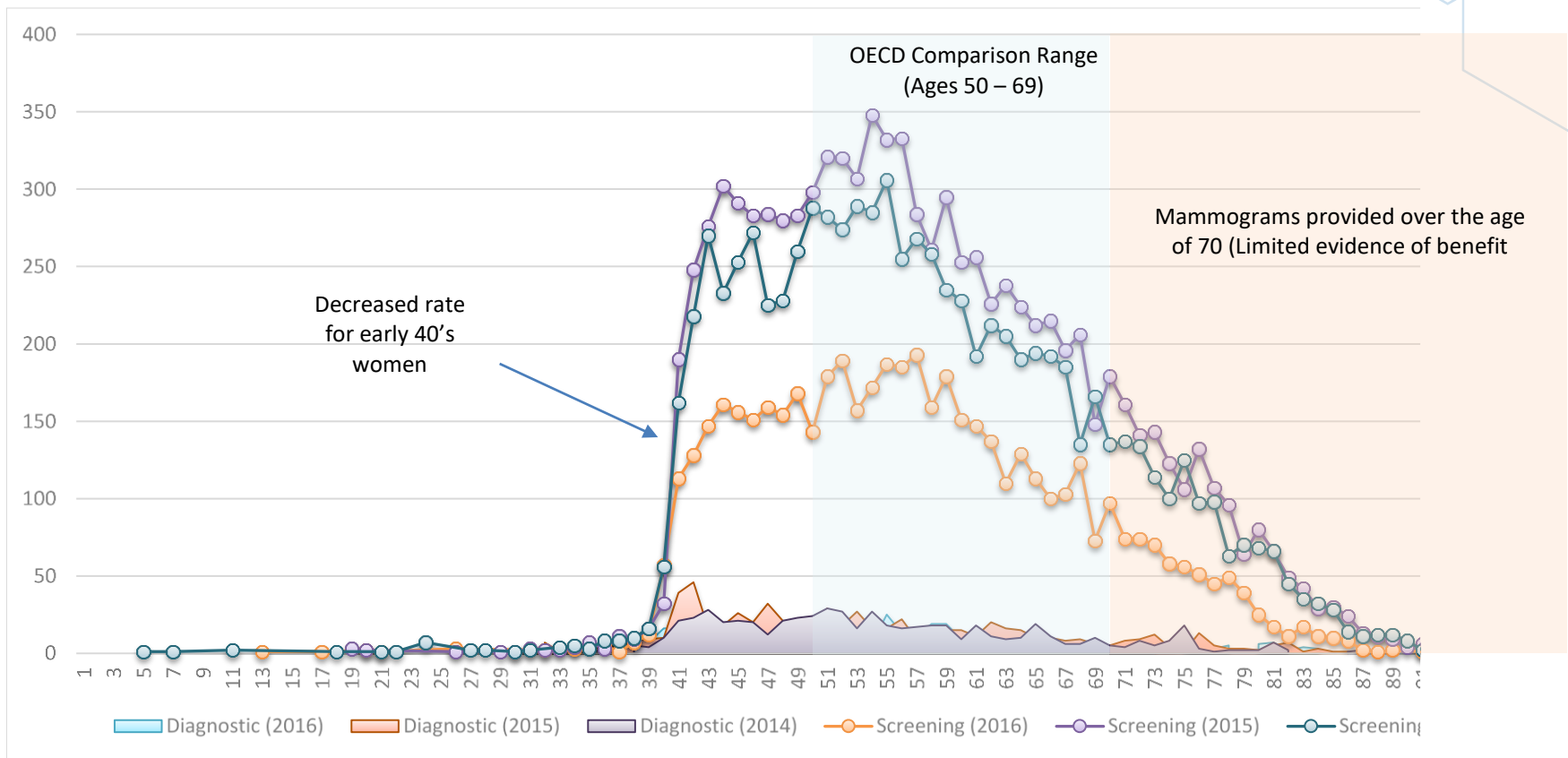
## LAB Test Order Rates YoY Comparison



# Evaluating Public Information Campaigns



# Promoting Clinical Guidelines

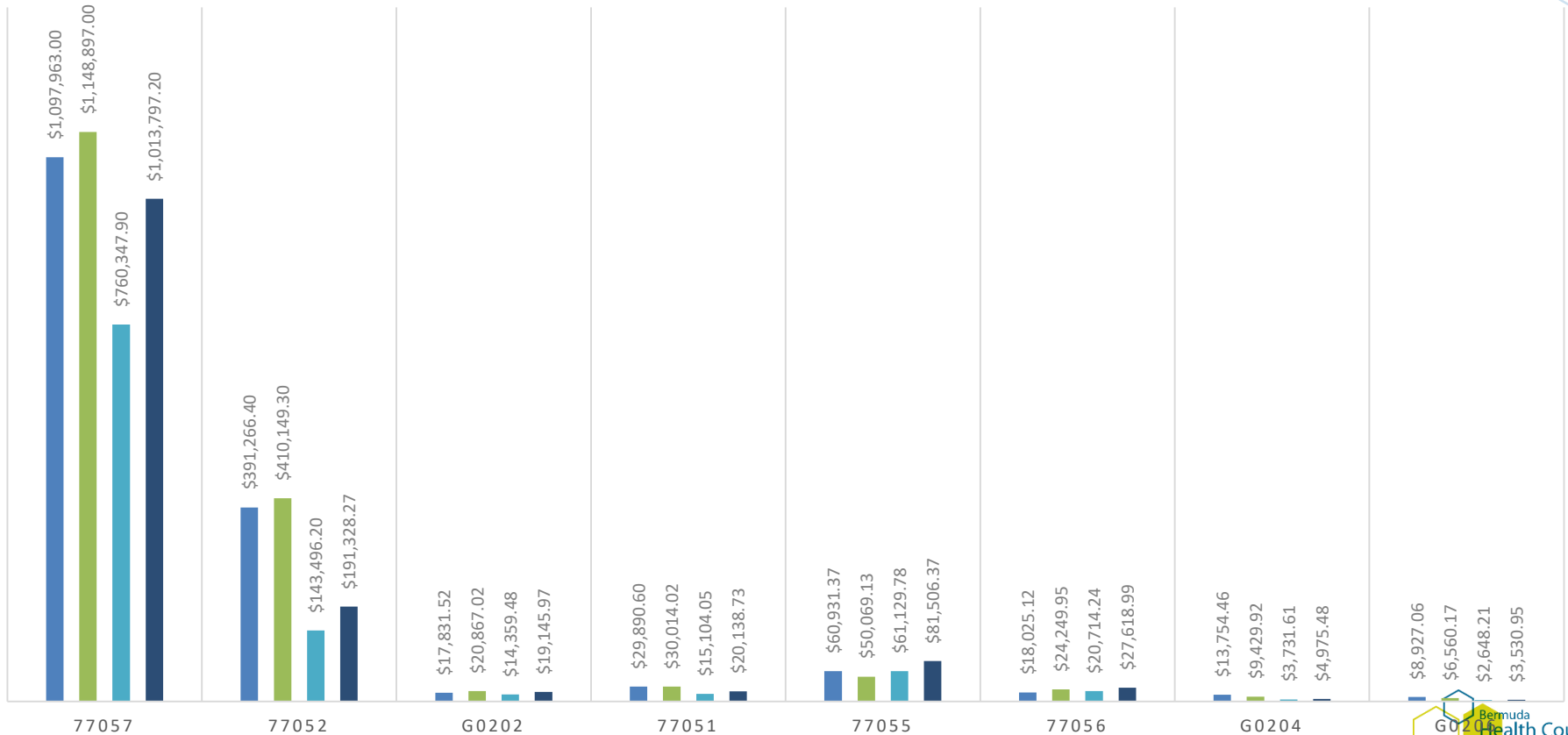




# Reducing Costs

## MAMMOGRAPHY EXPENDITURES 2013 - 2015

■ 2014 ■ 2015 ■ 2016 ■ Est 2016



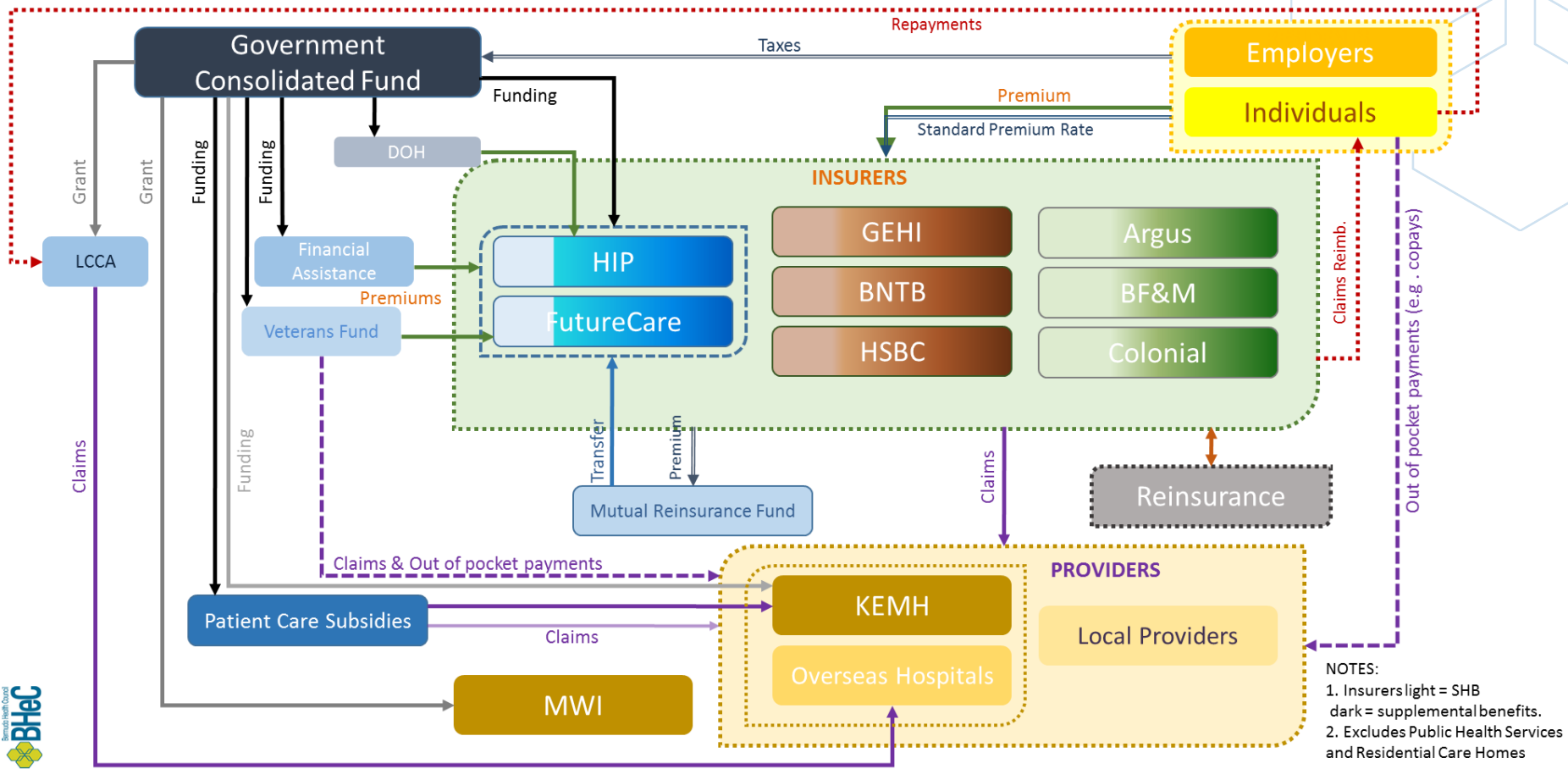
# More Analysis, More Requests...

- ❖ Compared costs between local providers and overseas providers
- ❖ Defined current services provided in continuum of care for cancer patients by location and provider
- ❖ Analyzed the types of pediatric services being delivered
- ❖ Began assessment of the impact of road traffic accidents
- ❖ Calculated the incidence of diabetes related blindness
- ❖ Approximated insurer loss ratios to prepare for policy discussions
- ❖ Described claims experience profile of the most vulnerable and economically challenged
- ❖ Determined average claims processing time to ensure compliance with legislation
- ❖ Used data to evaluate corporate wellness program
- ❖ Set fees for basic health benefits using the Relative Value Units methodology
- ❖ Complete annual national health accounts

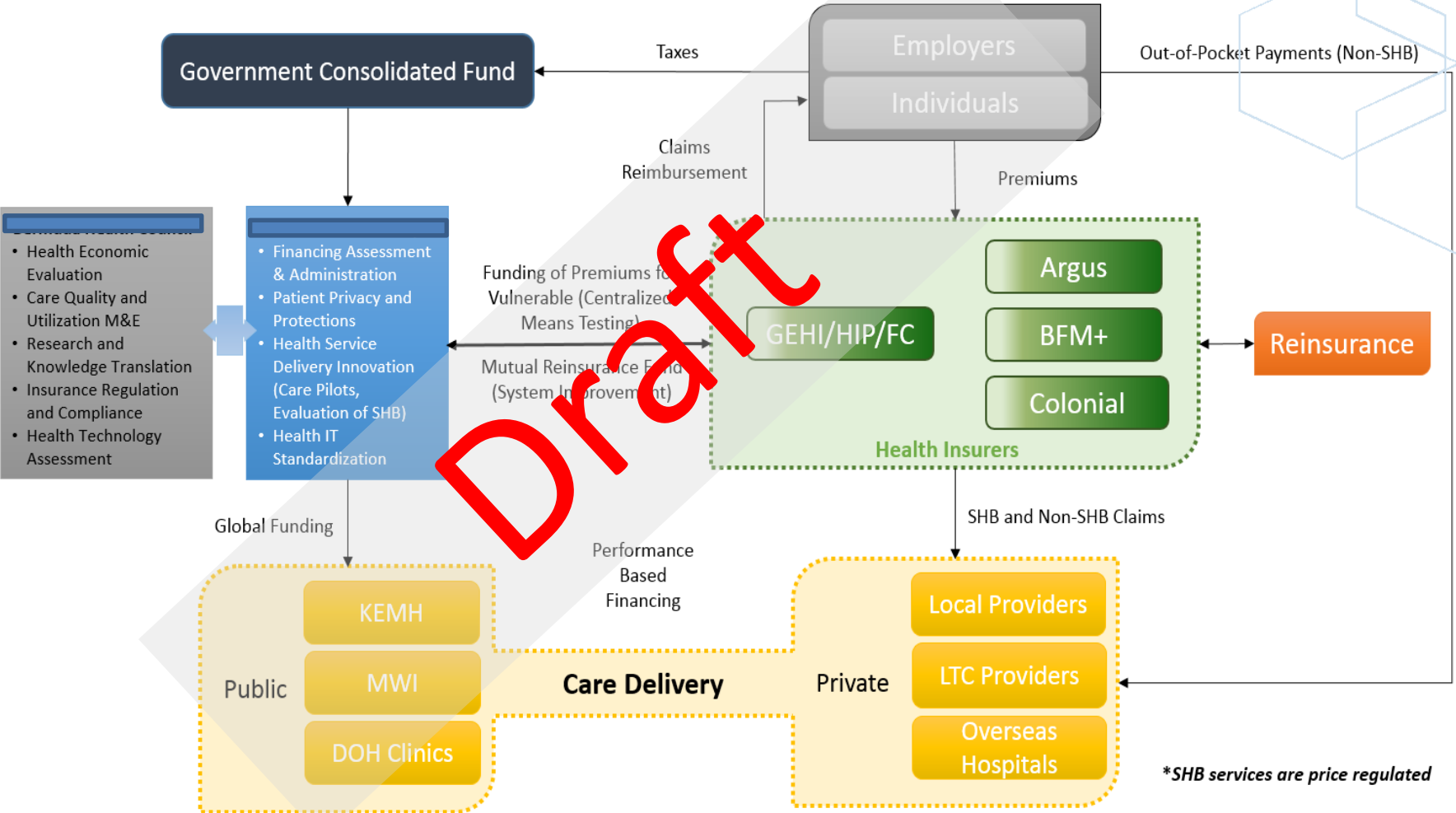
# Lessons Learned

- ❖ “Good Data” requires buy-in from all stakeholders
- ❖ Claims data does not answer the “Why?” question
- ❖ Local data helps in easing local change
- ❖ Timely claims data requires effective relationships with insurers or other claims processors

# Health Financing Reform

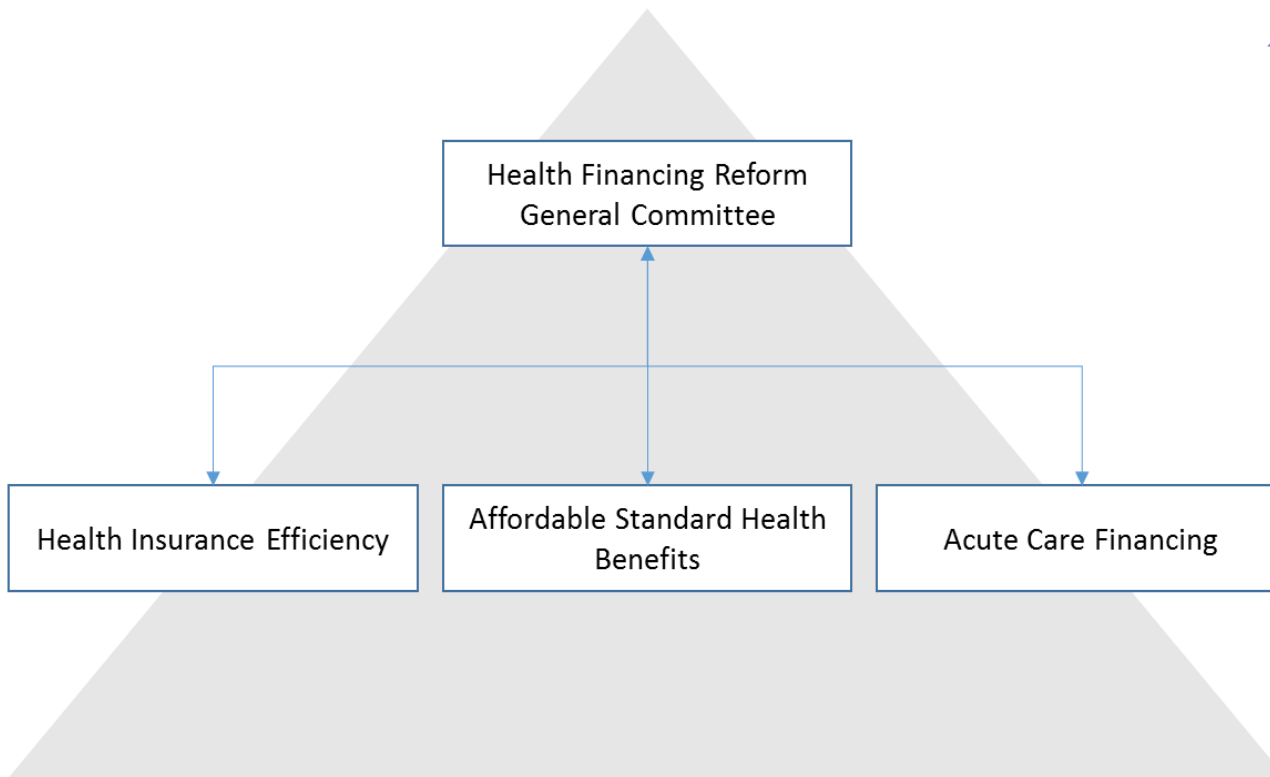


# Streamline Financing and Encourage Innovation and Research



# Data Driven Stakeholder Collaboration

Phased Approach to Health System Implementation



**Implementation,  
Monitoring and  
Evaluation**

**Risk Analysis and  
Stakeholder  
Consultation**

**System  
Improvement  
Recommendation**

**Data Review and  
Discussion**

**Qualitative and  
Quantitative Data  
Collection**

# Data Driven Objectives for FY2017

- ❖ Create a low cost adequate benefit product
- ❖ Create more competition through price and quality regulation
- ❖ Assess impact of financially vested referrals
- ❖ Determine system capacity for health technologies and conduct health technology reviews
- ❖ Establish the infrastructure to share data and best practices with other jurisdictions

# Thank You



**Bermuda  
Health Council**

**Know the Facts!**

-  [www.bhec.bm](http://www.bhec.bm)
-  @BDAHealthCouncil
-  @BDAHealth
-  @BDAHealth