



# HA Convention 2010

## High Risk Medication Management

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# Problems



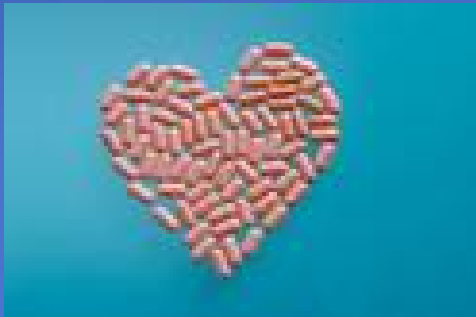
- High risk medications: highest risk of causing injury when misused (JCAHO<sup>1</sup>).
- Errors are not necessarily more common, but the consequences are clearly more devastating (ISMP<sup>3</sup>).
- Chemotherapy and biotherapy are high risk medications.
- The medication incidents rate was not small (about 0.18%) in COD in 2007.

<sup>1</sup>Joint Commission on the Accreditation of Healthcare Organization

<sup>3</sup>Institute for Safe Medication Practices

# Objectives

1. To decrease the medication incidents rate
2. To provide safe and quality services



# Methodology

## Root cause analysis

- Analysis of the incidents from AIRS (2007)
- JCI medication management survey (2007)

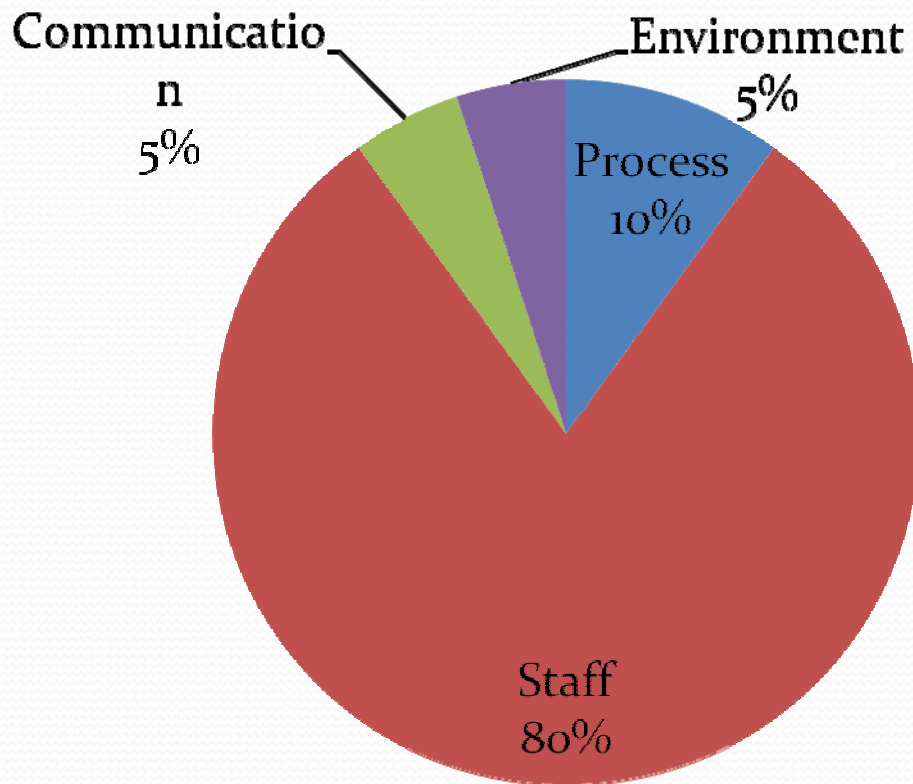
## Action

- Staff training and development (since 2007)
- Revised protocols & guidelines (2008)
- Improved the logistic workflow (2008)

## Monitor

- Monitoring of performance (2007-2009)

# Root cause analysis



# Centralized chemotherapy centre

- Revised protocols by doctors in different departments
- Revised guidelines by nurses in COD
- A list of common CT: names, effects, vesicant/non-vesicant, administration, precautions, nursing care
- OSH on chemotherapy administration by hospital
- High risk medication management by HAHO



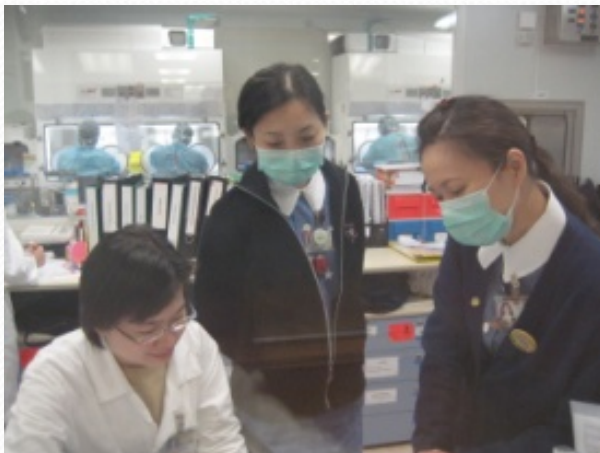
# T&D for nurses

- A designated mentor
- Tailored-made orientation program (1 year)
- In-service IV chemotherapy administration (6-month)
- Continuous nursing education (monthly)



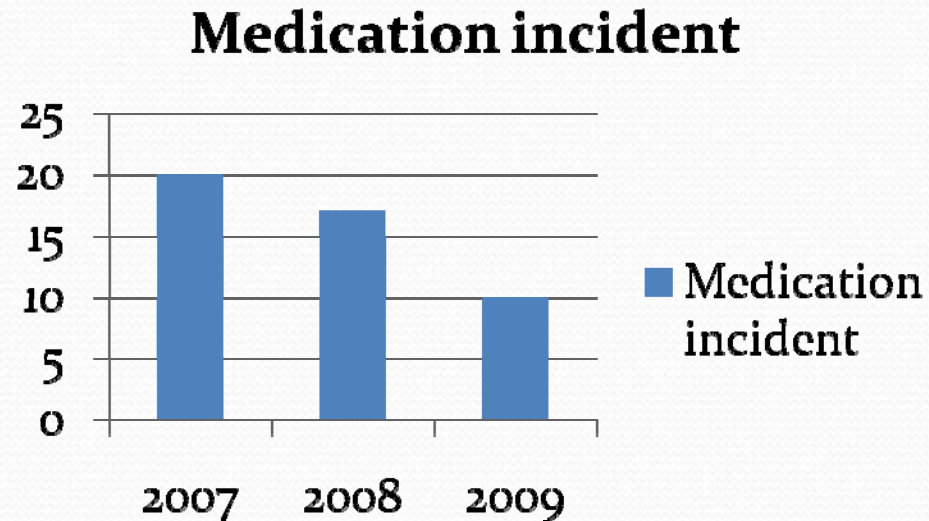
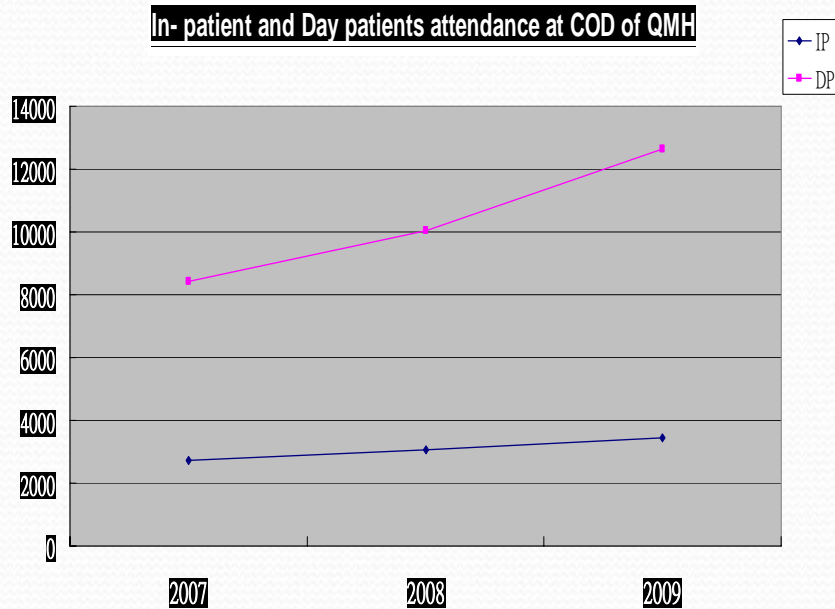
# Improved workflow

- Order by doctors
- MOE instead of manual
- Checking by nurses (first time)
- Prescriptions were checked by pharmacists
- Checking by nurses (second and third time)

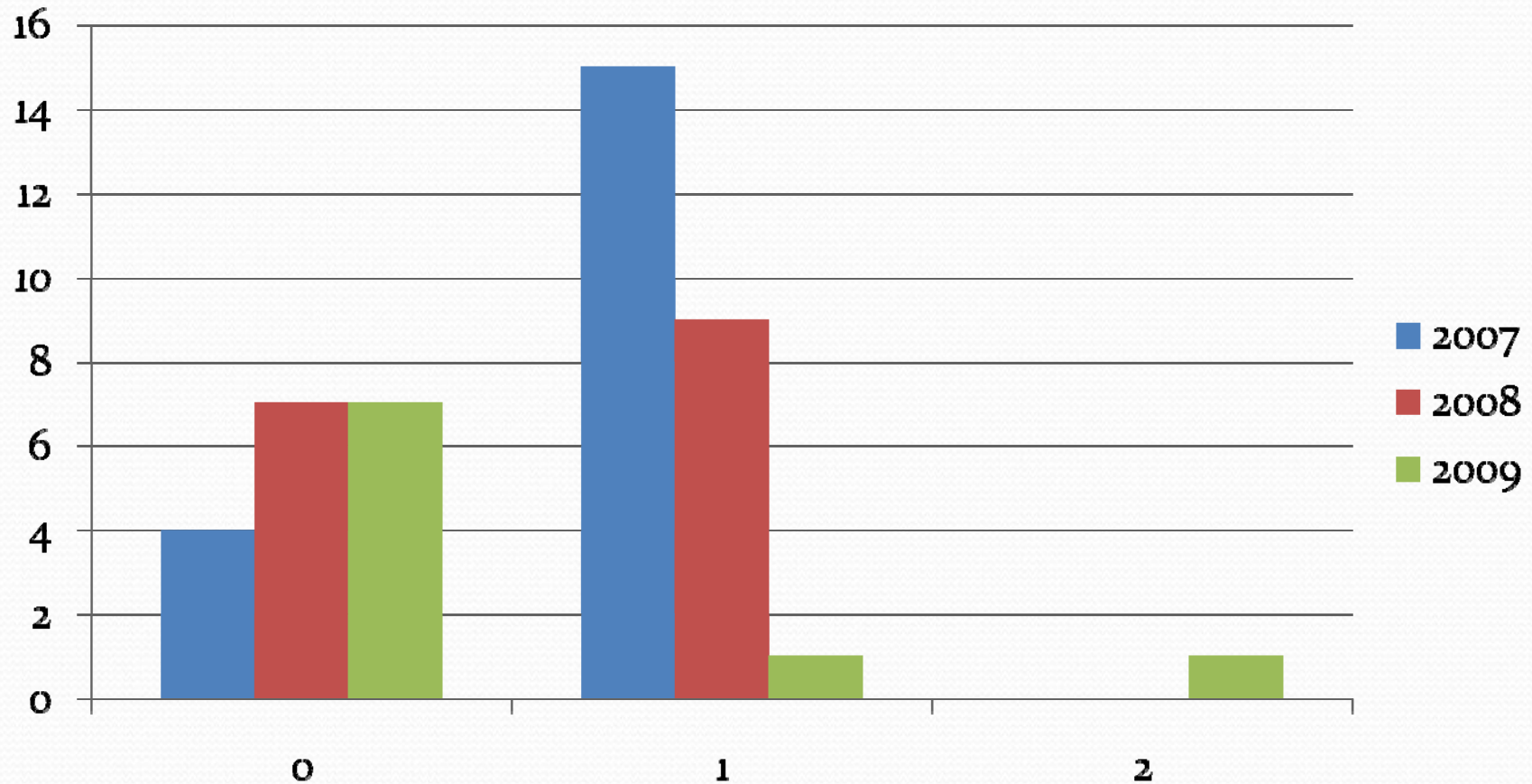




# An increase in workload but a decrease in medication incidents

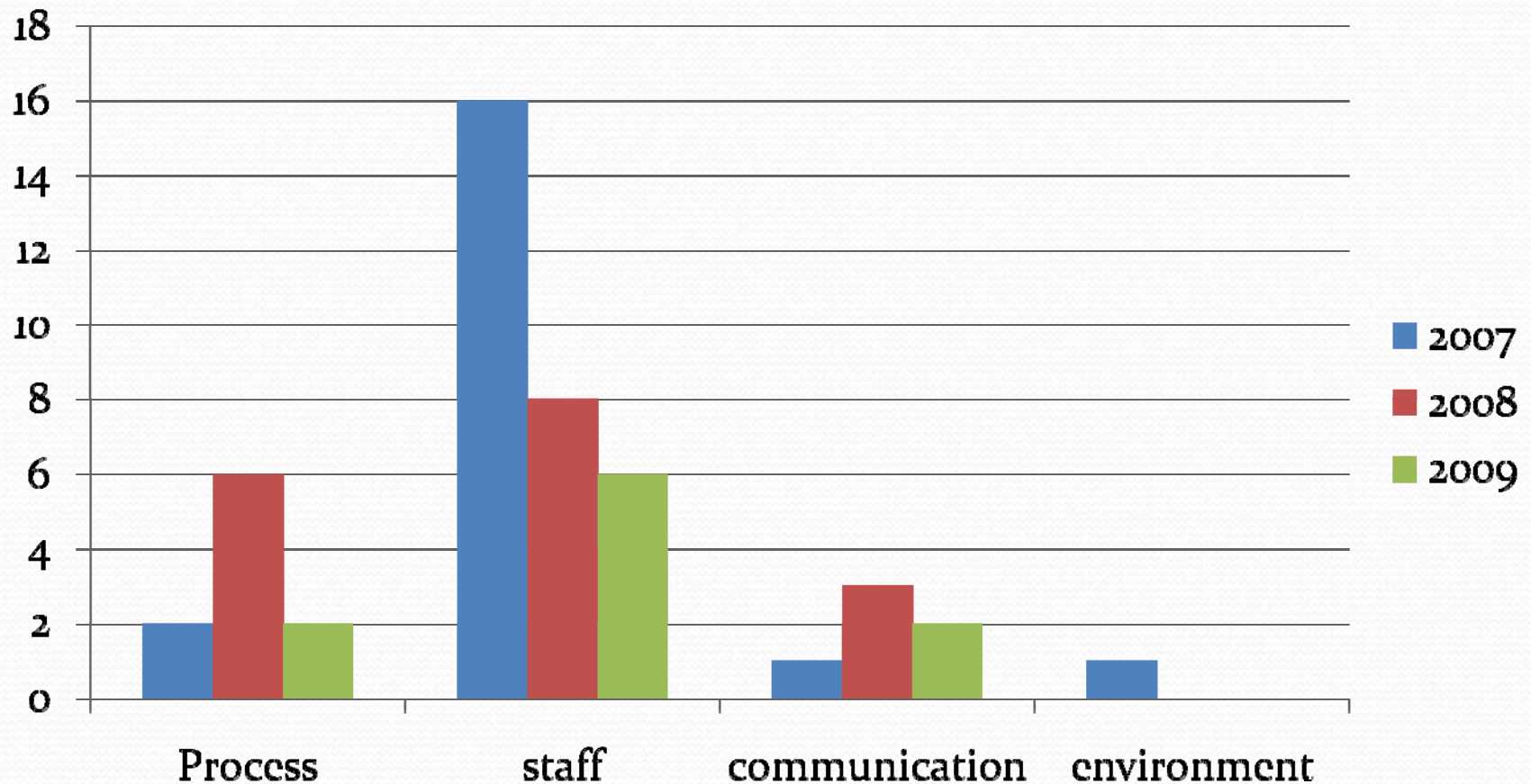


# A decrease in cases with severity '1'

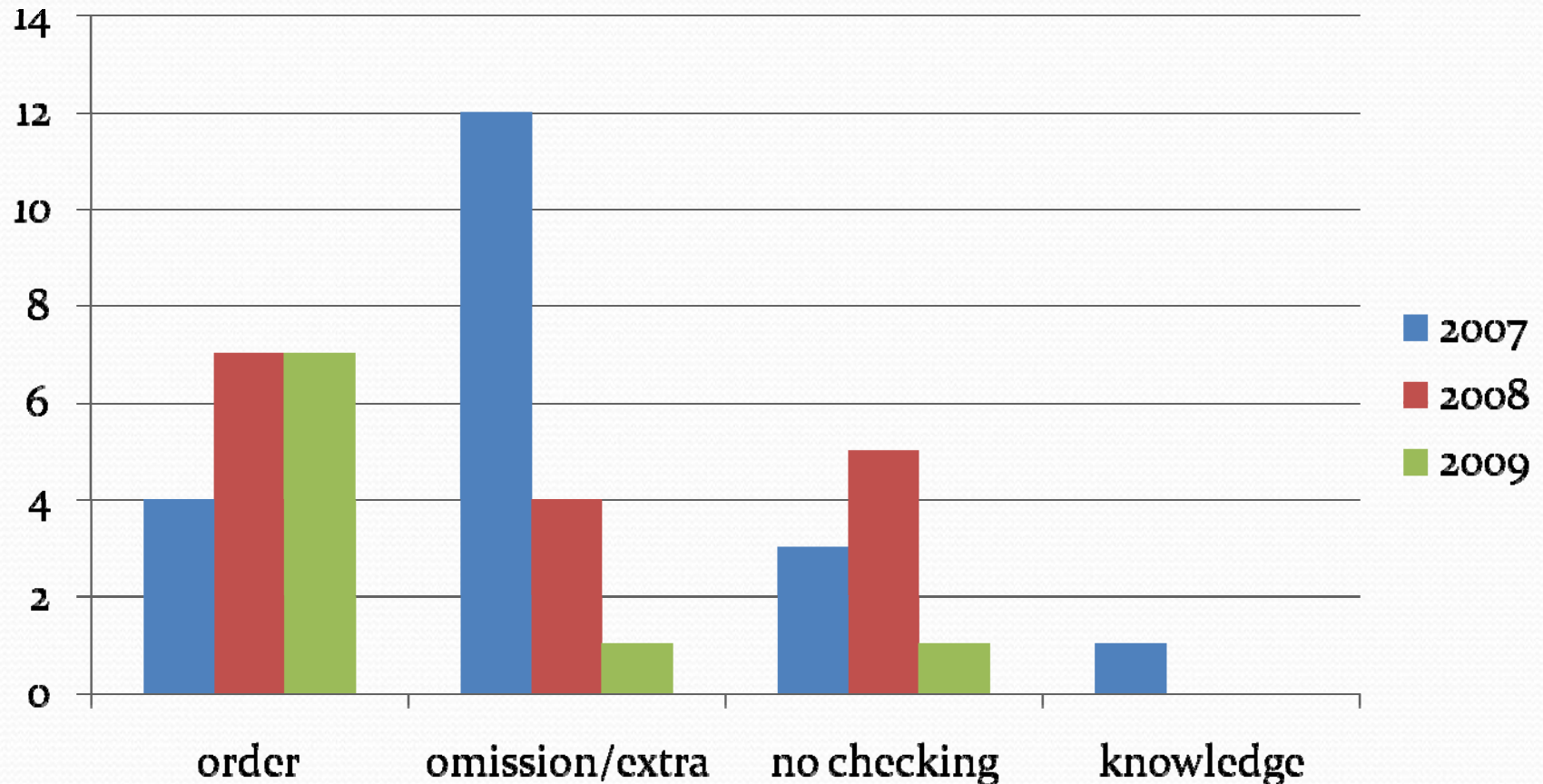


Severity '1': Incident occurred but stopped before reaching patient, no consequence

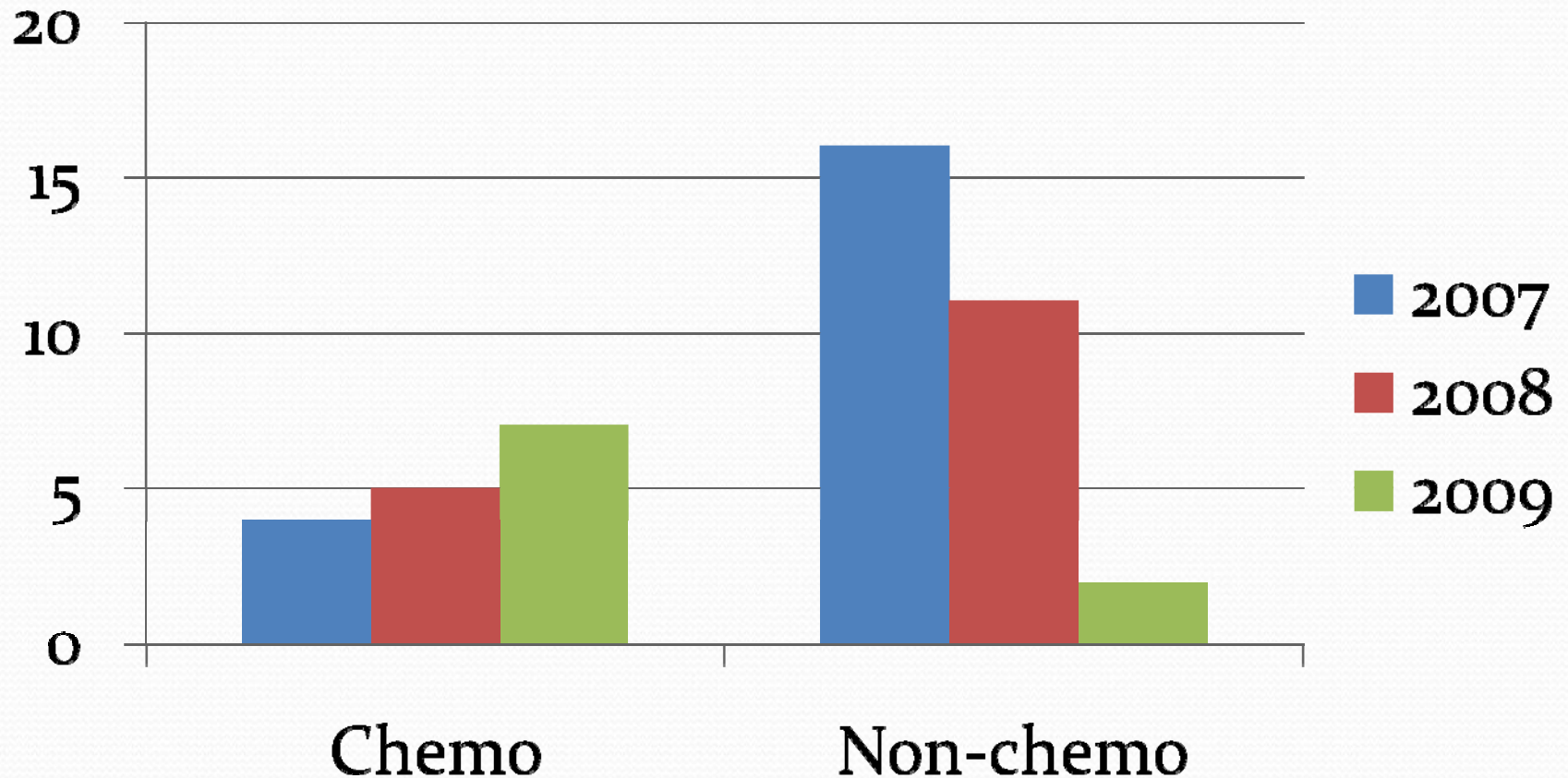
# A decrease in staff factor



# A decrease in dose omission or extra dose

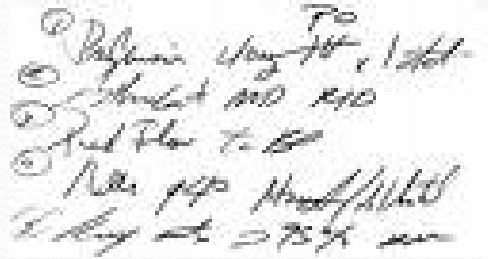


# A decrease in non-CT incident



# Remaining problem

- Error in prescription of intravenous chemotherapy (7 cases).



Handwritten medical prescription in cursive script, likely a chemotherapy order. The text is difficult to decipher due to the handwriting but appears to include:

- PO
- Paclitaxel 100 mg IV
- Carboplatin 100 mg IV
- And Flu to 50
- Now 400 mg IV
- to be given at 7:30 am

- MOE
- Chemotherapy module in CMS III

# Conclusions

- The high risk medication management required a multidiscipline approach that included the pharmacists, doctors and nurses.
- We successfully decreased the medication incidents with a comprehensive program.
- Continue effort should be employed to eliminate the risk and provide a safe environment to our patients

# Thank you

