

# 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

## Content

# **1 Introduction**

## **1.1 Restatement of the Problem**

- 123
- 234

## **1.2 Our Works**

- 123
- 234

# **2 Assumptions and Notations**

## **2.1 Assumptions**

1. 123
  2. 234
- 123
  - 234

## **2.2 Notations**

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

Symbol	Meaning
$t$	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

$$T \cdot A_{t-1} = A_t \implies T = A_t \cdot A_{t-1}^+ \quad (1)$$

### 4.1 xxxx Model

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

## 4.2 xxxx Model

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

## 4.3 xxxx Model

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

goto learn equation

**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

[?]

## 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