EMR structure sharing-China



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Status overview

- No platform of systematic tracking for patient.
  - Most patient prefer national/provincial top level hospital for diagnosis and back to hometown for follow up
  - Data from hospital and pharmacy are separated
  - Data in different hospital are separated
- Most hospitals have their own pharmacy and patient could buy drugs in the hospital.
- Psychiatry drugs are under strict control and some drugs are not available in the pharmacy outside of hospital.
- Except for ICD 10-CN version, no standard vocabulary. Each hospital has their own EMR system with different coding principle.
- Few national/regional registry program/platform

Hospital system

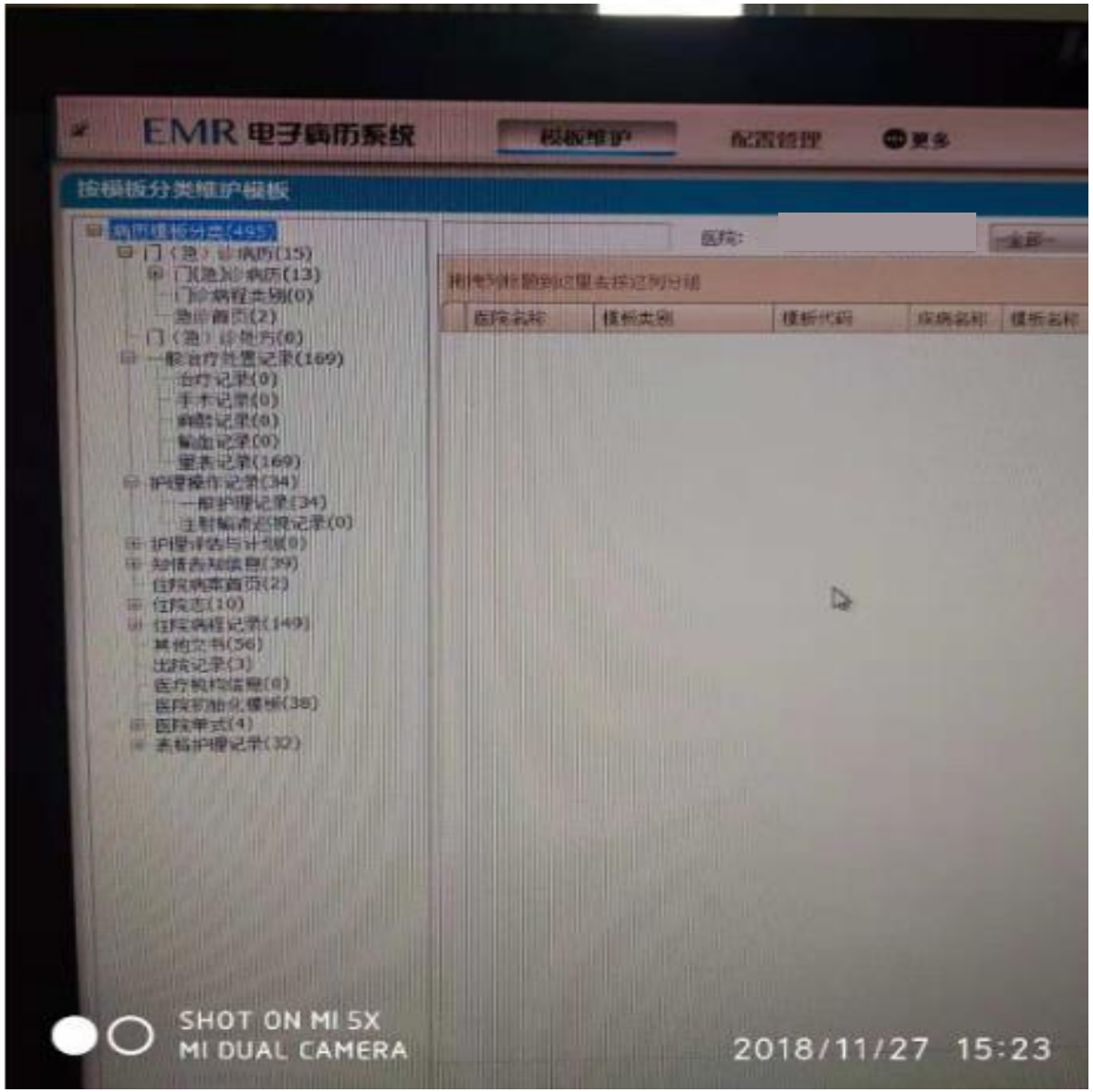
- There are several systems for different purpose in the hospital, most hospital, these systems are separated, different information from different system:
  - HIS (most are structured): cost manage system
  - EMR (most are unstructured): all medical record input by doctors
  - LIS (most are structured): lab test information including name, time, result etc.
  - PACS：for imaging, both picture and report (most are unstructured)
  - Main page of medical record (most are structured)

Hospital system ➡ OMOP

Some information stored in >= 2 systems and may be different

OMOP domain	Hospital system	comments
Person	HIS	Structured
Visit occurence	HIS	Structured
Condition occurrence	• Main page of medical record (diagnosis) • EMR (symptom & signs	• Structured • unstructured
Drug exposure	HIS	Structured
Observation	EMR	Unstructured or semi-structured
Measurement	LIS	Structured
Device	No information	
Procedure	HIS-medical order	Structured or semi-structured
Cost	HIS	Structured
Death	Main page of medical record	Seldom happen (only 6 in current database)

EMR structure-content list



- Outpatient record
- Inpatient record
  - Admit note
  - Discharge not
  - ……
- Operation record
- Caring (nurse) record
- Transfusion record
- Scale record
- ……

Outpatient record

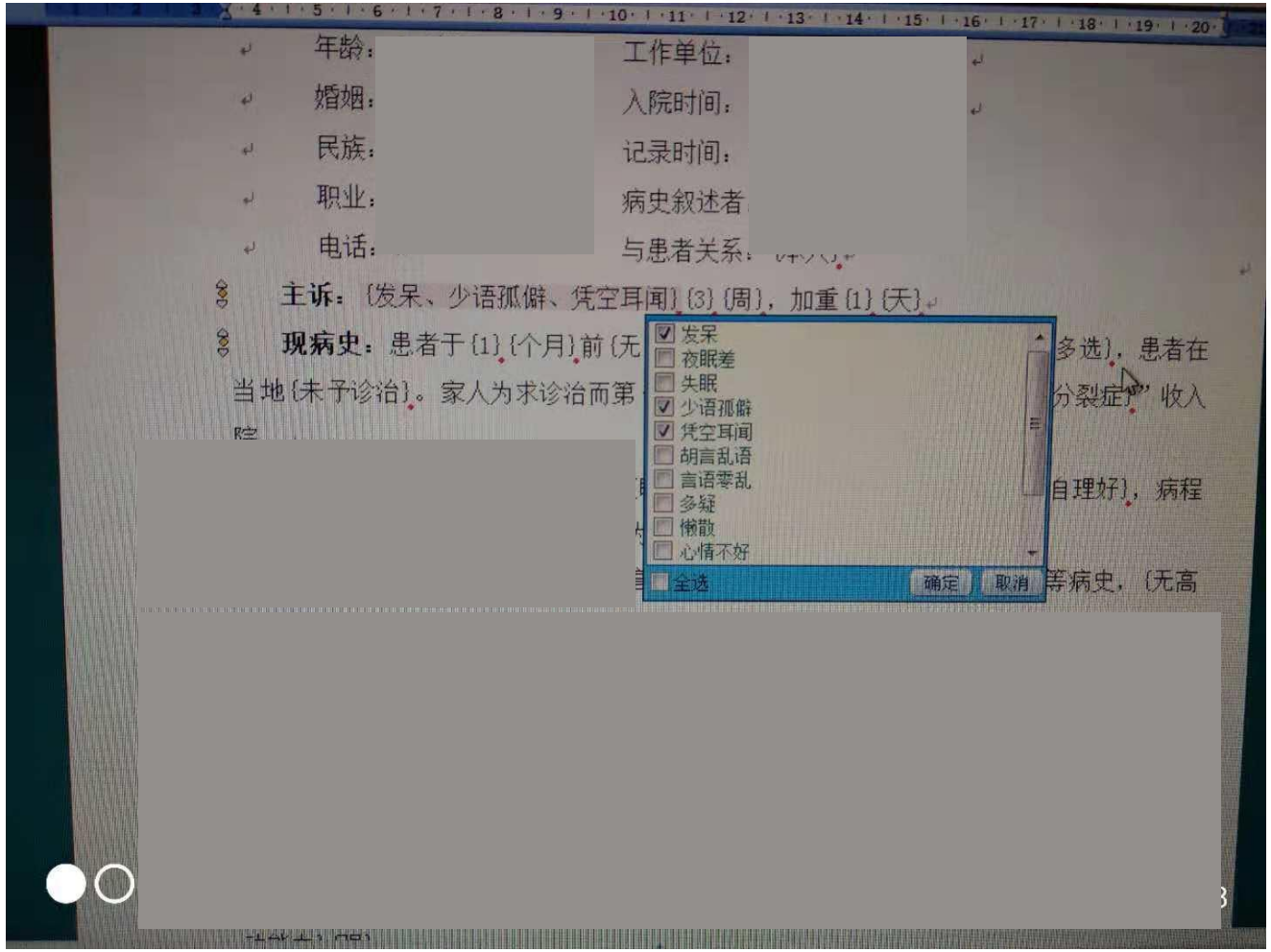
First visit

来诊者： *来诊者* Person who visit
主诉： Main complaint
现病史： history of present illness
既往史：平素健康状况良好，否认冠心病病史。否认高血压病史。否认糖尿病病史。
过敏史：否认药物过敏史，否认食物过敏史。
个人史：胞 *胞数* 行 *排行* 。出生情况： *出生情况* ，发育： *发育* ，文化程度： *教育程度* ，个性： *个性* ，不良嗜好： *有无嗜好* 。
家族史：精神病家族史：无。躯体病遗传史：无。
检查： *体温* *脉搏* *呼吸* *收缩压* *舒张压* 。
精神检查：
初步诊断： *请点击输入诊断*
处理： *请点击输入处方信息*
请点击输入检验申请单
请点击输入检查申请单
请点击输入草药处方
请点击输入治疗
嘱托与建议：
疾病证明单信息
病假单建议信息
北京市重性精神疾病门诊报告卡是否上报
医师签名：

Regular visit

初步诊断： *请点击输入诊断*
来诊者： *来诊者*
内容：病情：稳定，精神状态有改善 *睡眠状况* *进食情况* *二便是否规则*
用药情况： *用药情况*
不适反应： *有无明显不适* *症状名称*
躯体情况： *躯体情况*
查体情况（异常请描述）： *查体*
精神检查： *精神状态*
处理： *请点击输入处方信息*
请点击输入检验申请单
请点击输入检查申请单
请点击输入草药处方
请点击输入治疗
嘱托与建议：
疾病证明单信息
病假单建议信息
北京市重性精神疾病门诊报告卡是否上报
医师签名：

Inpatient record-admit note



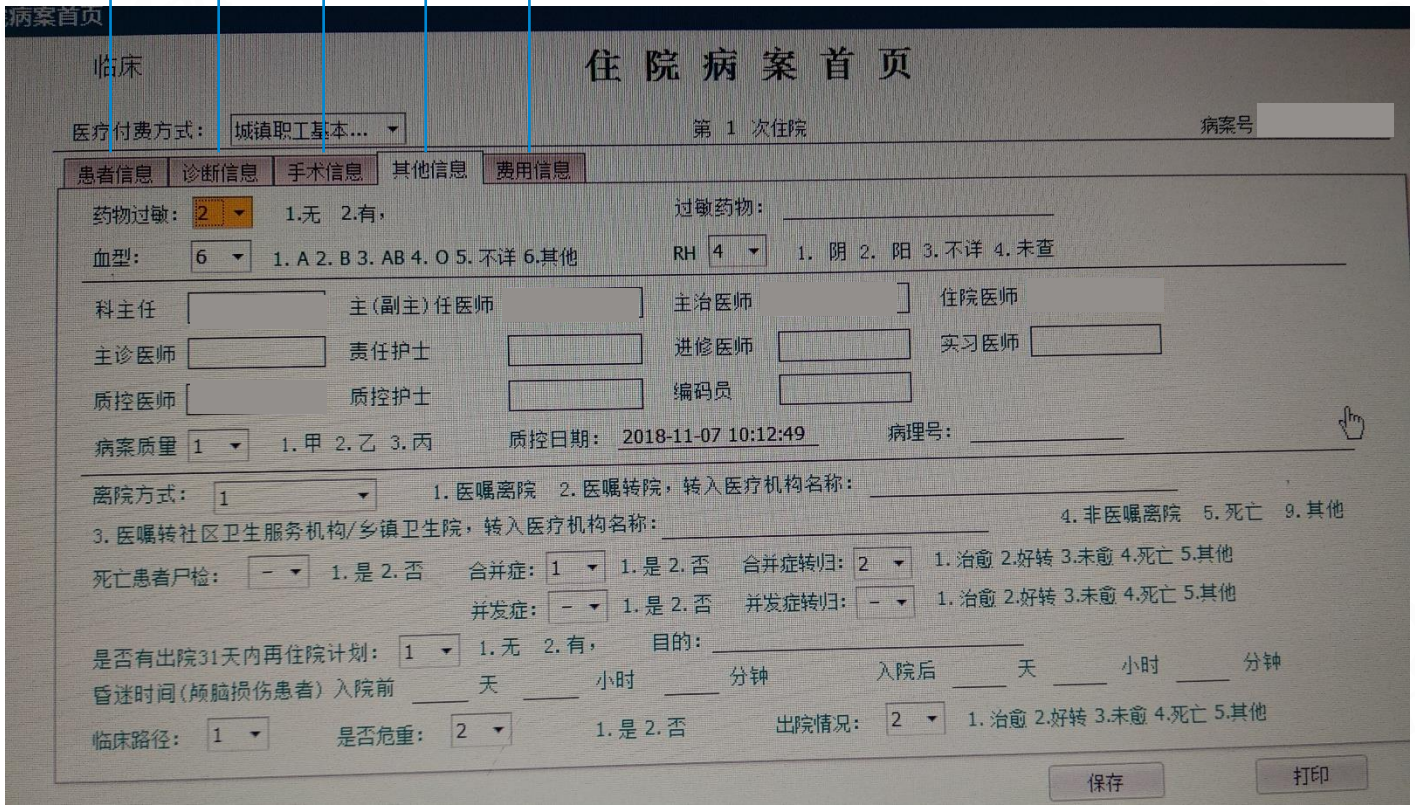
Some are structured,

but the vocabulary are

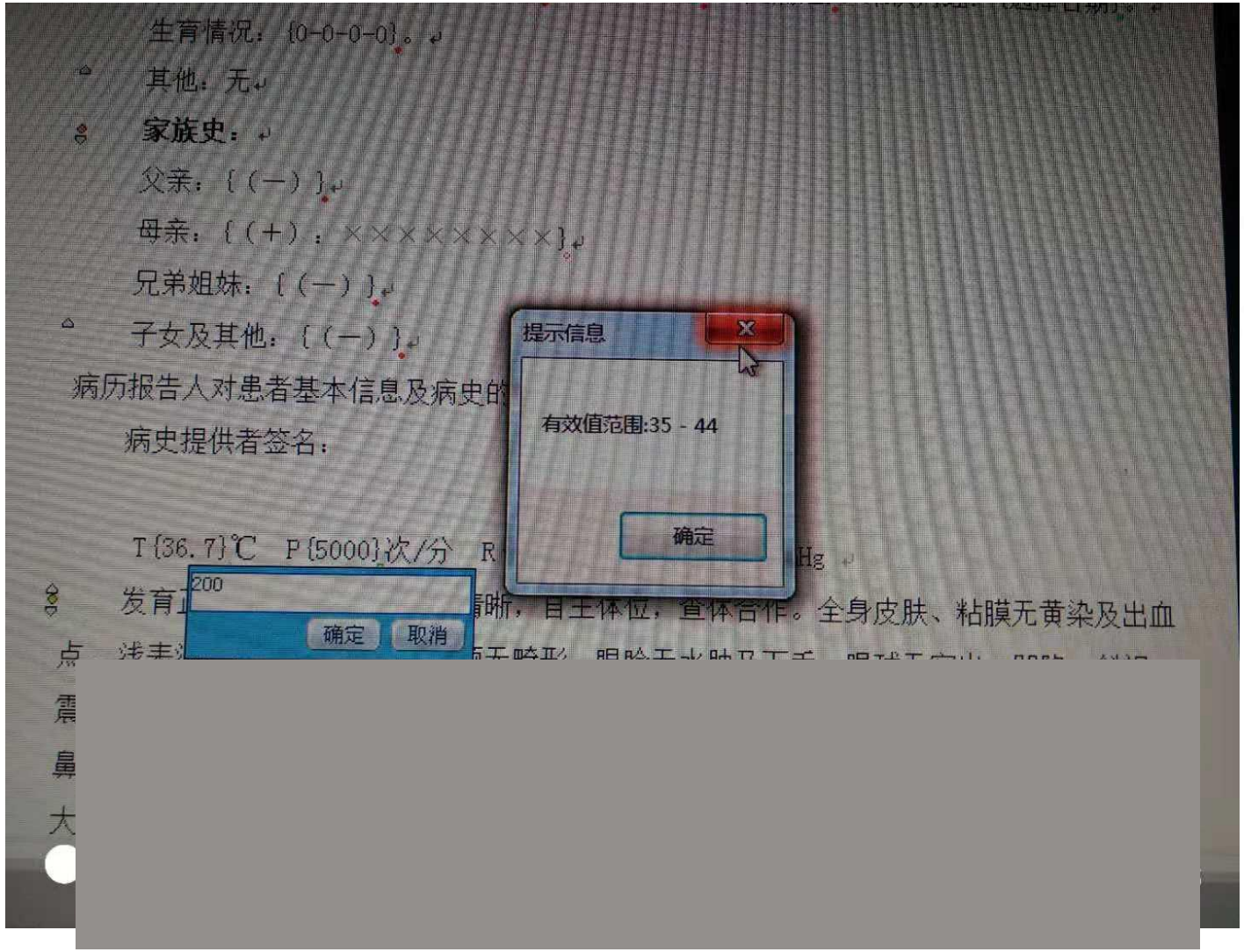
not standard

Main page of medical record

Diagnosis
others
Patient information
operation
Cost



Predefined rules to ensure quality



Physical examination:

Body temperature:

effective value is 35-44