

Webinar on Ayushman Bharat Health Insurance Scheme

Date: July 24, 2020

Time: 1600 to 1730 IST

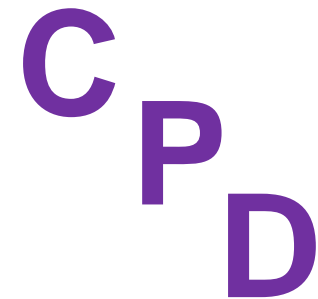
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Welcome Instructions



Introductory Comments



Bharat Venkataramani

**Chair, Advisory Group on Sustainable
Development & Micro Insurance**

Keynote Address



Sunil Sharma

**President, Institute of
Actuaries of India**



Speaker's Profile



Sai Mudigonda

**Senior Tech Actuarial Consultant @techactuarial.com
and Hon. Professor@sssihl.edu.in**

Senior Tech Actuarial Consultant with more than 27 years of consulting in actuarial and tech domains in USA and India. With a wide skill set, he managed numerous multi-million-dollar international assignments for major insurance companies across the globe. He is hon. professor at Sri Sathya Sai Institute of Higher Learning (Deemed University). He has several international journal research publications and book chapters to his credit in the field of Actuarial Data Science and has presented in many international conferences.

Agenda



Ayushman Bharat – Key Features & Actuarial Perspectives

Pricing Framework for Ayushman Bharat

Ayushman Bharat – In times of Pandemic - COVID 19

Future of Ayushman Bharat



Agenda

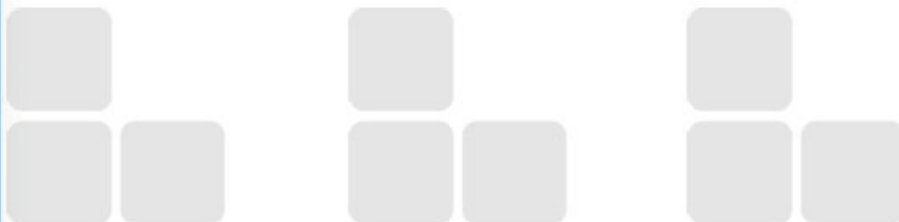


Ayushman Bharat – Key Features & Actuarial Perspectives

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Ayushman Bharat - Background



Scheme Structure

- Group Health Insurance Scheme – 5 lakhs floater cover
- Key stakeholders- NHA, SHA, Families covered, Hospitals, Insurers, TPAs
- Operates in 3 modes - Trust, Insurance, Hybrid
- Contribution - State and Central in a ratio based on State

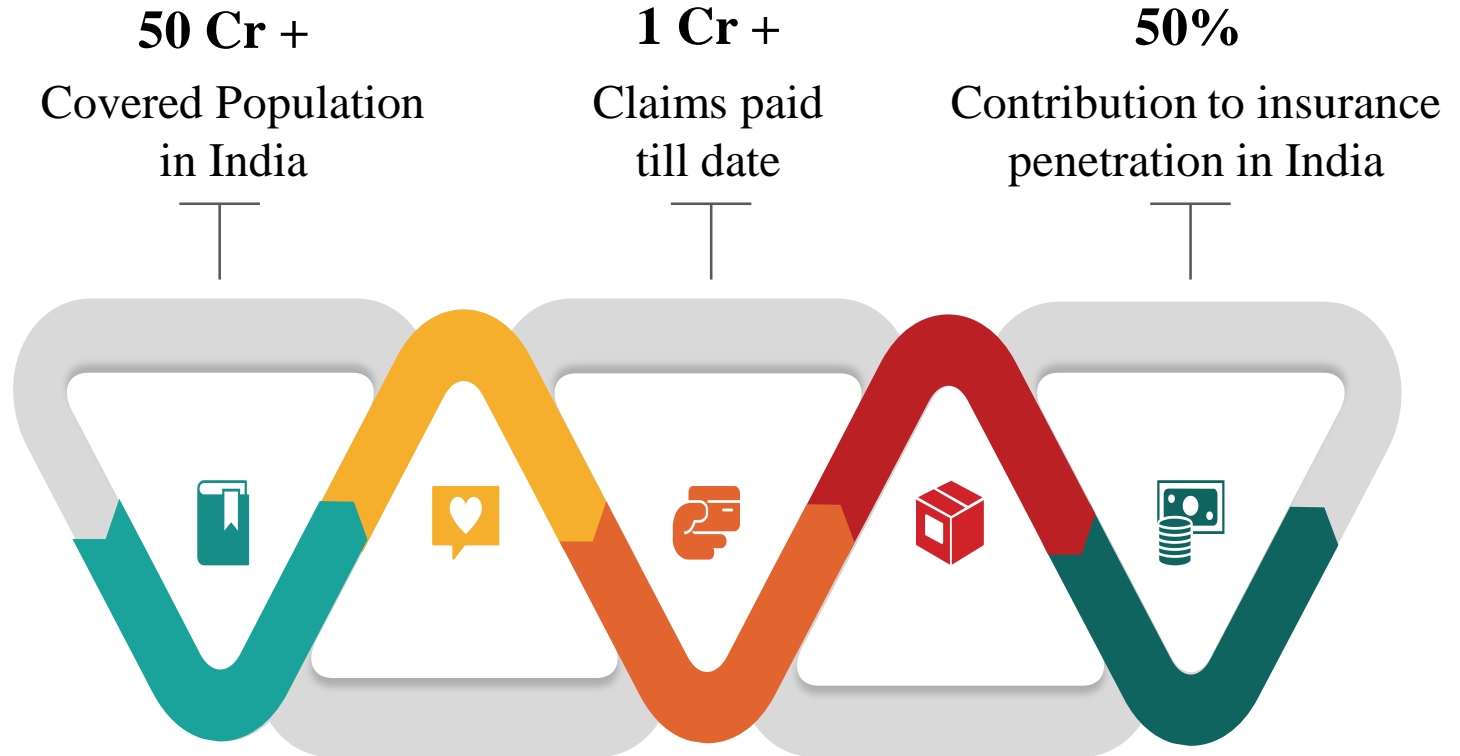
Package Rate Structure

- Tertiary care with 2500+ procedures and surgeries
- Categorized into 24 specialities
- Pre-authorized packages
- Include all costs associated with treatment
- Additional incentives for hospitals

Key Clauses

- Expense clause
- Loss cap clause
- Enrollment of new members
- Empanelment of new hospitals
- Portability of scheme
- Claim investigation and settlement
- Fraud Prevention Measures

Ayushman Bharat in numbers



50 Cr +

Covered Population
in India

1 Cr +

Claims paid
till date

50%

Contribution to insurance
penetration in India

Hospitals
empaneled
20,916 +

Mode of operation
Trust (21)
Insurance (7)
Hybrid (4)

Insurance Companies

Opportunities and Risks



Benefits of involving

- Increased visibility and creates cross sell opportunities
- Sizable amount of yearly premium (250 crore to 1500 crore range)
- New working relationships with thousands of Hospitals
- Access to line item data of claims

Risks of not involving

- Loss of opportunity if Ayushman Bharat is also offered to other segments
- Competitive advantage if insurer is already involved

Risks of involving

- Potential loss if scheme is mis-priced, political interference, claims mis-management and potential abuse / fraud

Actuarial Professionals

Opportunities and Risks



Benefits of involving

- Opportunity to work for a flagship scheme
- Be part of the team of professional implementing world's largest health insurance scheme

Risks of not involving

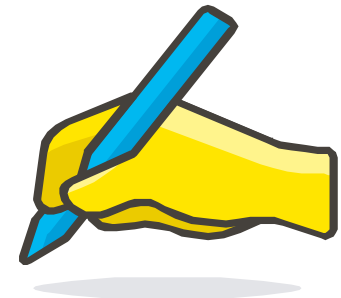
- Lost opportunity of implementing advanced actuarial techniques on big data
- Other professionals such as data scientists / economists / statisticians filling for the actuarial skill needed for the scheme

Risks of involving

- Task demands knowledge of data science, Health surgeries / medical procedures and implementation of actuarial techniques in a non traditional area
- This needs greater commitment and involvement to acquire multi-disciplinary knowledge than traditional standard actuarial tasks.

Poll Question 1

Approximately, how much % of the country's population do you think is covered by Ayushman Bharat?



Agenda

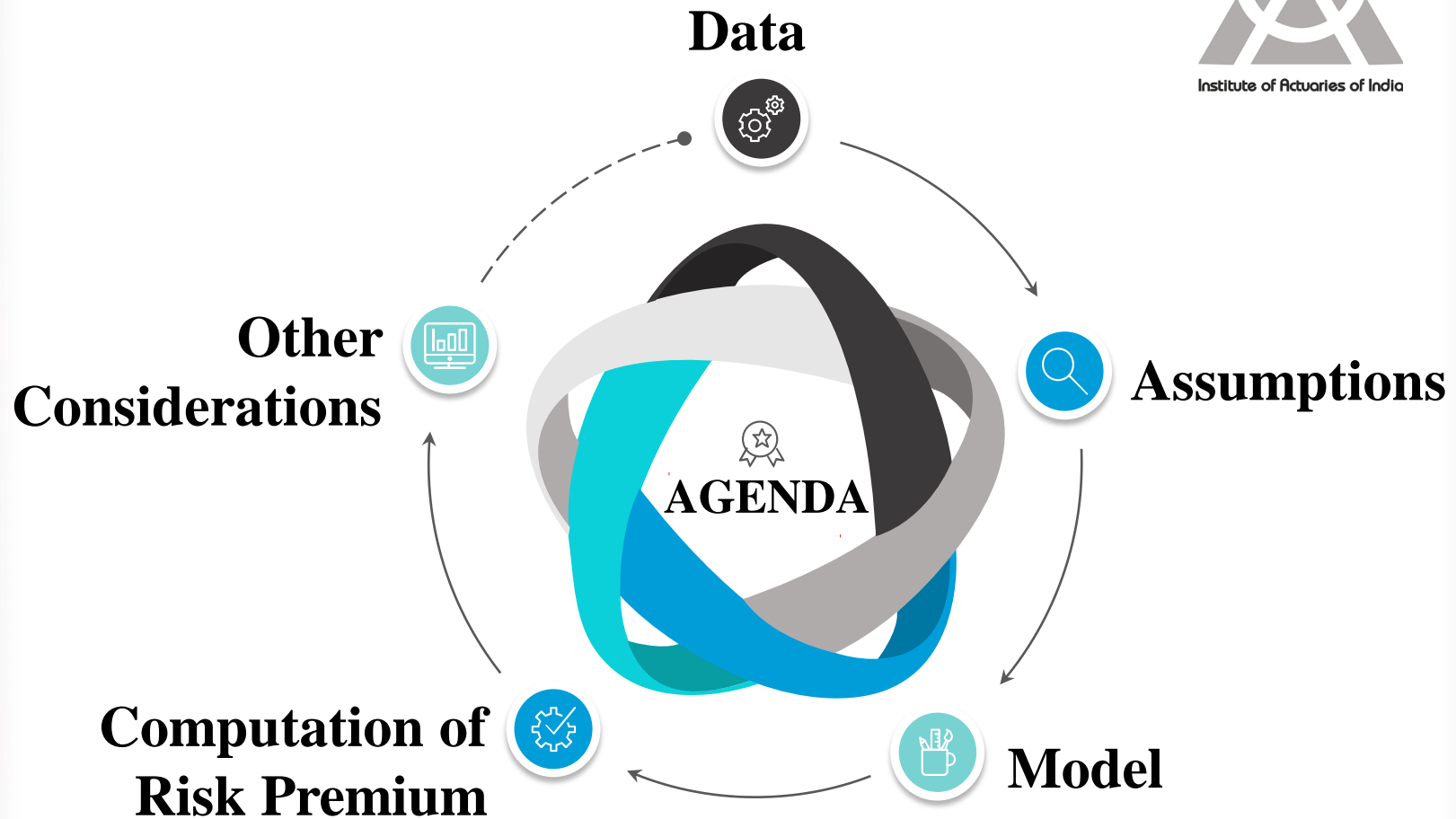


Ayushman Bharat – Key Features & Actuarial Perspectives

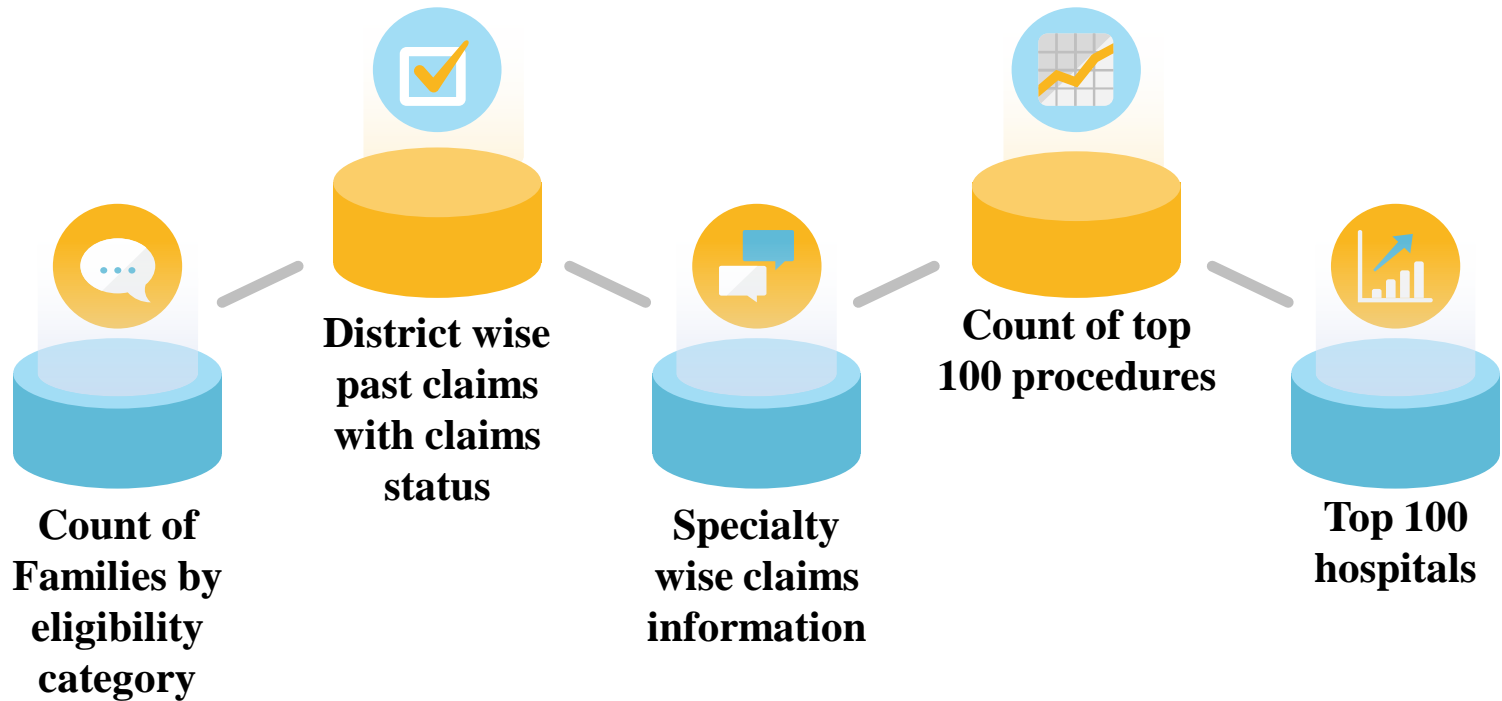
Pricing Framework for Ayushman Bharat

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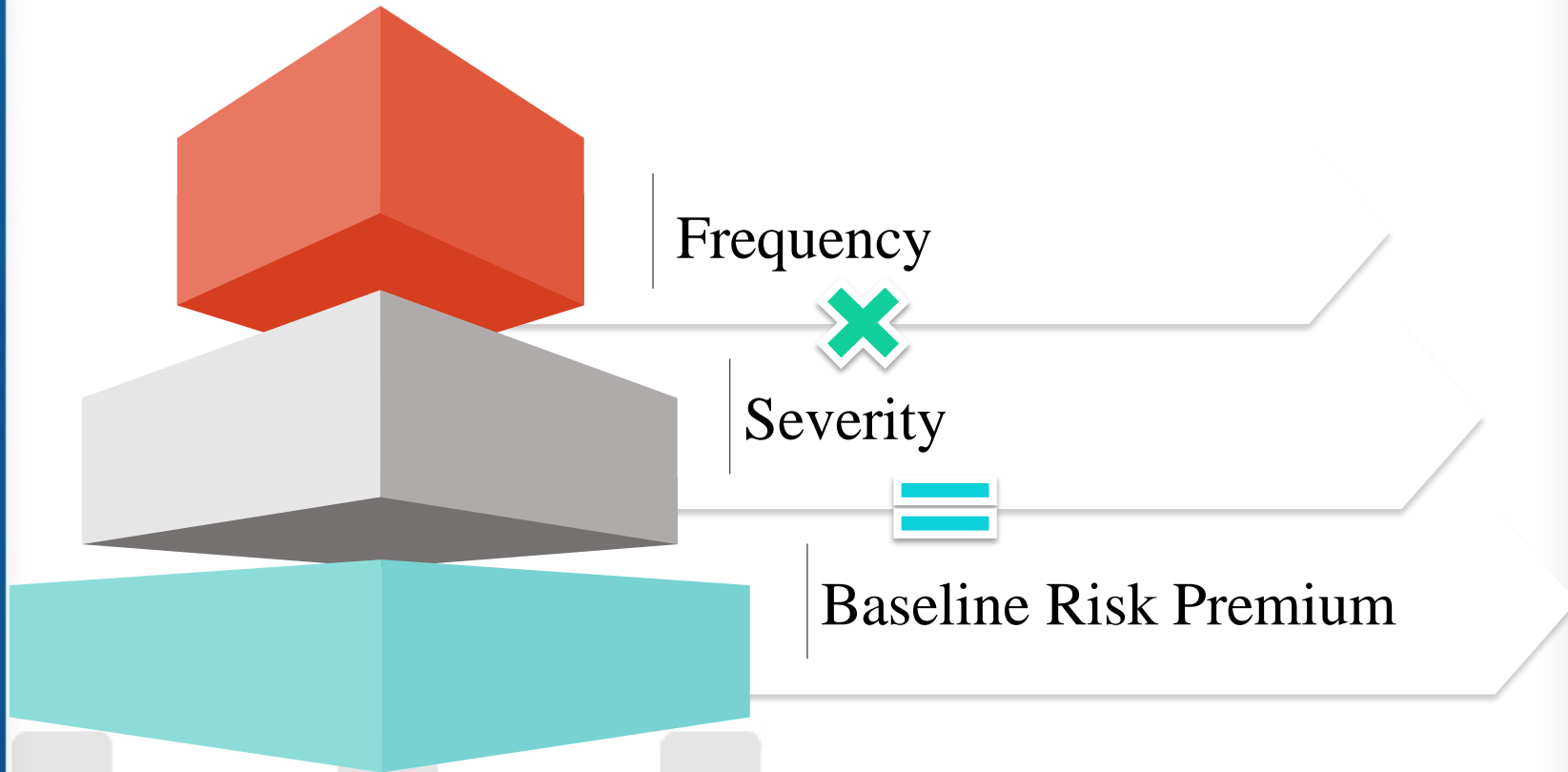
Future of Ayushman Bharat



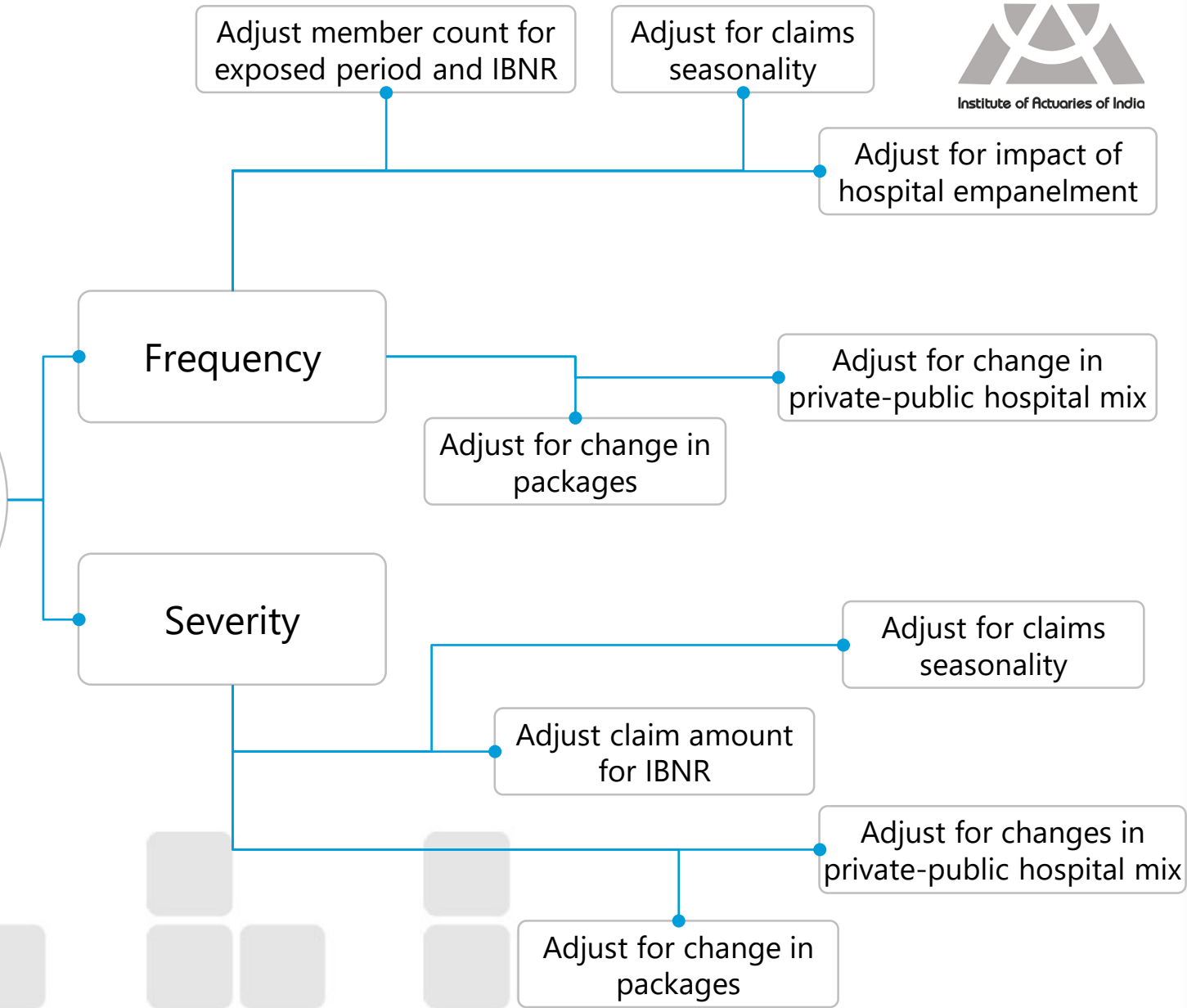
Data - Analysis of Available Information



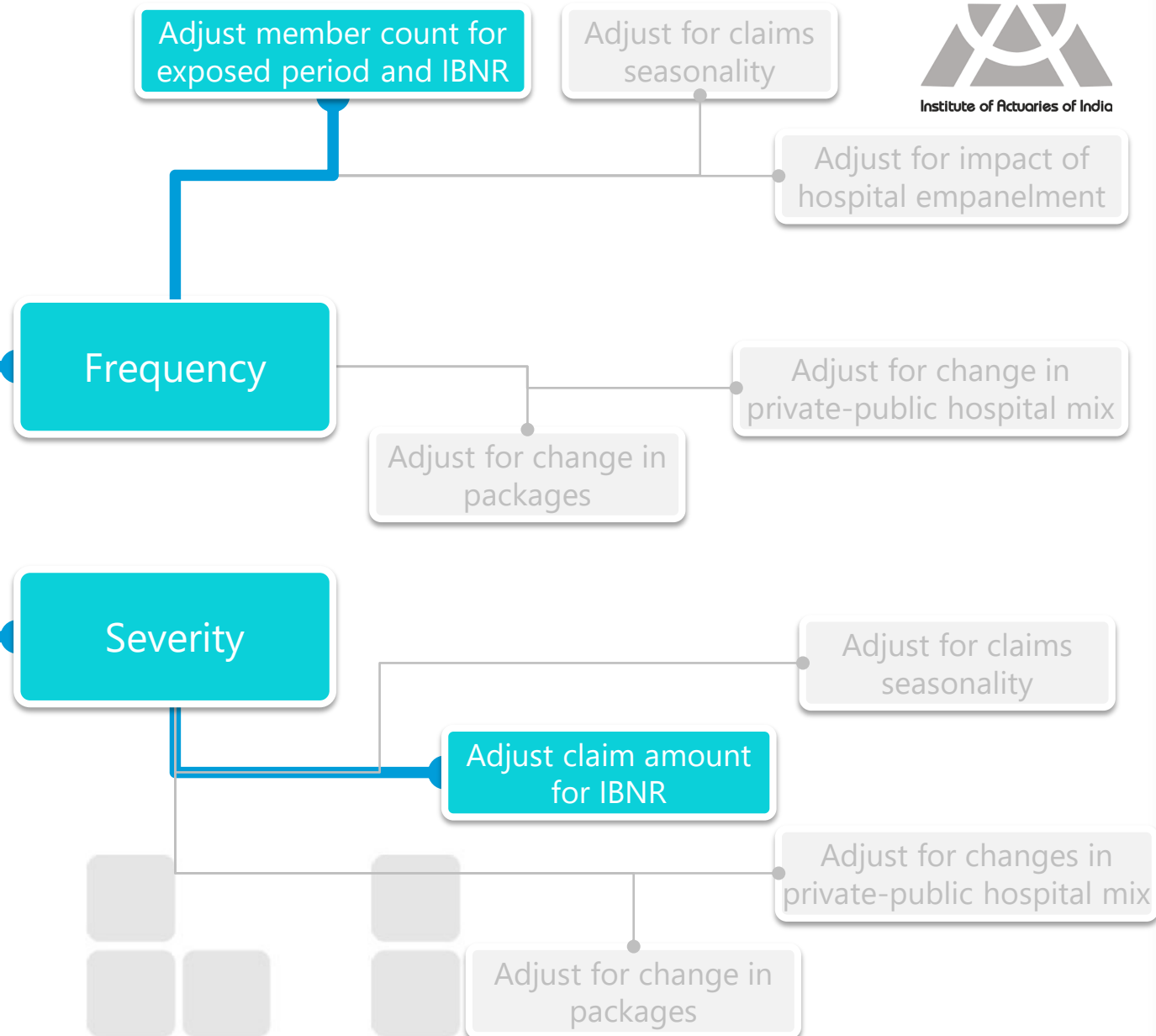
Arriving at adjusted Risk Premium



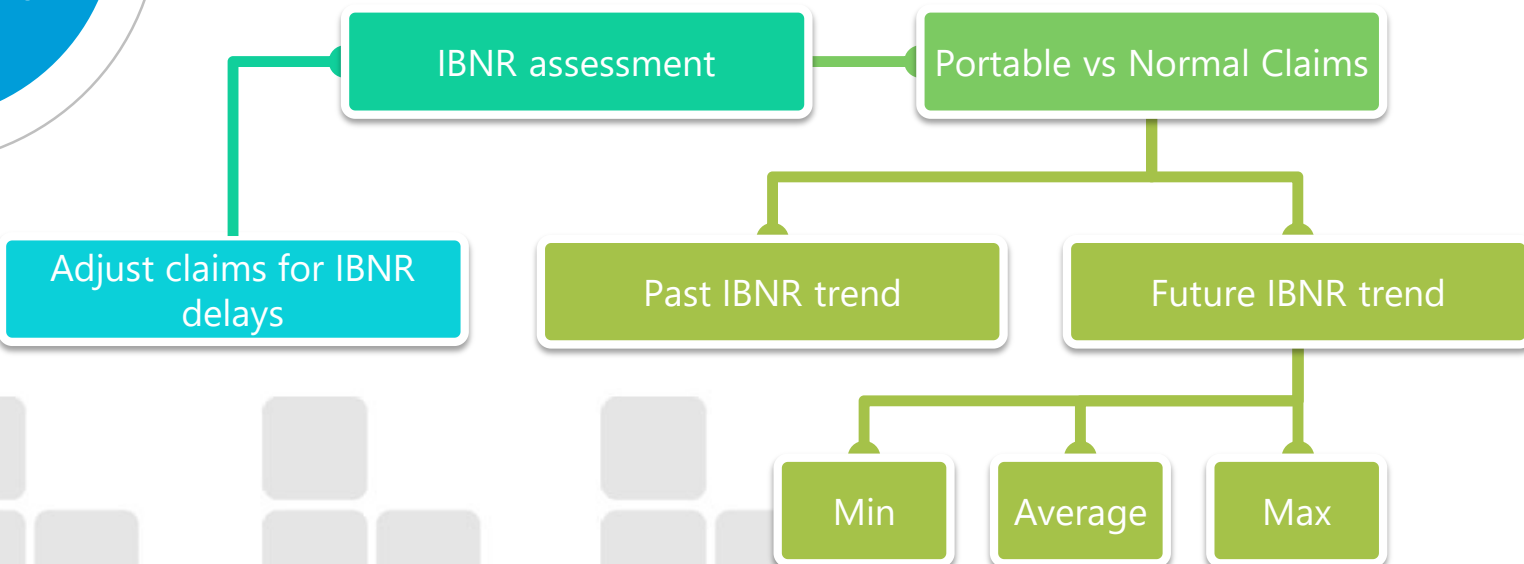
Risk Premium



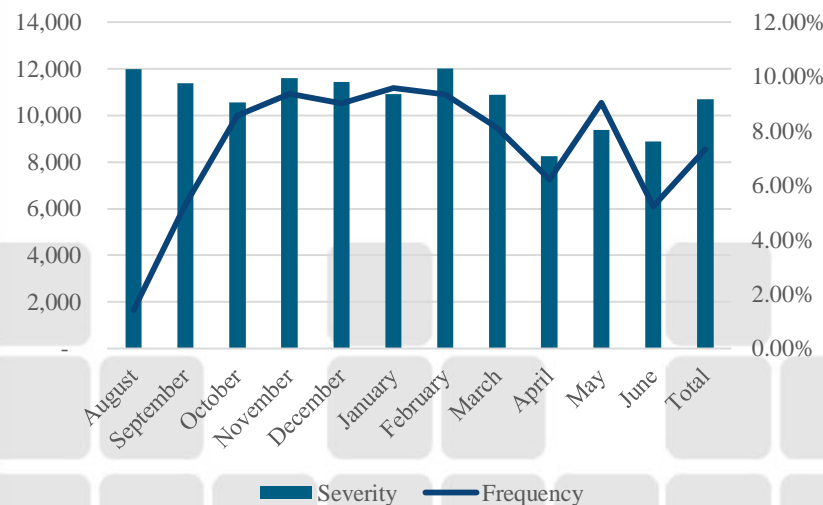
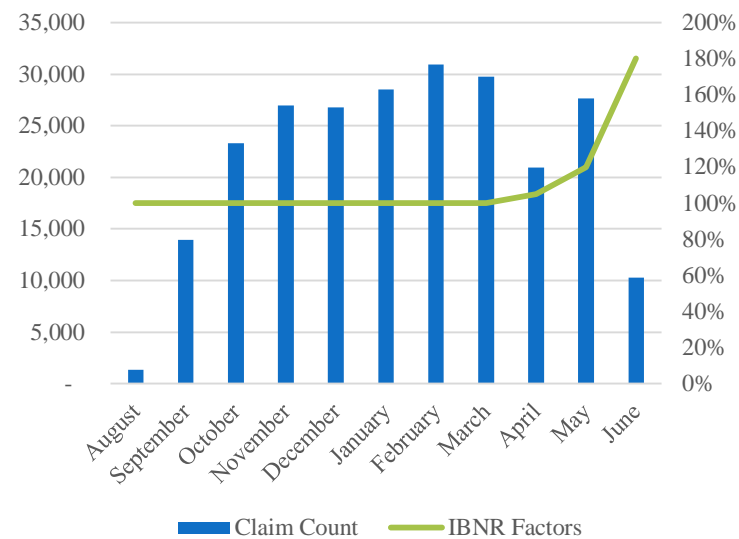
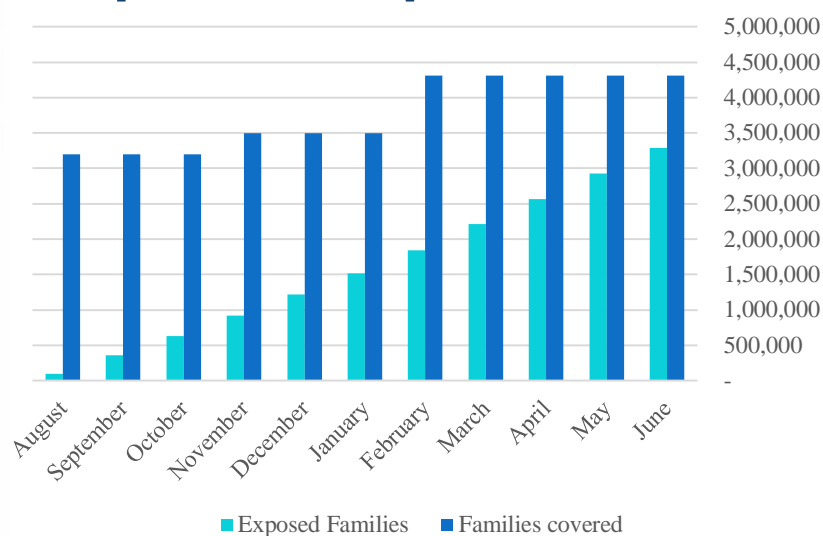
Risk Premium



Adjust member count for exposed period and IBNR

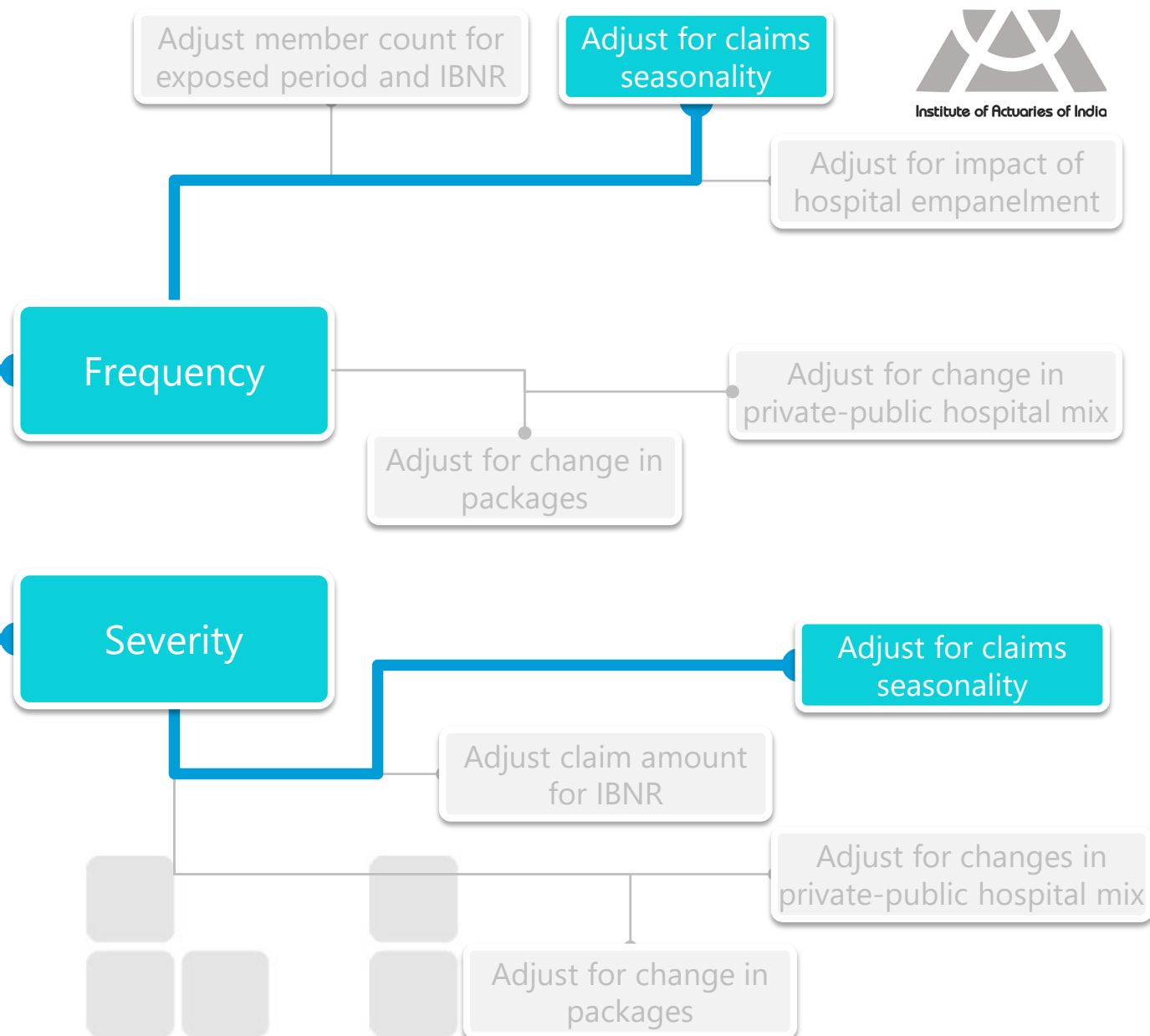


Adjust member count for exposed period and IBNR

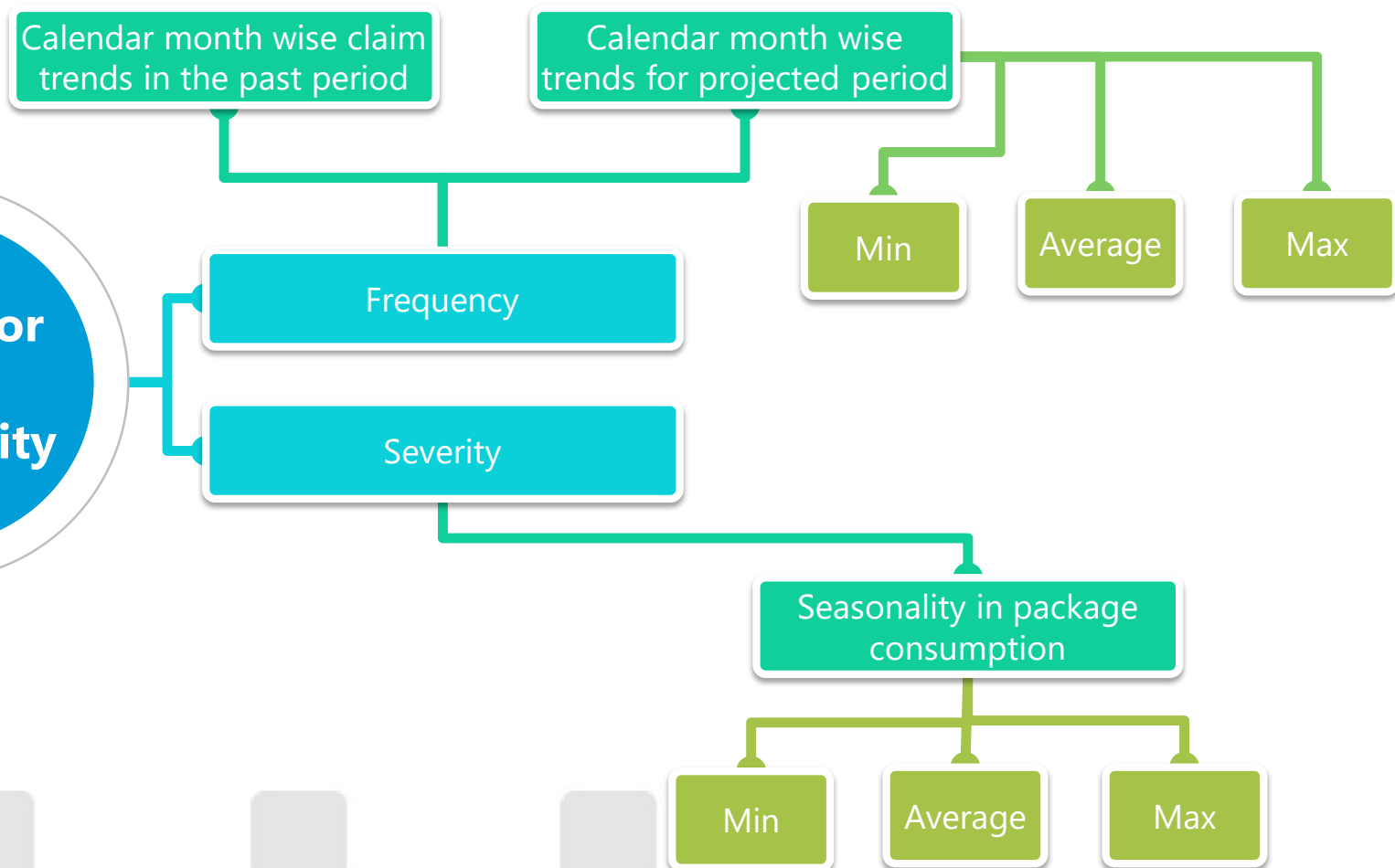


	Min	Average	Max
Frequency	5%	7%	10%
Severity	8,245	10,693	12,023
Risk Premium	431	782	1,152

Risk Premium



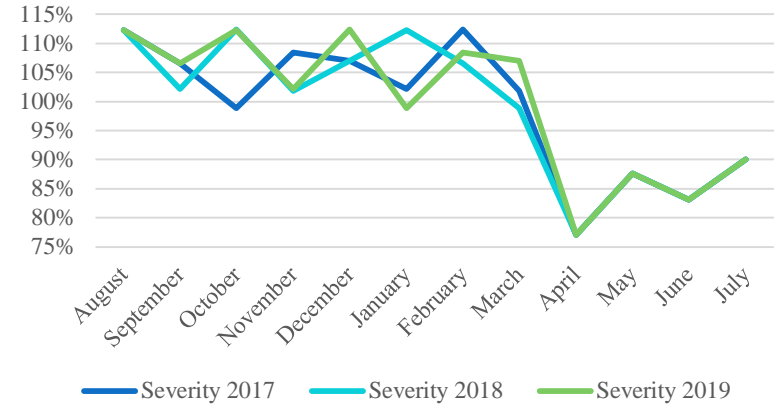
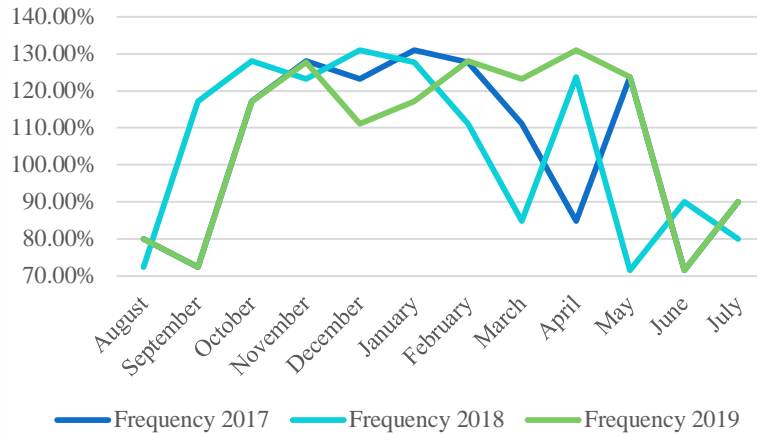
Adjust for claims seasonality



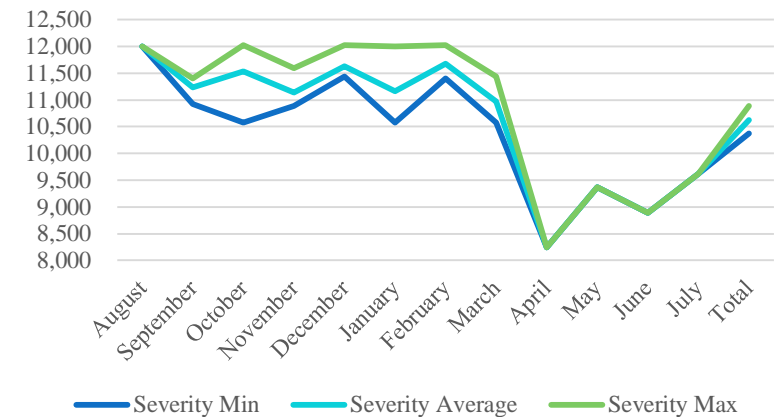
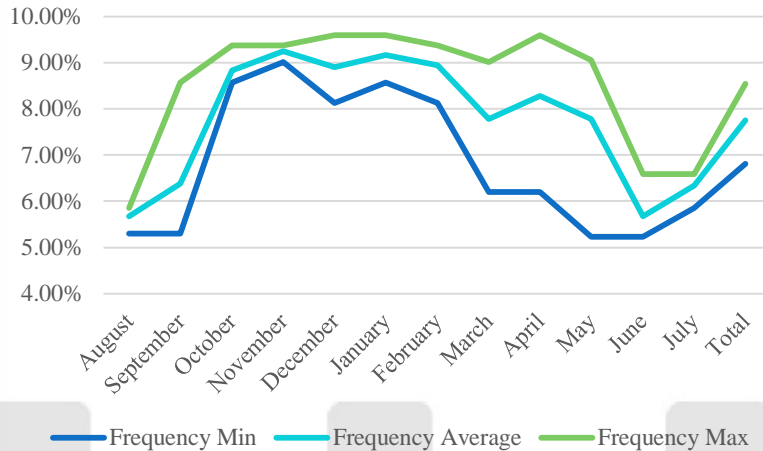
Adjust for claims seasonality



Current Experience

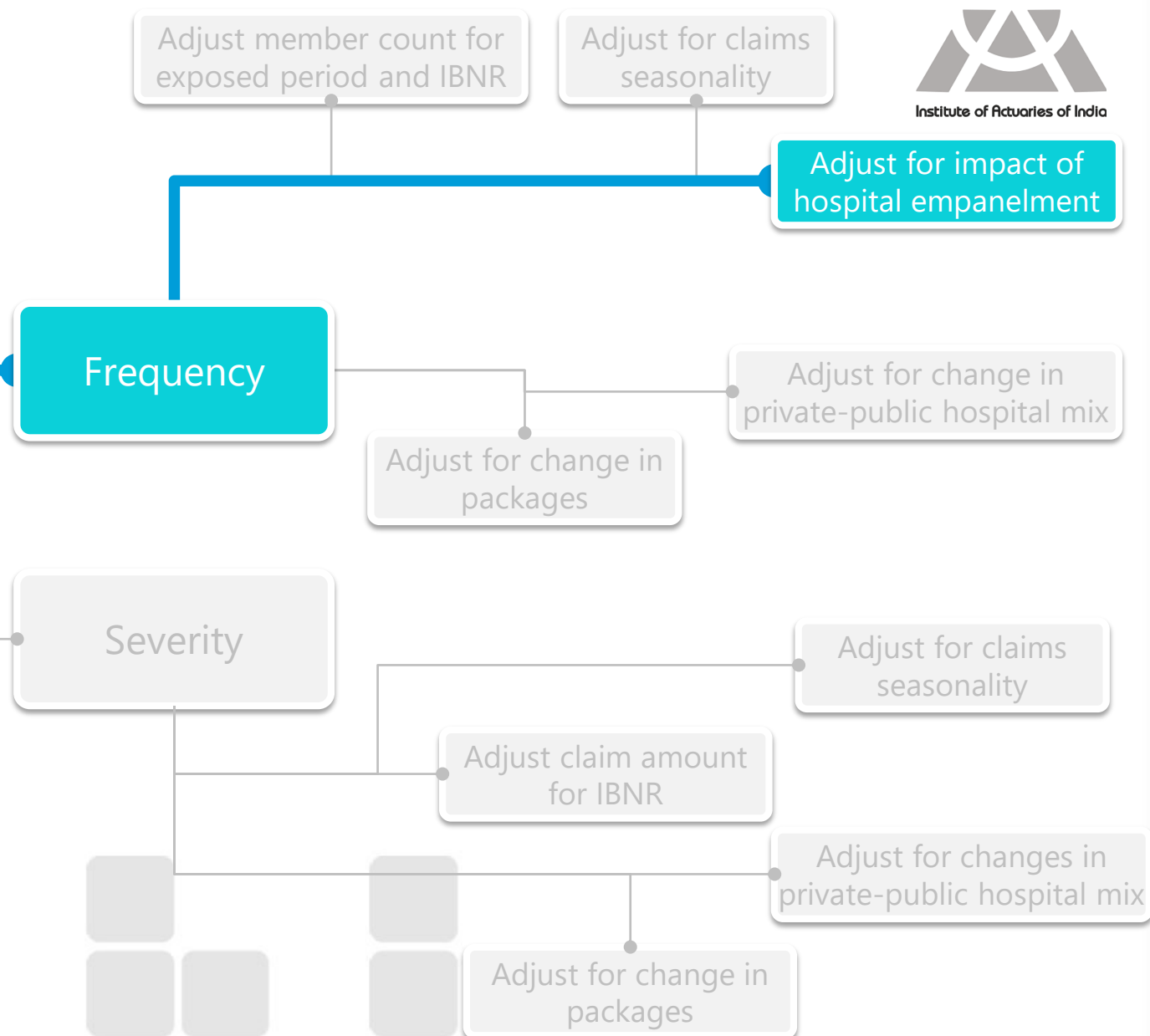


Future Projection

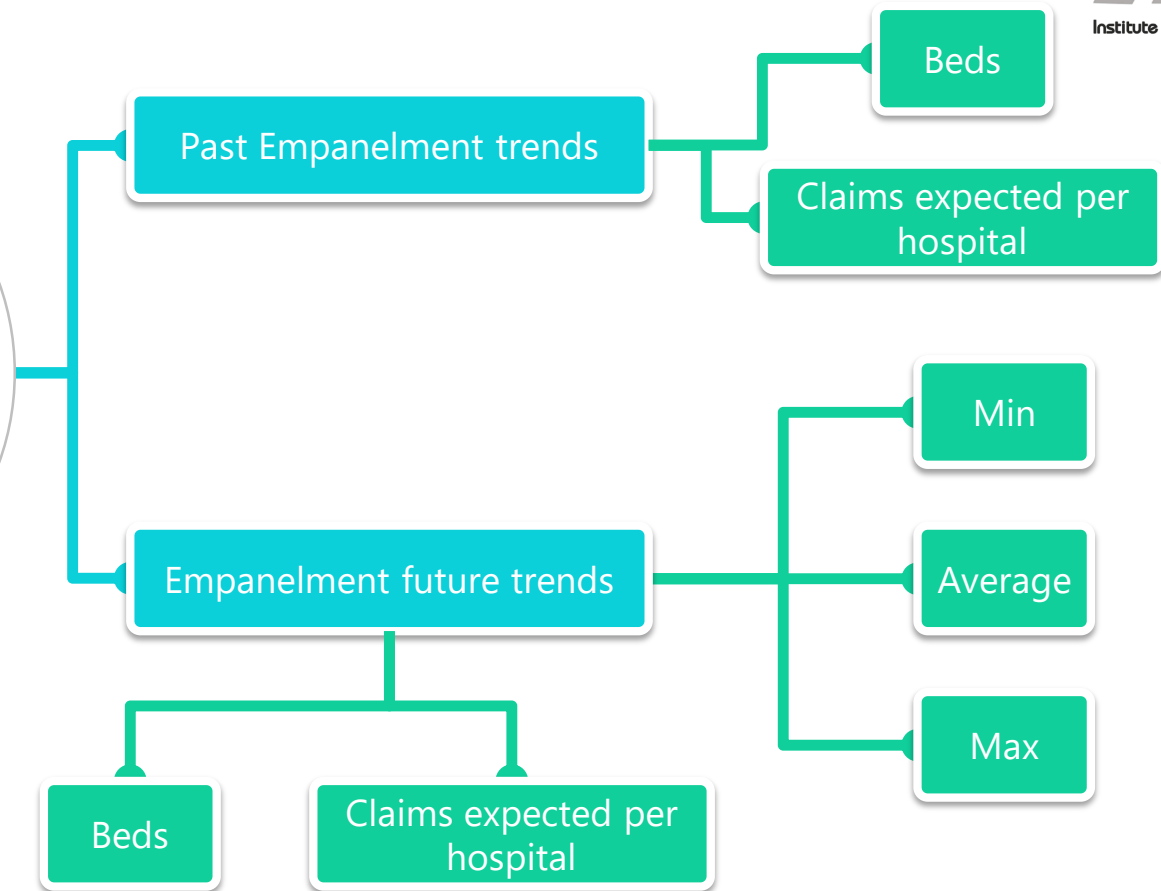


	Min	Average	Max
Frequency	7%	8%	9%
Severity	10,374	10,623	10,886
Risk Premium	706	823	930

Risk Premium

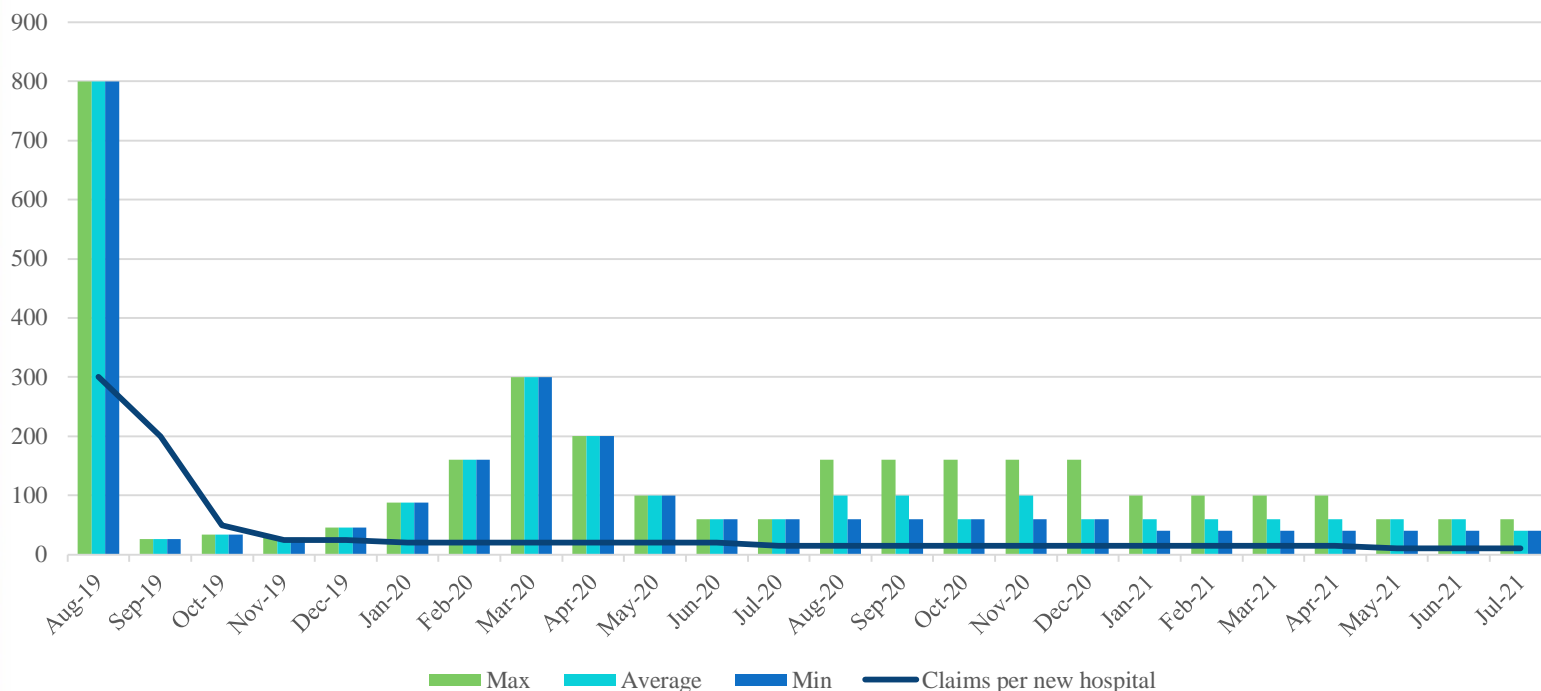


Adjust for impact of hospital empanelment



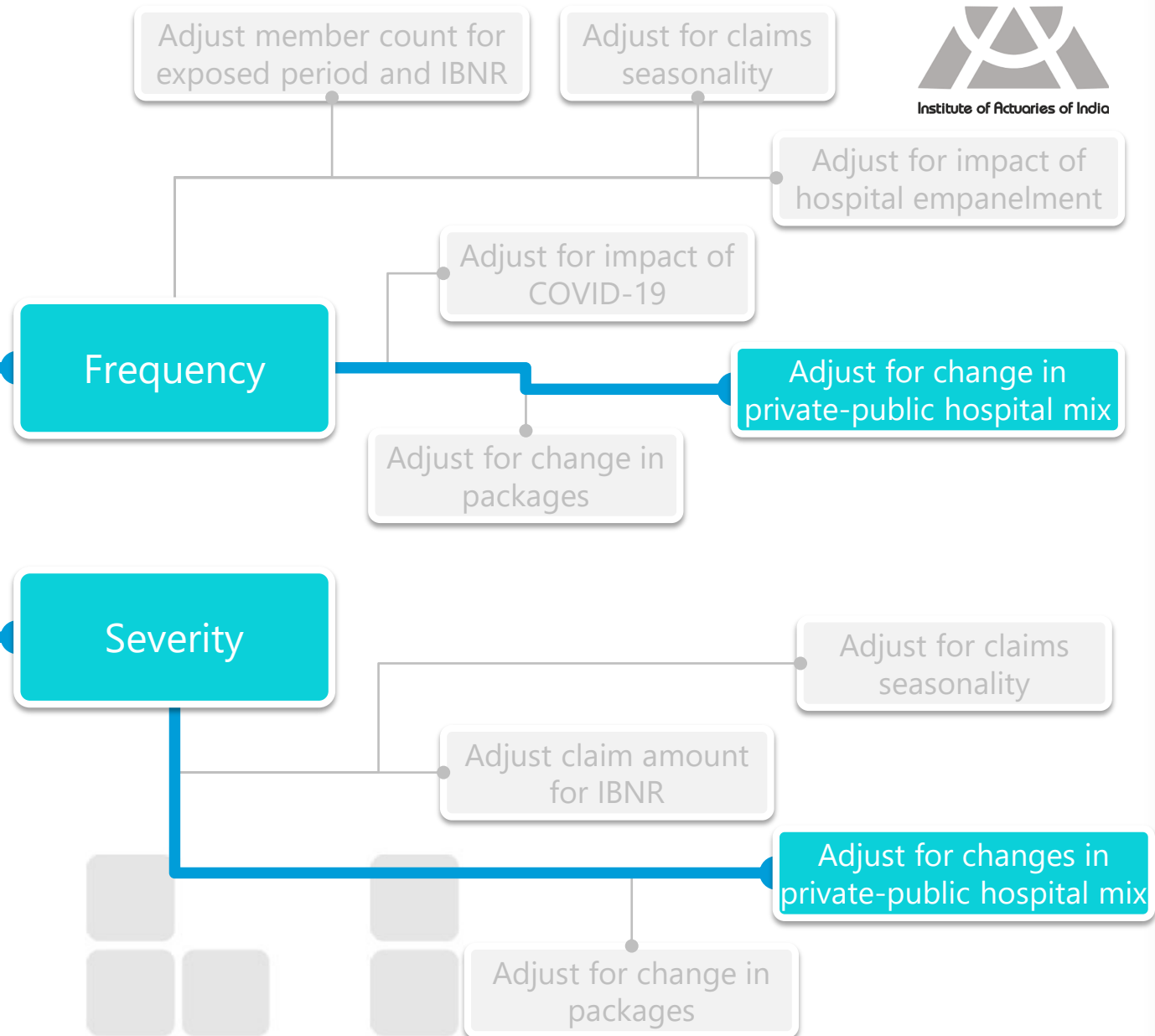
Adjust for impact of hospital empanelment

Number of hospitals Enrolled

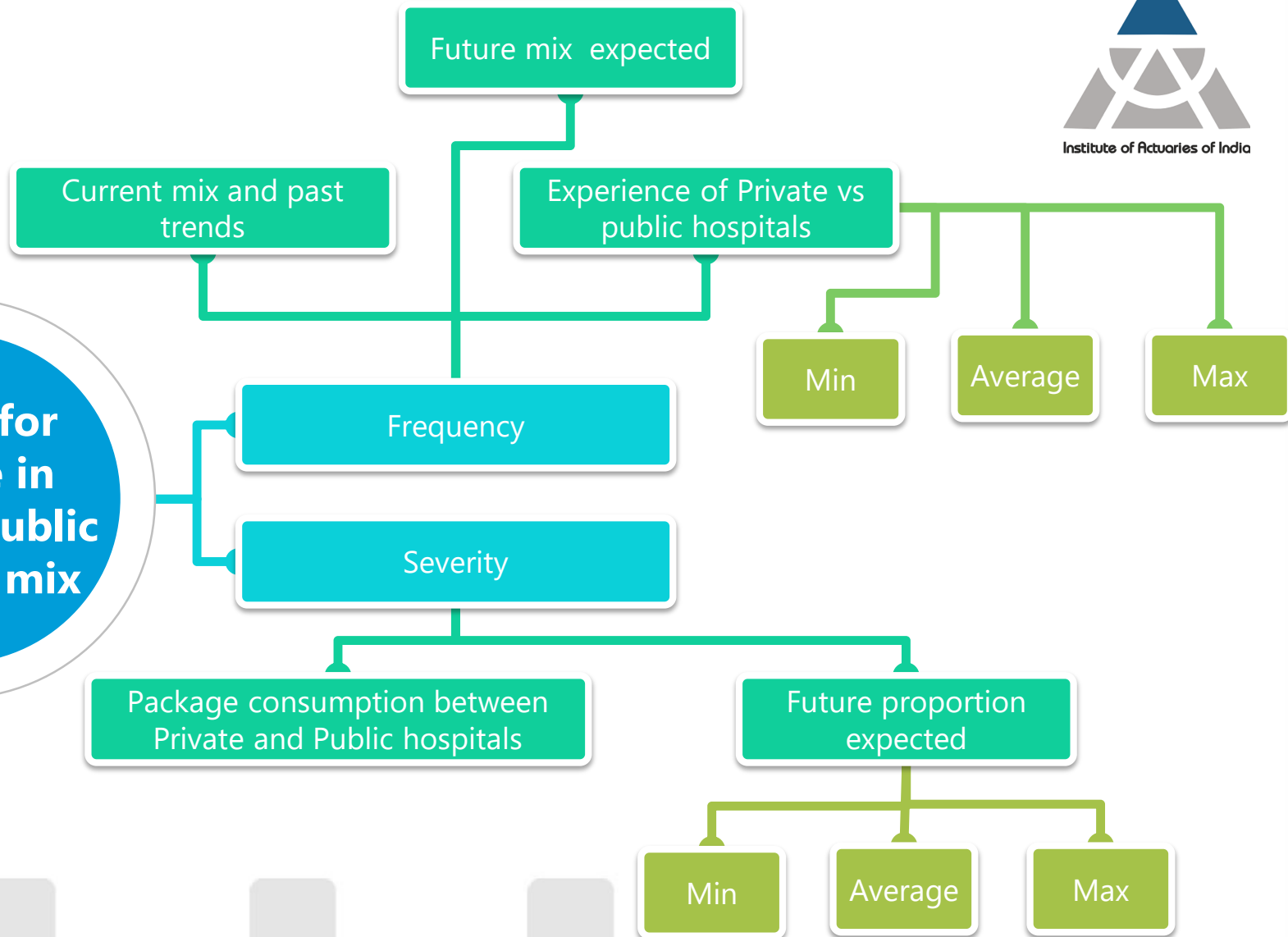


	Min	Average	Max
Frequency	7%	8%	9%
Severity	10,374	10,623	10,886
Risk Premium	726	851	980

Risk Premium

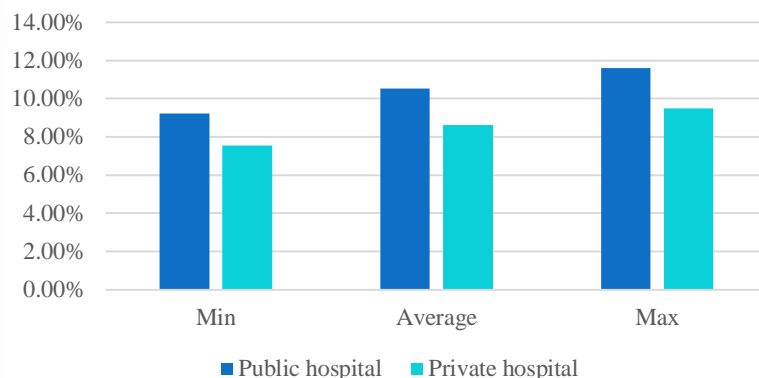


**Adjust for
change in
private-public
hospital mix**

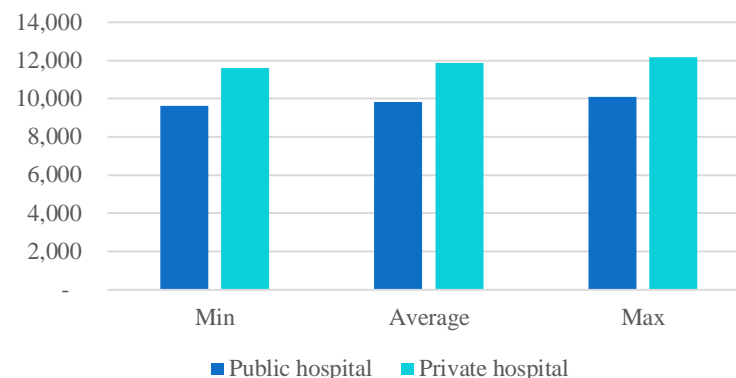


Adjust for change in private-public hospital mix

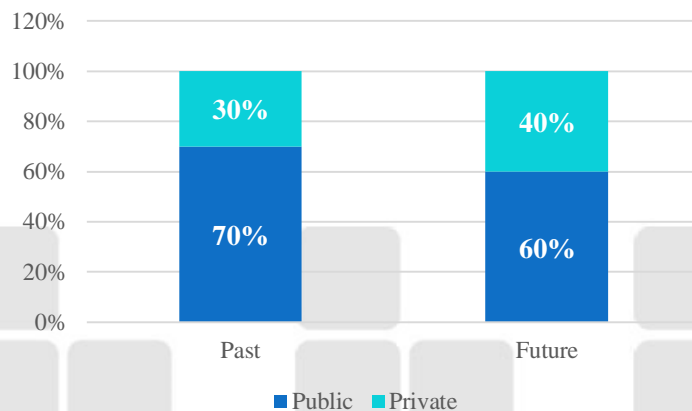
Frequency



Severity

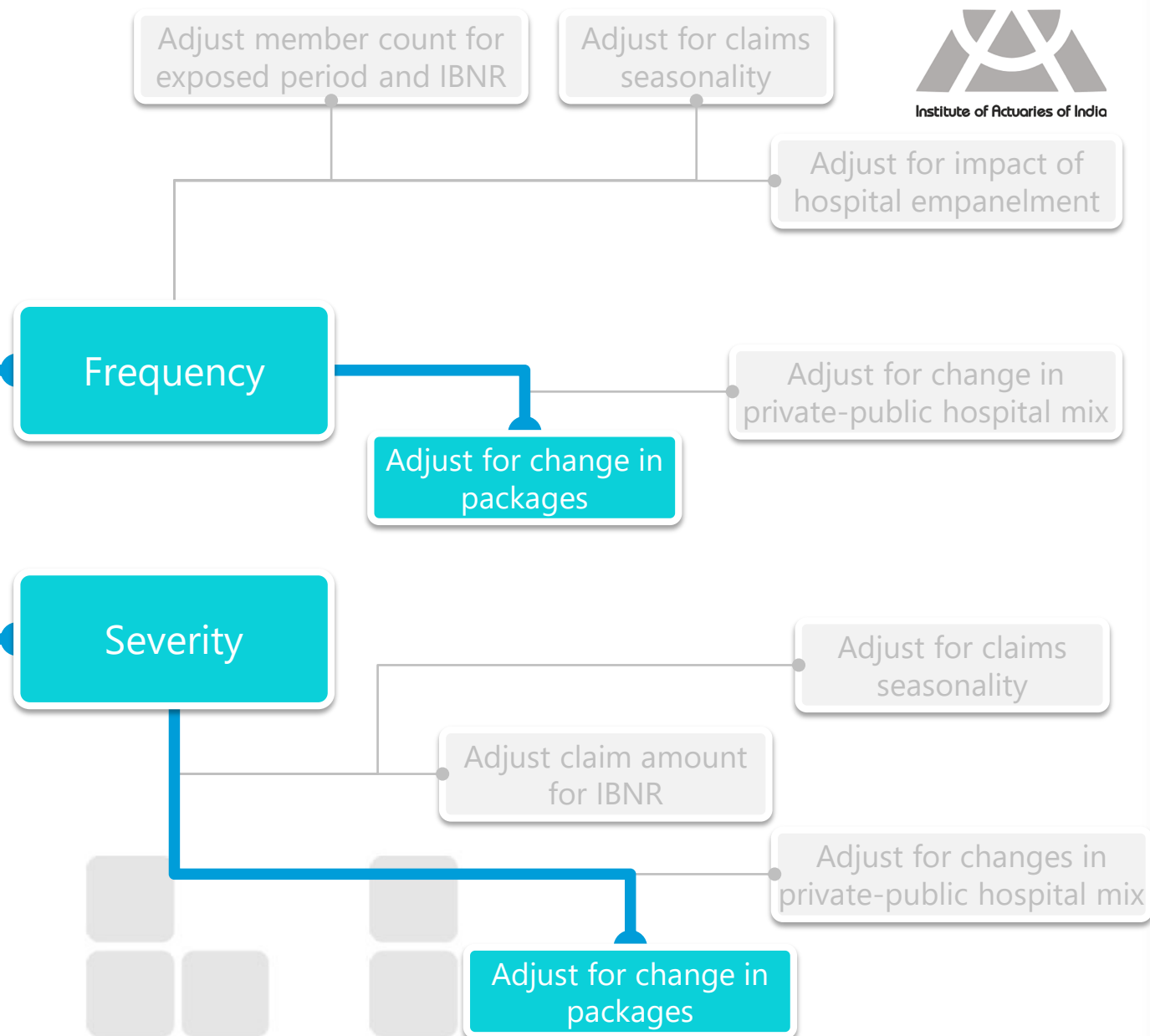


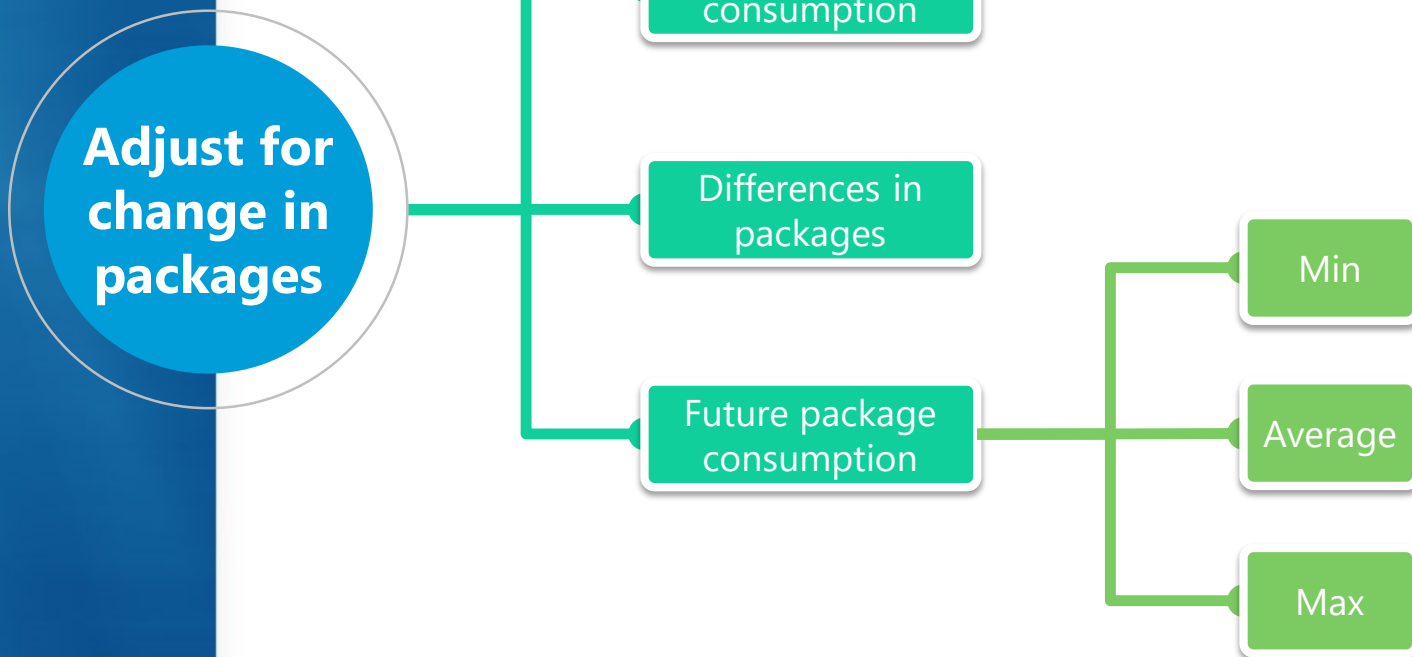
Private vs Public mix



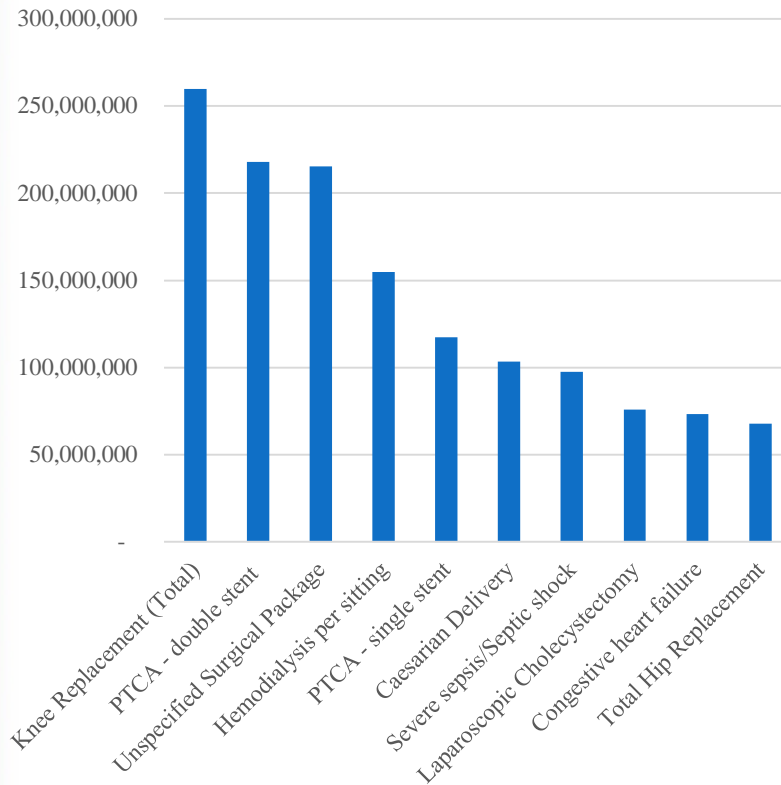
	Min	Average	Max
Frequency	9%	10%	11%
Severity	10,410	10,651	10,915
Risk Premium	891	1,038	1,172

Risk Premium

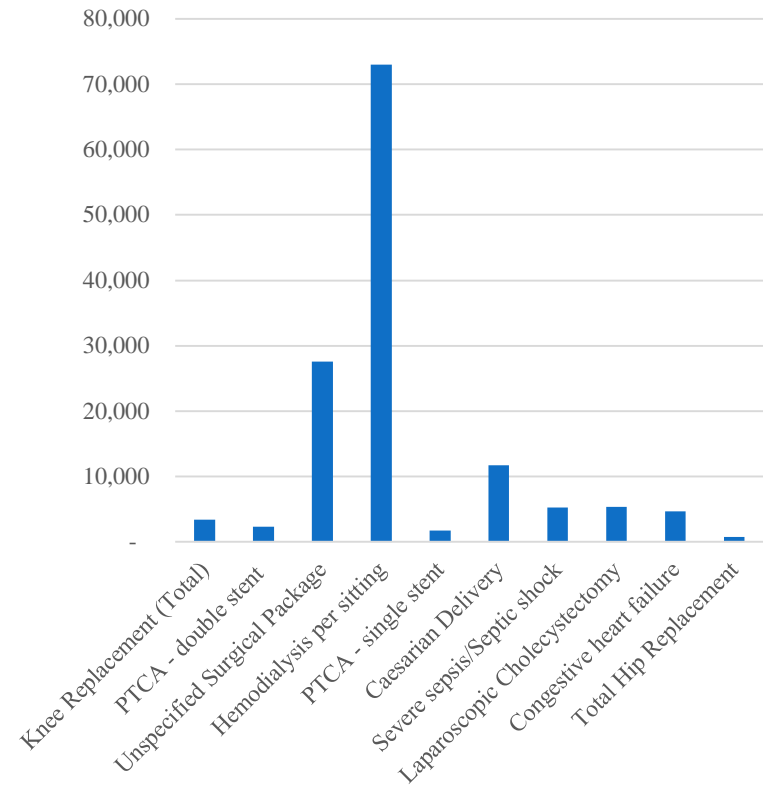




Top 10 procedures

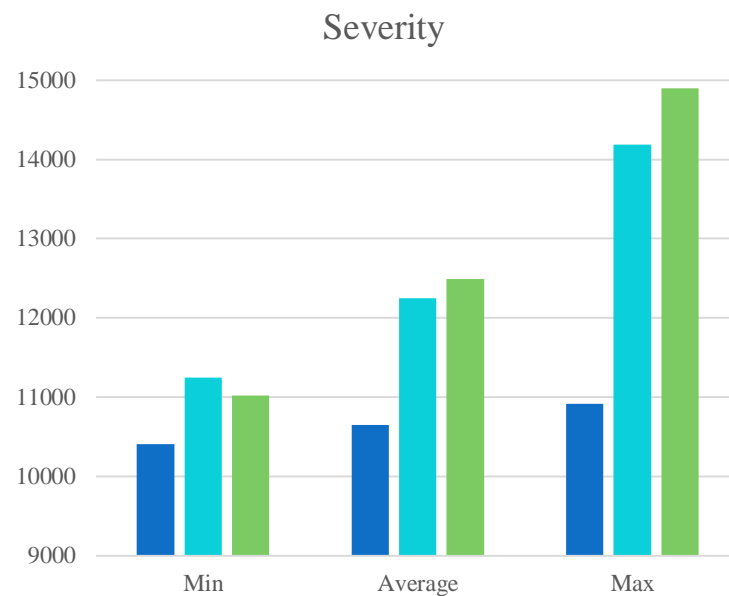
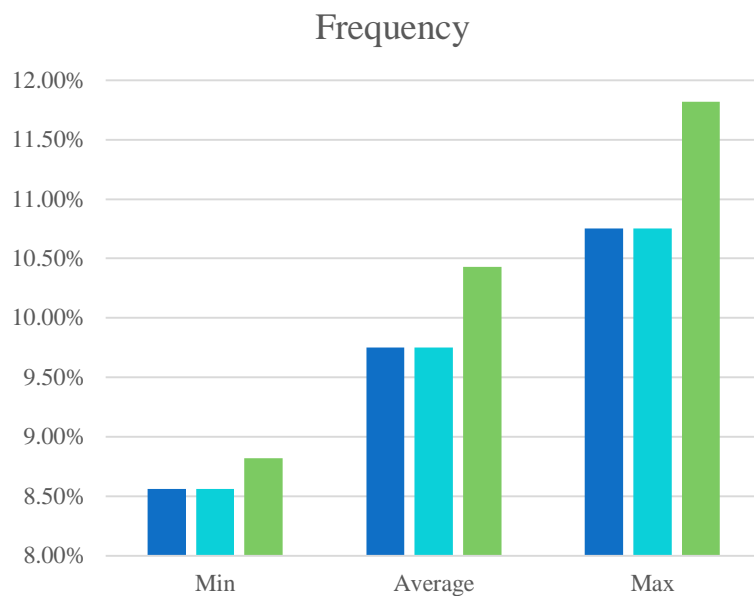


■ Claim Amount



■ Claim Count

Adjust for change in packages

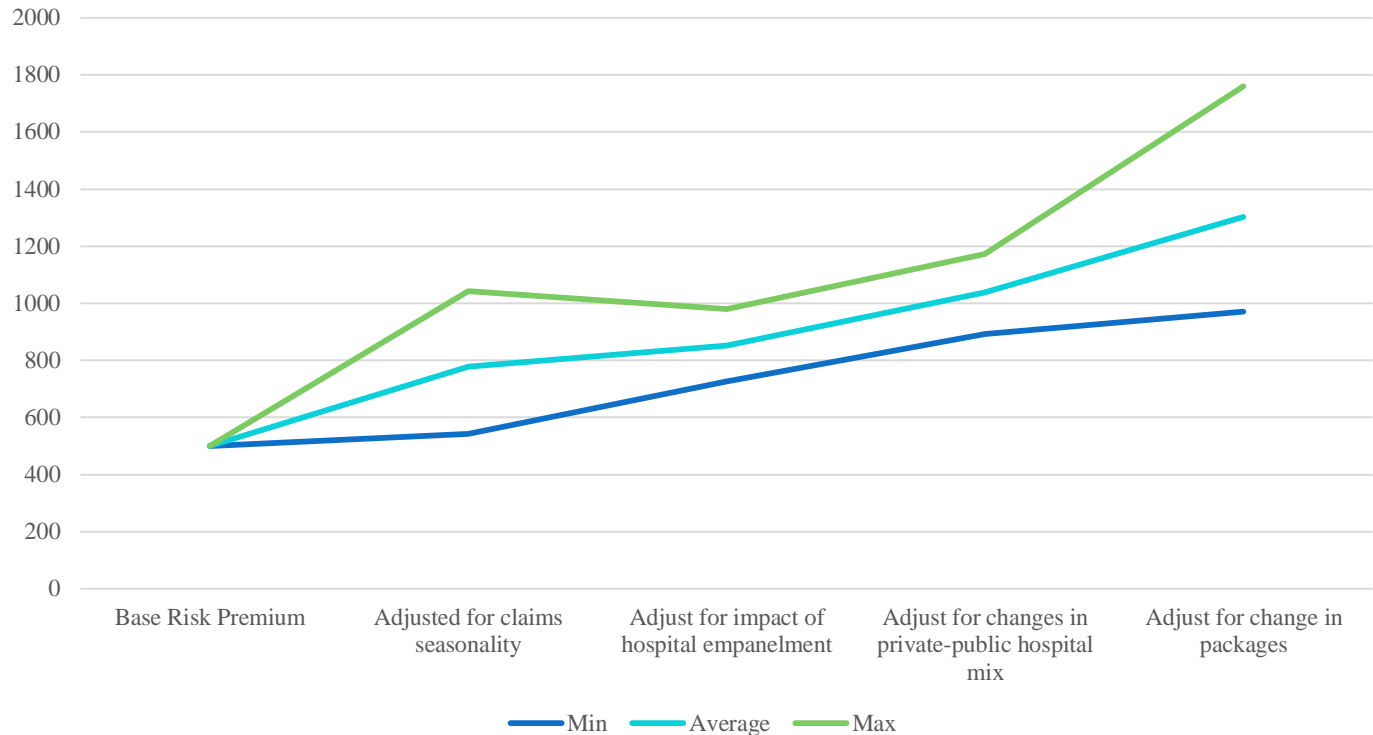


■ Same Packages ■ Increase in Package Rates ■ Increase in Packages

■ Same Packages ■ Increase in Package Rates ■ Increase in Packages

	Frequency			Severity		
	Min	Average	Max	Min	Average	Max
New Packages	9%	10%	12%	11,018	12,493	14,899

Risk Premium Calculation



	Min	Average	Max
Base Risk Premium	500	500	500
Adjusted for claims seasonality	542	777	1,043
Adjust for impact of hospital empanelment	726	851	980
Adjust for changes in private-public hospital mix	891	1,038	1,172
Adjust for change in packages	971	1,303	1,761

Select input for projecting risk premium

Frequency

Lower Average Upper

Severity

Lower Average Upper

Frequency Trend

Lower Average Upper

Severity trend

Lower Average Upper

Hospital Empanelment Impact

Lower Average Upper

Package Rate Changes

Lower Average Upper

Package Count Changes

Lower Average Upper

Poll Question 2

In 2020, the packages offered in the Ayushman Bharat product have changed. What does this impact?

1

Frequency only

2

Severity only

3

Both Frequency and severity

4

Neither frequency nor severity



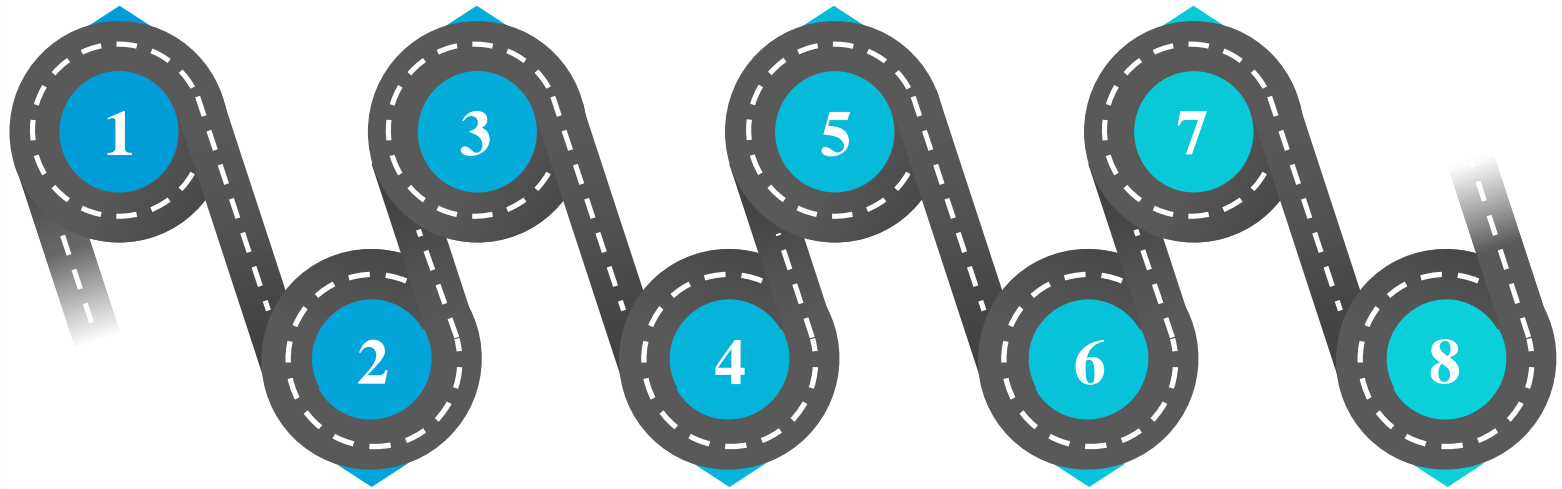
Other Considerations

Enrollment
changes

Target Population
Changes

Emerging
Experience

Portability



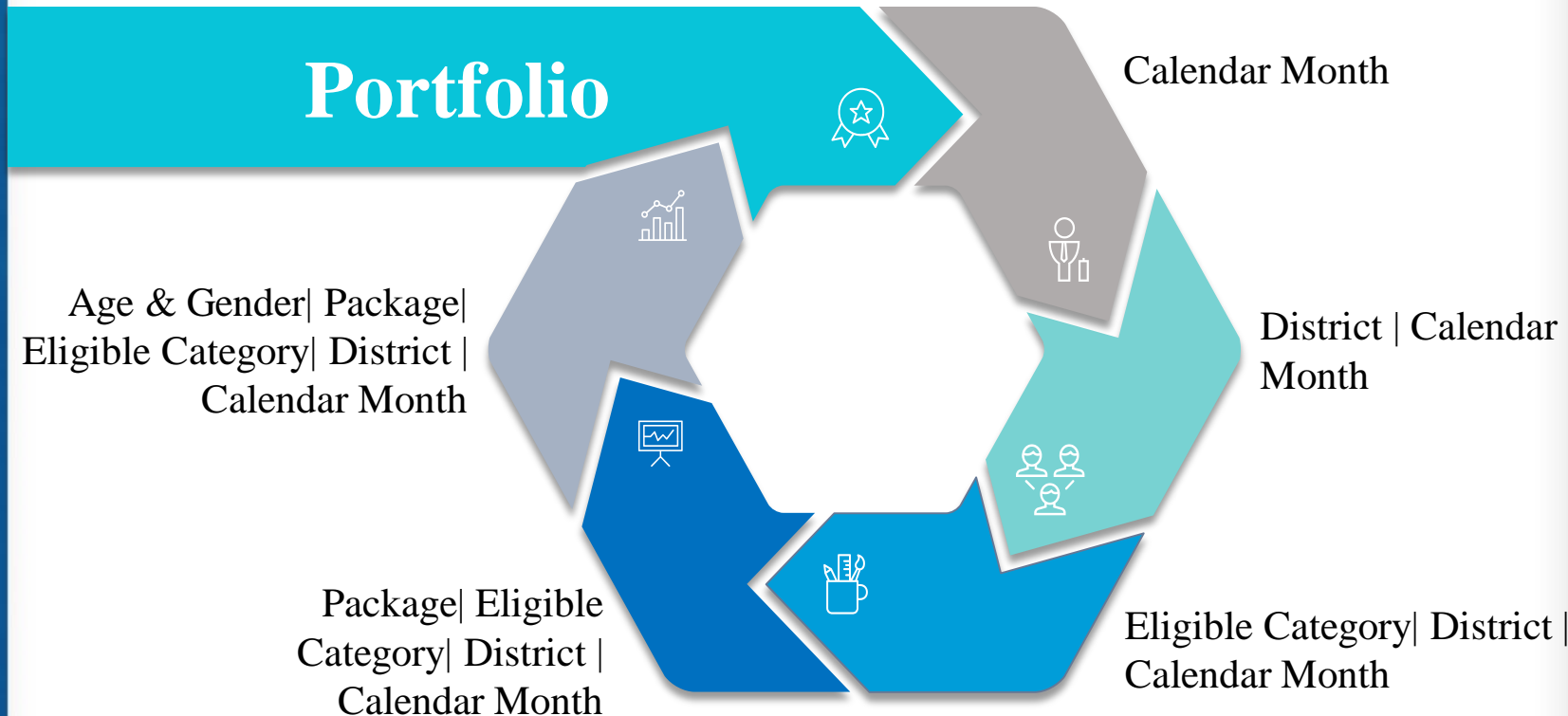
Change in
Loss Sharing
Clause

Experience from
Retail health
insurance products

Other government
schemes
experience

Fraud
detection

Calculation complexity – Leveraging Big Data



Data Sources for Actuaries to explore AB Pricing

- ABPMJAY official website
- SHA Tender documents

Agenda



Ayushman Bharat – Key Features & Actuarial Perspectives

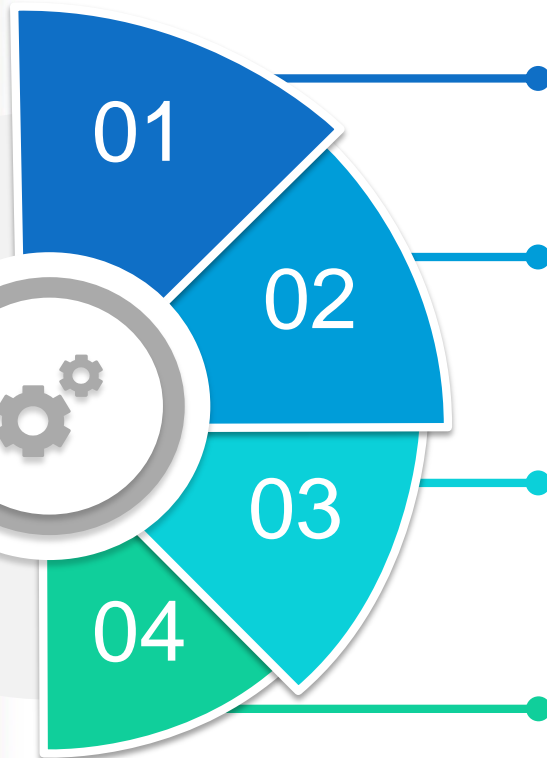
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COVID-19 Impact



Changes in package consumption patterns

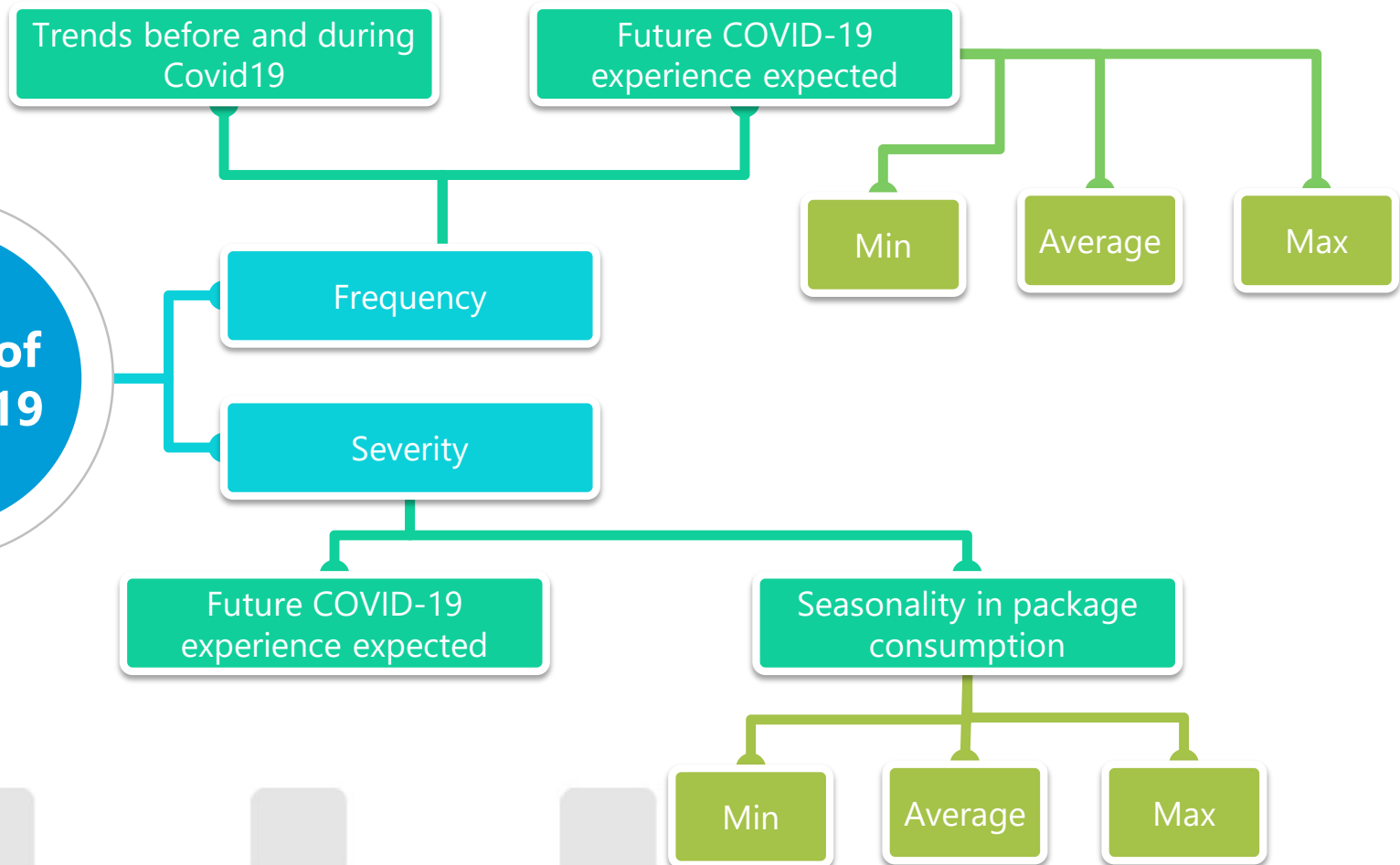
Upcoming period impact

Packages for COVID-19

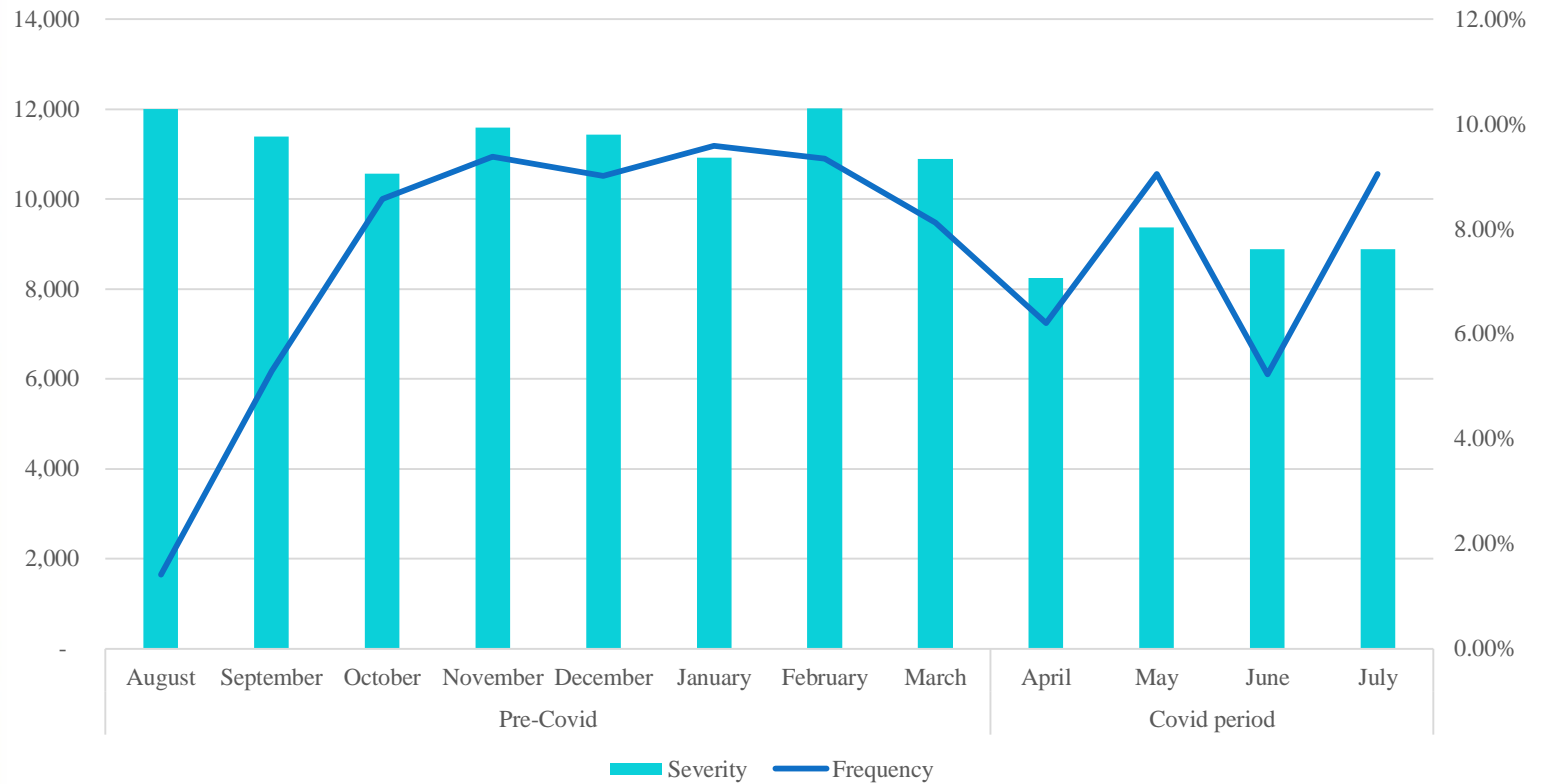
Scope of claims investigation

COVID-19 Impact

Impact of COVID-19



Impact of COVID-19



Agenda



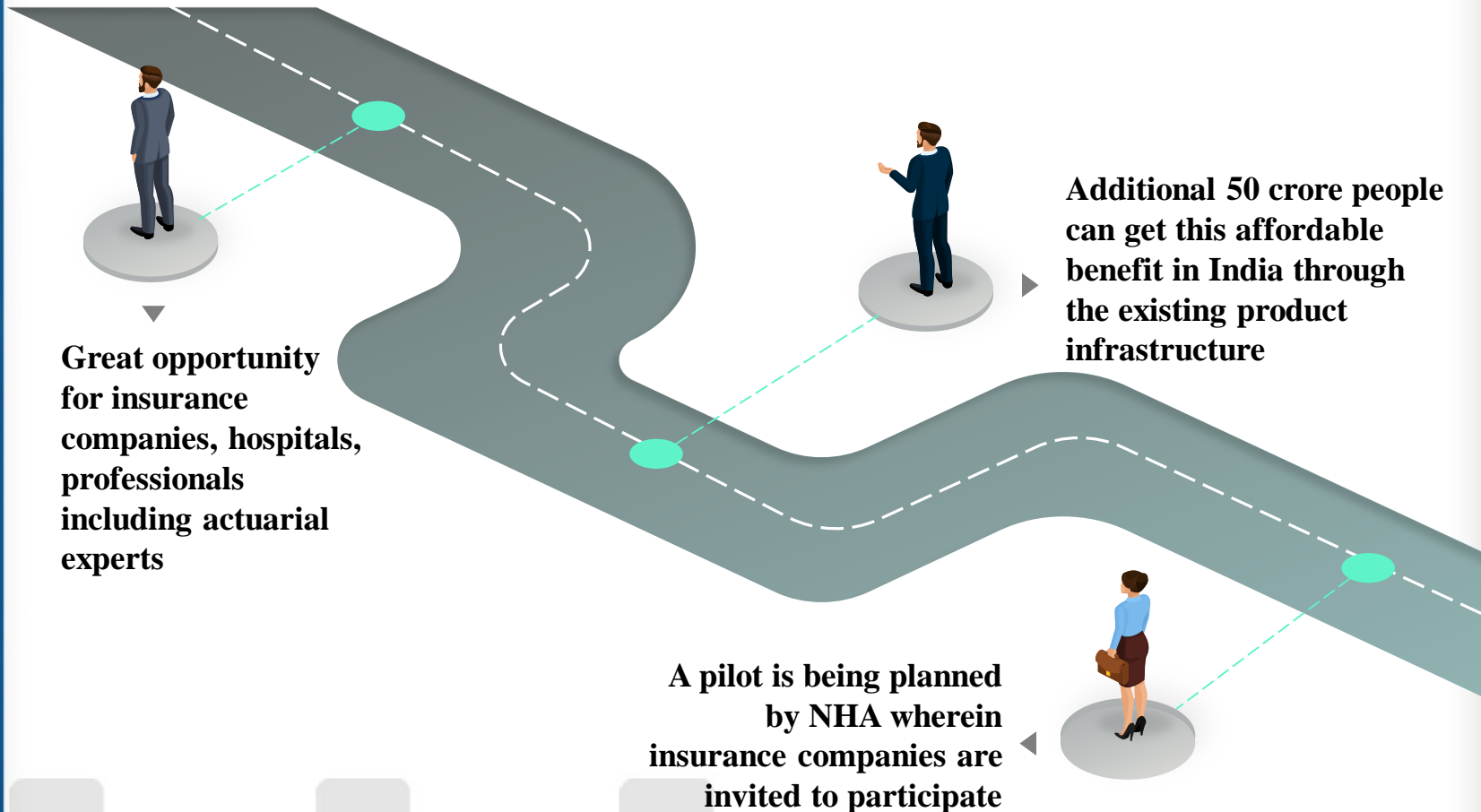
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Institute of Actuaries of India

DISCLAIMER

- The premium computation shown is intended for illustration of concepts for education purpose only. In practice, a number of factors outside those described in this presentation are applicable which can possibly affect the risk premium computation in a significant manner.
- The presenter is not liable for any commercial implications of the methodology shown and the results obtained.



WRAP UP



- Upcoming Webinars
- CPD Questions
- Feedback



Upcoming Webinars



Webinar	Date
2nd Webinar on Risk Management - Webinar on COVID 19 – Response to Basis and Operational risks & championing them!	31 July, 2020
2nd Webinar on IFRS 17	6 August, 2020
2nd Webinar in Life Insurance	13 August, 2020
3rd Webinar on Pension - 17 th CIRB Module 1 - Exempt Provident Fund Actuarial Valuations- Overview of industry opinions and way forward presented by Special Task Force	18 August, 2020
3rd Webinar on Pension - 17th CIRB Module 2 - To Annuity and beyond...	19 August, 2020
2nd Webinar in Health Insurance	27 August, 2020
2nd Webinar on Banking and Finance	5 September, 2020
3rd Webinar on Pension - 17th CIRB Module 3 - Pensions in a low to very low interest rate environment	10 September, 2020
3rd Webinar on Pension - 17th CIRB Module 4 - Latest trends and impacts on ESOP design and valuations	11 September, 2020
3rd Webinar in Health Insurance	23 September, 2020
6th Webinar in Data Science	3 October, 2020
4th Webinar in Health Insurance - Data Science and Health Insurance	29 October, 2020
3rd Webinar on Banking and Finance	5 December, 2020

CPD Question-1

Who pays the premium for the AB scheme?

- i. Central government
- ii. State government
- iii. Insured family
- iv. Insurer

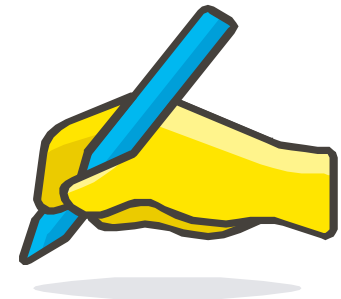
a. i and ii proportionately

b. i or ii depending on the state

c. i, ii and iii proportionately

d. iv only

e. iii only



CPD Question-2

In the example shown in webinar, what is the package contributing the most to the claims cost?

a. Double stent

b. Caesarean

c. Knee Replacement

d. Hemodialysis

e. Hip Replacement

