# This Is the Title

## **Summary**

**key words**: key 1; key 2; key 3

# **MEMO**

FROM: Team 114514,MCM C To: The group of Governors Date: January 28, 2019

Dear Officials:

Sincerely yours MCM C Team 1917694

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## 1 Introduction

### 1.1 Restatement of the Problem

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### 1.2 Our Works

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# 2 Assumptions and Notations

## 2.1 Assumptions

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## 2.2 Notations

Here are all the notations and their meanings in this paper.

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Symbol	Meaning
$\overline{t}$	Time
N	Total reported opioid cases
$N_t$	Total reported drug cases
$\lambda$	Average cases induced by a single case
$A_t$	Status at $t$
E	Set containing socio-economic factors with high correlation $t$
T	Transition matrix
i(t)	Proportion of opioid cases in all drug cases at $t$
$\mu_1$	Average number of drug cases induced by an existing drug case
$\mu_2$	Number of opioid cases induced among all drug cases
$\gamma$	Drug spread slow down factor
$i_0$	Status at $t$
H	Information Entropy
$p_0$	Initial number of drug cases

# 3 Using of the Table

# goto learn tabular

## 4 Model Construction

$$T \cdot A_{t-1} = A_t \implies T = A_t \cdot A_{t-1}^+ \tag{1}$$

### 4.1 xxxx Model

$$T \cdot A_{t-1} = A_t \implies T = A_t \cdot A_{t-1}^+ \tag{2}$$

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### 4.2 xxxx Model

$$T \cdot A_{t-1} = A_t \implies T = A_t \cdot A_{t-1}^+ \tag{3}$$

#### 4.3 xxxx Model

$$T \cdot A_{t-1} = A_t \implies T = A_t \cdot A_{t-1}^+$$
 goto learn equation (4)

#### Highlight something important just use textbf

- 4.4 Modification to xxx Model
- 4.4.1 xx way xx way
- 4.4.2 Modifying Our Model with xxx way
- 4.4.3 Analysis of the Modified Model
- 5 Model Simulation and Analysis

[1]

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- 5.1 Describing Characteristics of XXX Model
- 5.2 XXX
- 6 Strengths and Weakness
- 6.1 Strengths
- 6.2 Weakness
- 7 Sensitivity Analysis
- 8 Conclusion

# References

[1] "Nflis-drug 2017 annual report," https://www.nflis.deadiversion.usdoj.gov/DesktopModules/ReportDownloads/Reports/NFLIS-Drug-AR2017.pdf.