

PIH46:

Cost Effectiveness Analysis For a Multi-factorial Intervention For Elderly Inpatients With Delirium, Utilizing Real World Data .

Ohde S¹, Takekata M², Takiguchi M², Namiki C², Abe K², Nishizawa S², Tanaka M², Saito N², Yamada U², Kajima N², Naomi N², Takahashi O³

¹St. Luke's International University, Tokyo, 13, Japan, ²St. Luke's International Hospital, Tsukiji Chuo Tokyo, Japan, ³St. Luke's International University, Tokyo, Japan

Background

- **Delirium** among elderly inpatients is a critical condition that delays patients recovery.
- It also brings a lot of burden to both medical practitioners and family.
- The purpose of this study is to evaluate our multifactorial intervention to delirium patients.

Statistics

- Cost-effectiveness analysis: Markov Model.
- Data: Retrieved by EMR.

St. Luke's Multifactorial Intervention towards delirium

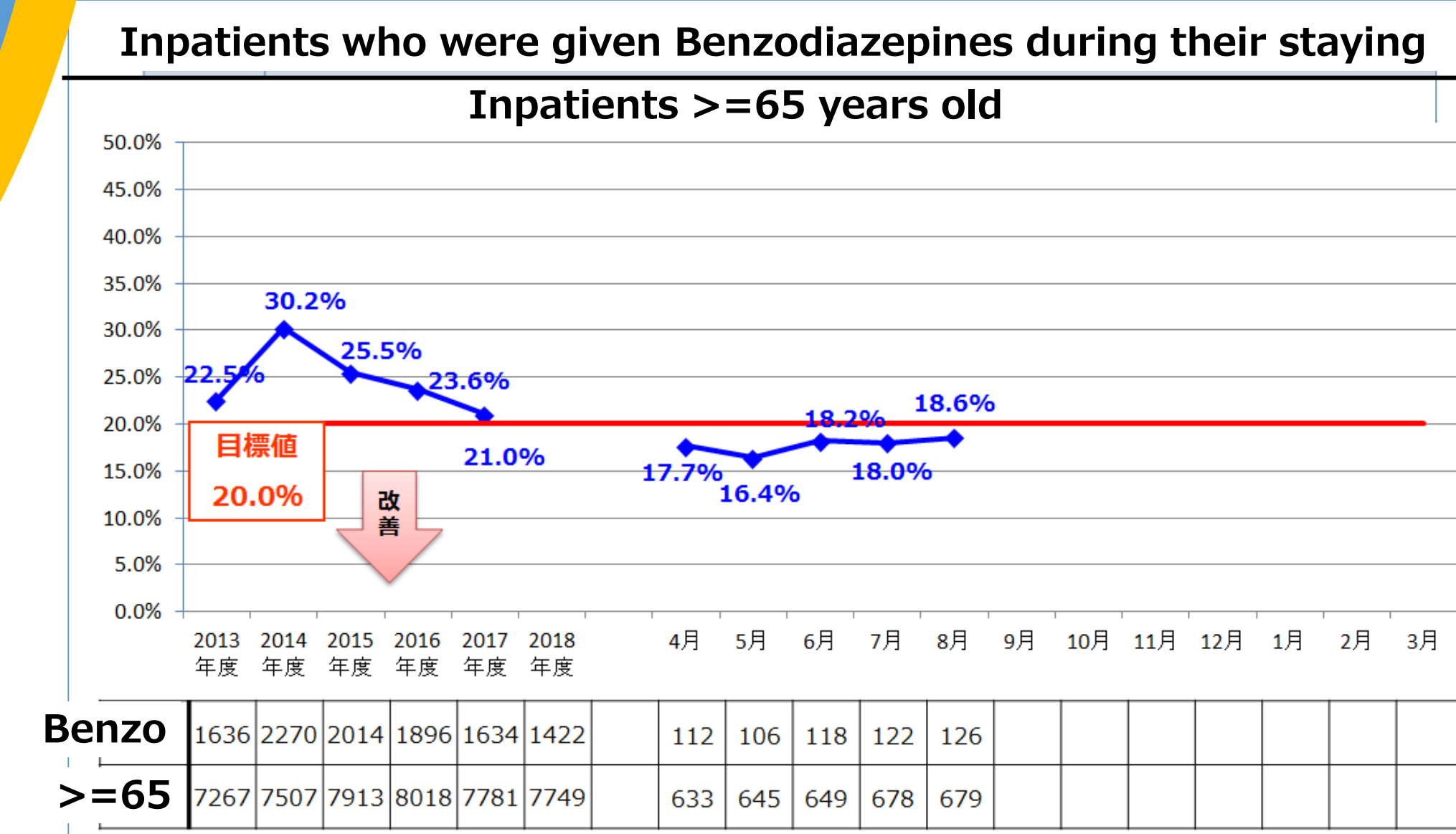
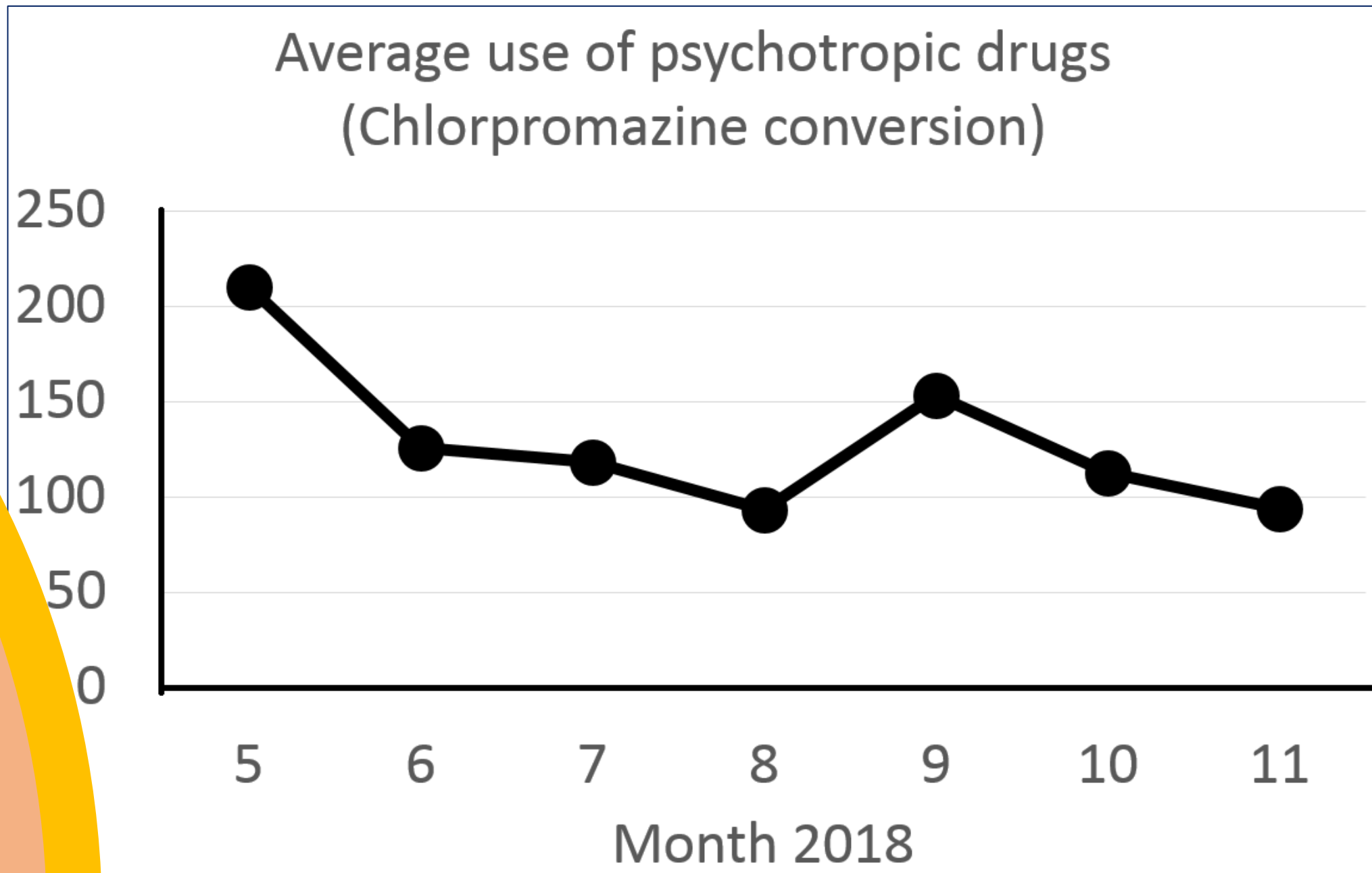
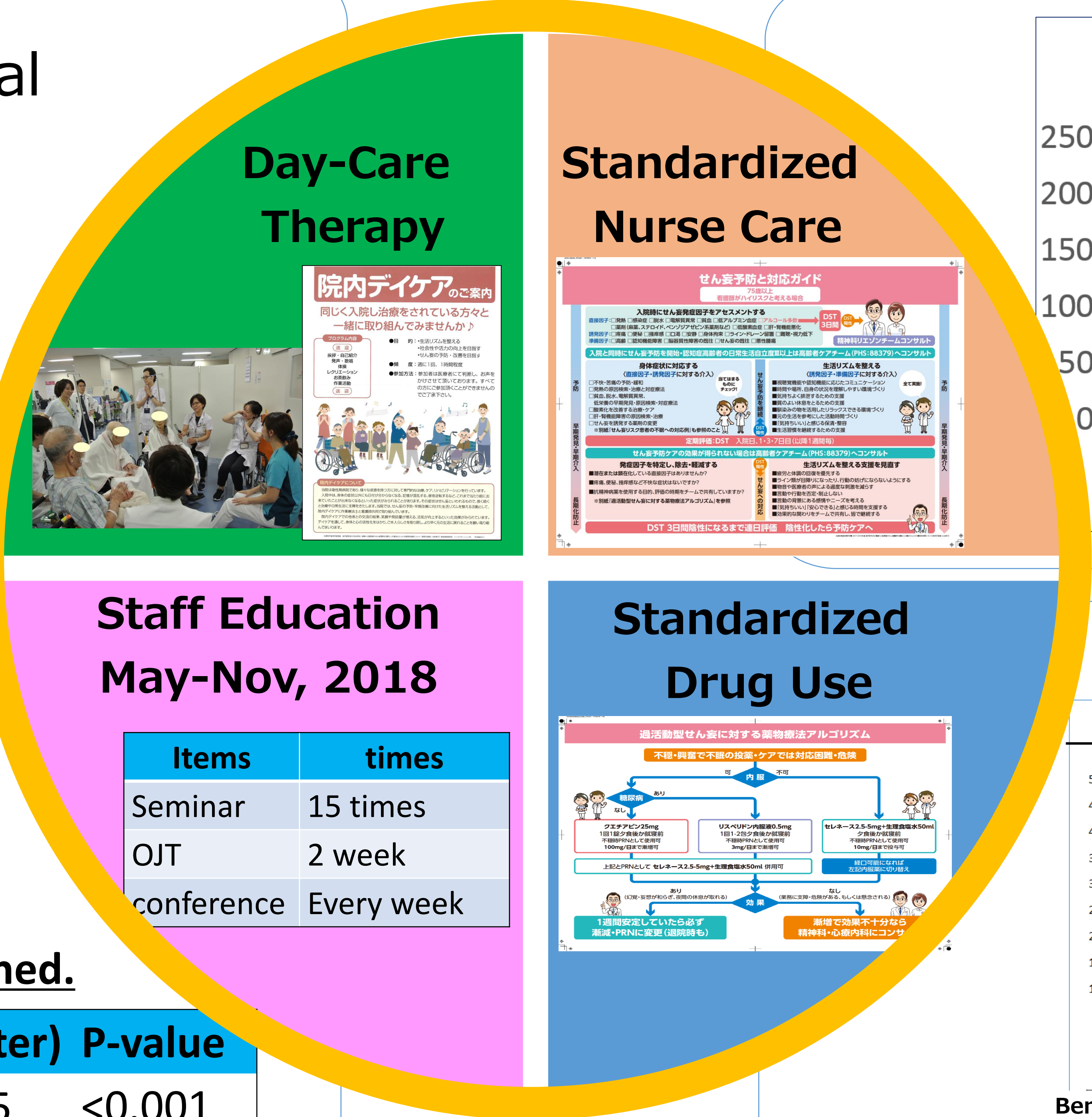
- Provide rehabilitation program by Occupational Therapists.
- Round team members select patients to invite to the program.
- Once a week, 1 hour program.

- Provide series of lecture to staff at wards
- Other activities include OJT and conference.

Mean days of patients were constrained.

	May. (Before)	Nov.(After)	P-value
Mean days	15.4±11.3	7.9±4.5	<0.001

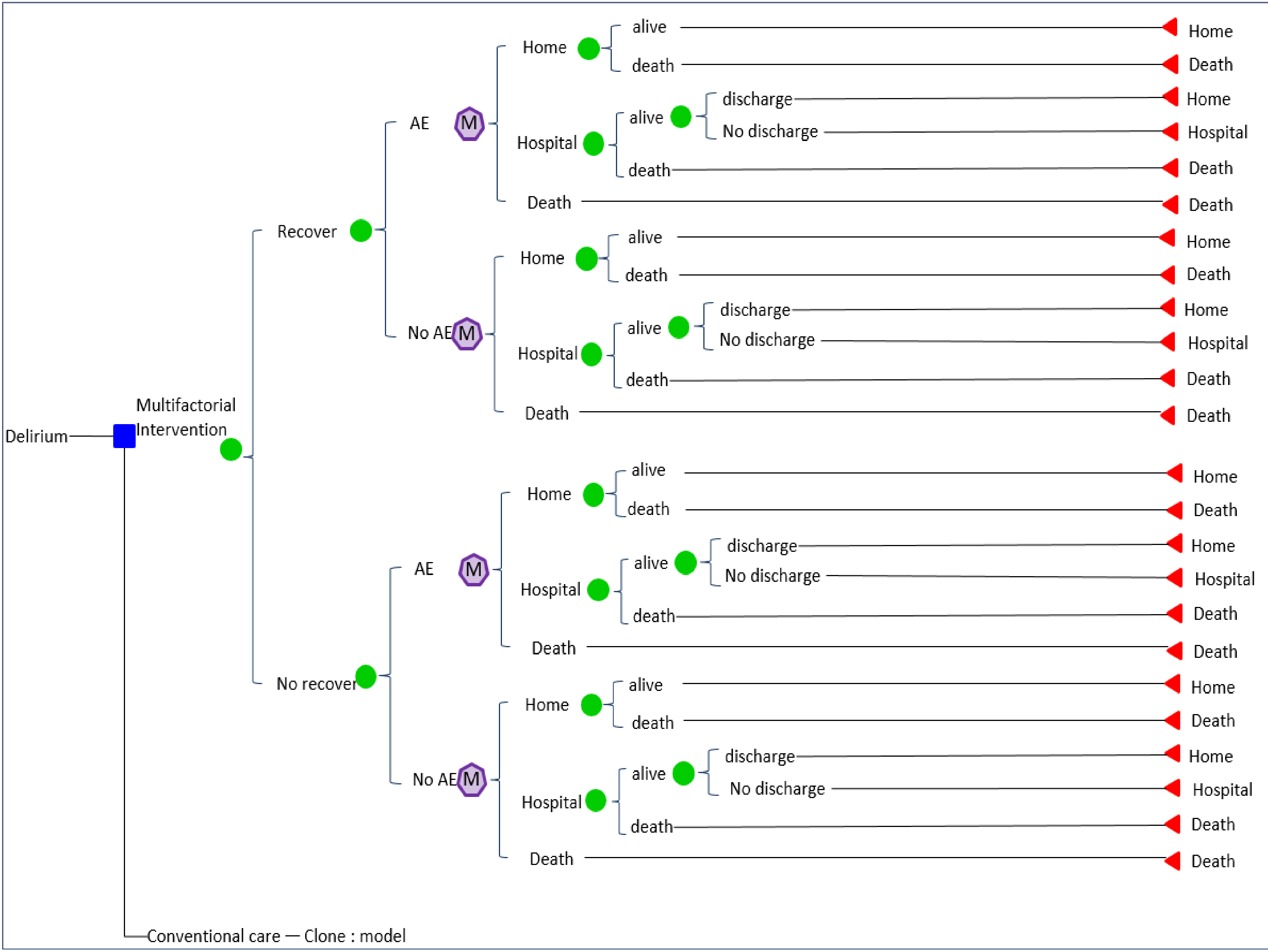
Student t test



Parameters in the Model

	Multifactorial Intervention				Conventional Care			
Data period	2017/8-2019/4				2014/4-2017/3			
Ns	101				1252			
Program Fee	\$280.00/patients				\$22.00 /patients			
Recovery rate	85.3%				65.4%			
	Recover		No Recover		Recover		No Recover	
Adverse Event rate	64.3%		56.2%		33.2%		39.2%	
Utility	0.533		0.7		0.533		0.7	
Mortality / month	7.8%		3.2%		20.4%		8.3%	
Discharge rate / month	45.5%		33.9%		46.0%		37.5%	
	AE	No AE	AE	No AE	AE	No AE	AE	No AE
Treatment fee	\$9900	\$31400	\$16500	\$32200	\$14000	\$21600	\$21400	\$38700

Tree Model



Results & Conclusion

- AE rate and treatment cost were even higher among recovered delirium patients. This may results in Increased activity and longer awakening time.
- Based on the analysis, however, multifactorial intervention was still cost effective with ICER \$6700.00/ QALY.