

Digital intelligence empowers regional obstetrics quality management

门诊大厅
Outpatient Lobby

Prof. Xiu Qiu
Guangzhou Women and Children's Medical Center
Guangzhou Medical University
28th August 2024

- Obstetrics Services in Guangzhou
- Sui Hao Yun Mini Program Improving Pregnancy Risks Management
- From Data to Quality Improvement

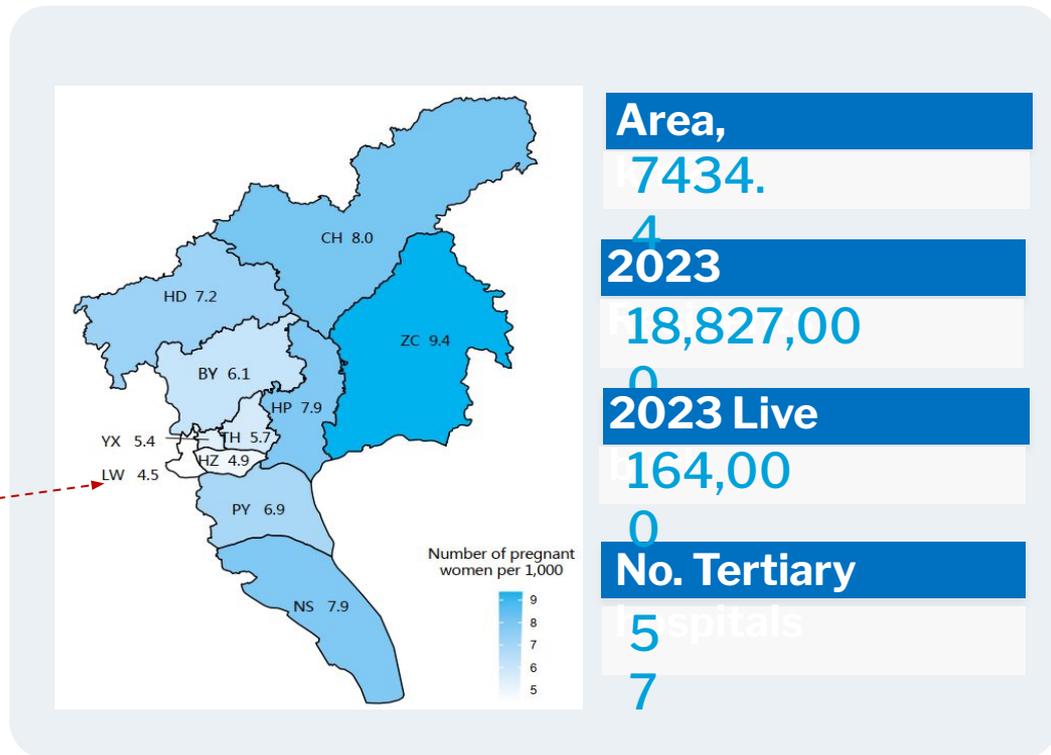


Guangzhou, a Mega City

Central City of the Guangdong-Hong Kong-Macau Greater Bay Area



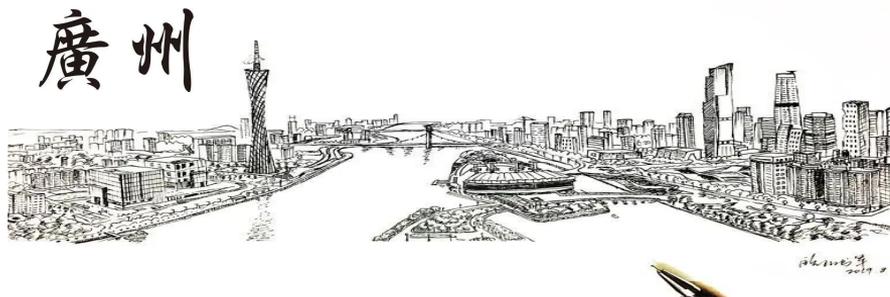
广州市妇女儿童医疗中心
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Distinct living profiles within this city



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Information technology can improve the efficiency of health services



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Technological advances is the fastest and most effective means to bridge the gap to **achieve health equity**



Information technology based system

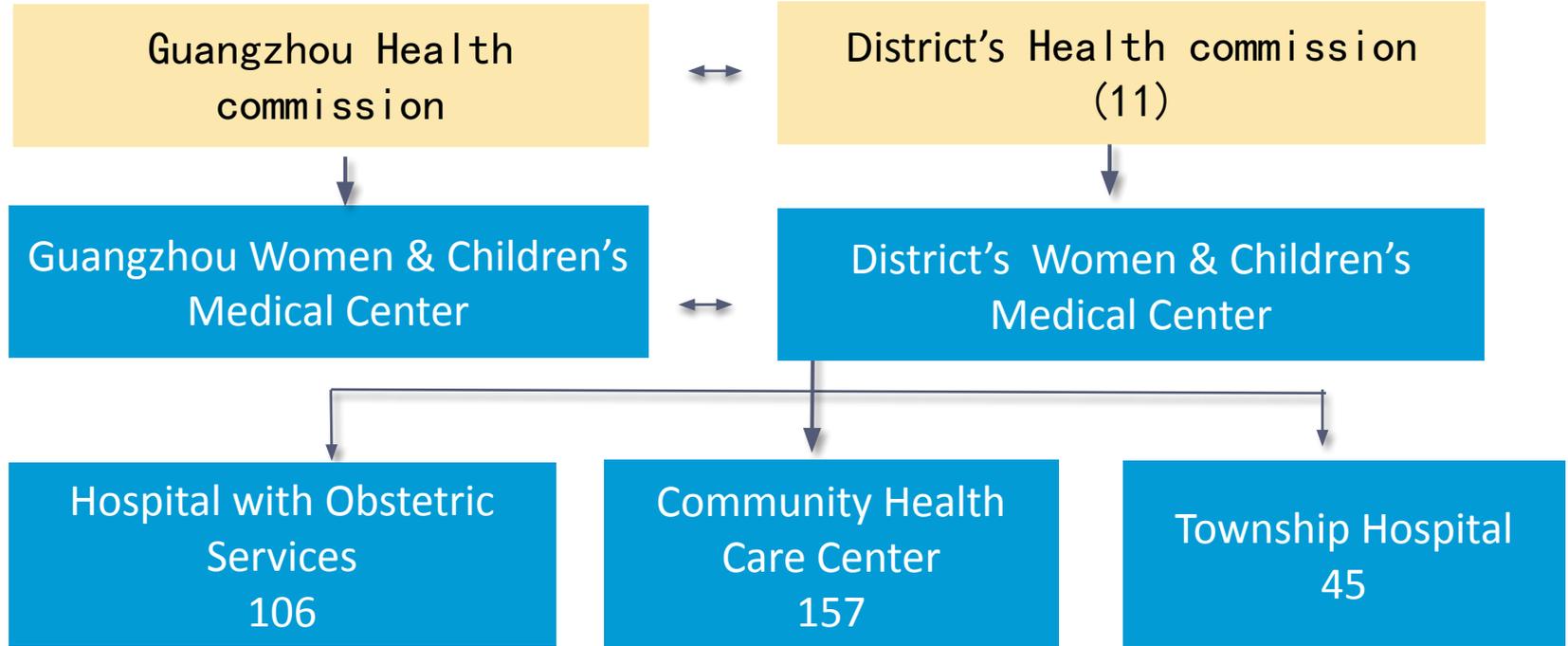
Availability
Fairness
Justice
Eliminating disparities
Opportunity
Equal Chance



3-Tiers Woman and Child Health Network



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*Obstetriens 1431

*Midwives 1286

*Women's Health professionals 687

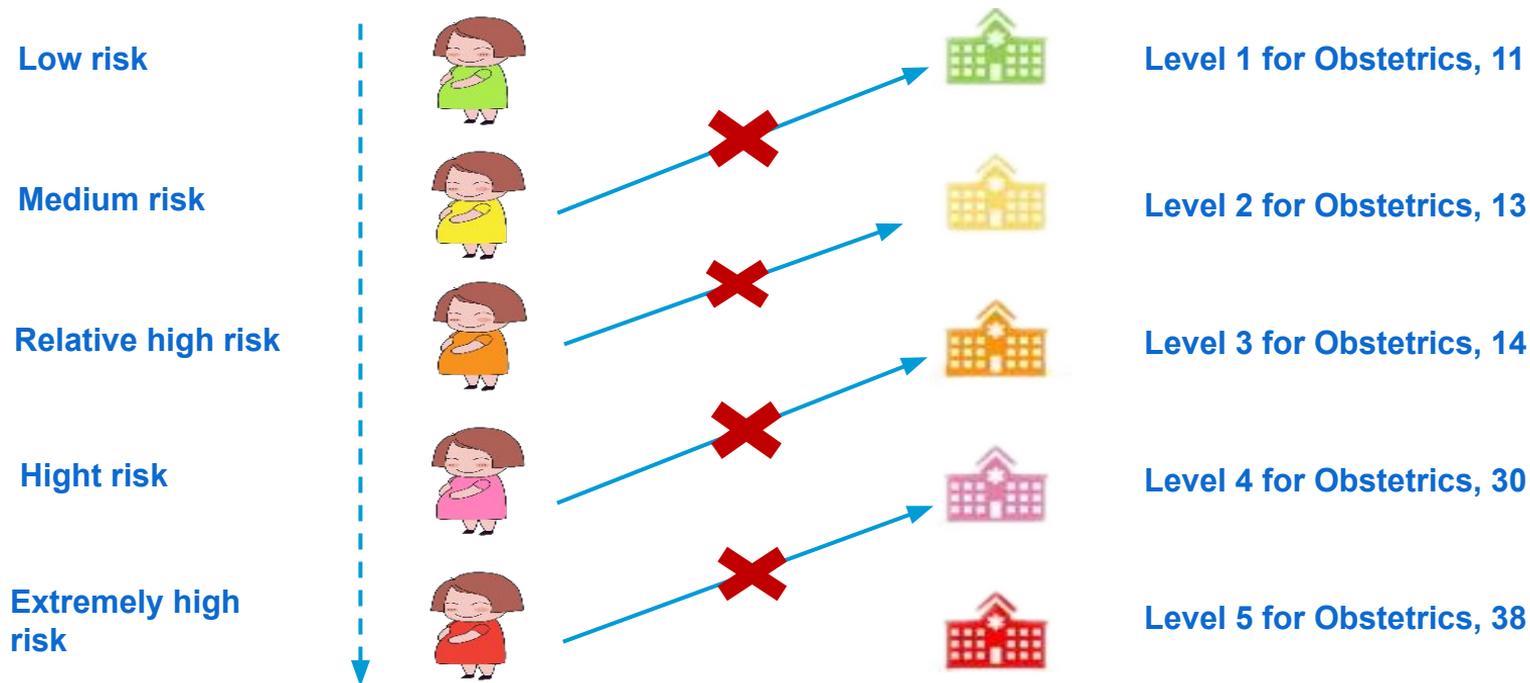
*Jan 2023

Assessment and management of pregnancy risk



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“Five-Color Management” started from 2012 in Guangzhou



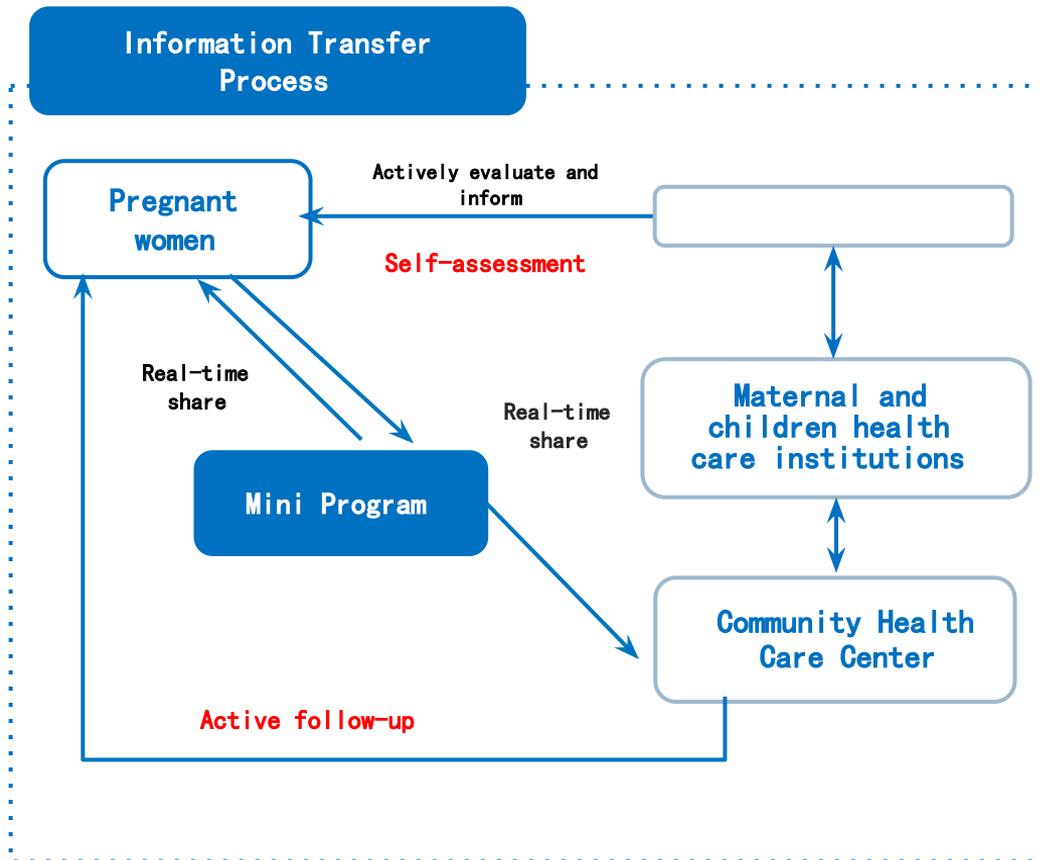
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Management**
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Sui Hao Yun mini program - closed-loop management



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Self-management for pregnancy



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< 返回 孕卡信息

基础信息

姓名 Basic information

证件号码

* 出生日期

年龄

其他信息 Last menstrual period

* 联系电话 Due date 联系电话

* 末次月经 Height 请选择

* 预产期 weight 请选择

* 身高(cm) Pre-pregnancy weight

* 孕前体重(kg) BMI

* BMI

* 现住址

* 现住详细地 请输入

提交



< 穗好孕

上午好!
当前孕16周 添加孕卡

切换孕卡

预产期 2024-11-07

查看孕情信息 查看二维码

体重趋势图 添加记录 体重记录 >

非安全体重范围 实际值

Week	Actual Value (kg)	Non-safe Range (kg)
0	48	48-51
4	49	48-51
8	50	48-51
12	51	48-51
16	52	48-51
20	53	48-51
24	54	48-51
28	55	48-51
32	56	48-51
36	57	48-51
40	57	48-51

保健服务

产检签到 住院登记 心理评估

检查记录 出院登记 消息记录

领券申请 申请记录

Weight Gain Chart

Related services

Overview of GZ's Maternity Information



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孕产妇基础数据

累计注册孕妇数

2021年03月18日-2021年09月06日 | 上线至今

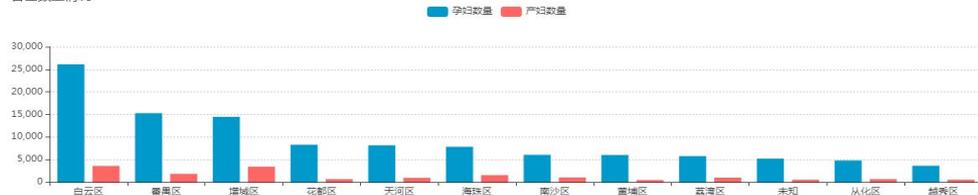
111490人数

累计注册产妇数

2021年03月18日-2021年09月06日 | 上线至今

17246人数

各区数量情况



妊娠中孕妇数

2021年03月18日-2021年09月06日

110292人数

已分娩产妇数

2021年03月18日-2021年09月06日

16060人数

流产产妇数

2021年03月31日-2021年09月03日

1155人数

宫外孕产妇数

2021年04月01日-2021年09月06日

51人数

孕妇风险等级概览

2021年03月18日-2021年09月06日

绿色等级

31276人数



2021年03月18日-2021年09月06日

黄色等级

7446人数



2021年04月01日-2021年09月06日

橙色等级

18199人数



2021年03月18日-2021年09月06日

粉红色等级

7078人数



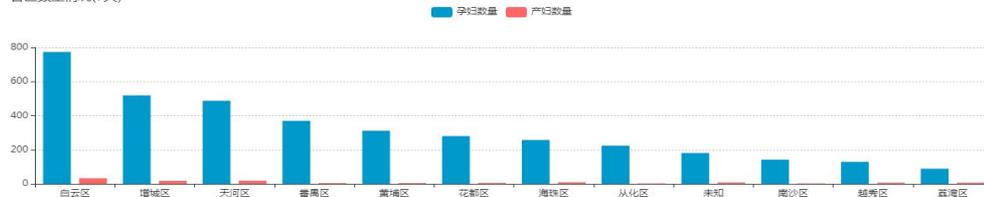
2021年05月20日-2021年09月06日

红色等级

644人数



各区数量情况(7天)



新增孕妇数

2021年08月30日-2021年09月06日 | 7天内

3764人数

新增产妇数

2021年08月30日-2021年09月06日 | 7天内

114人数

Improvement of the First Trimester Visit



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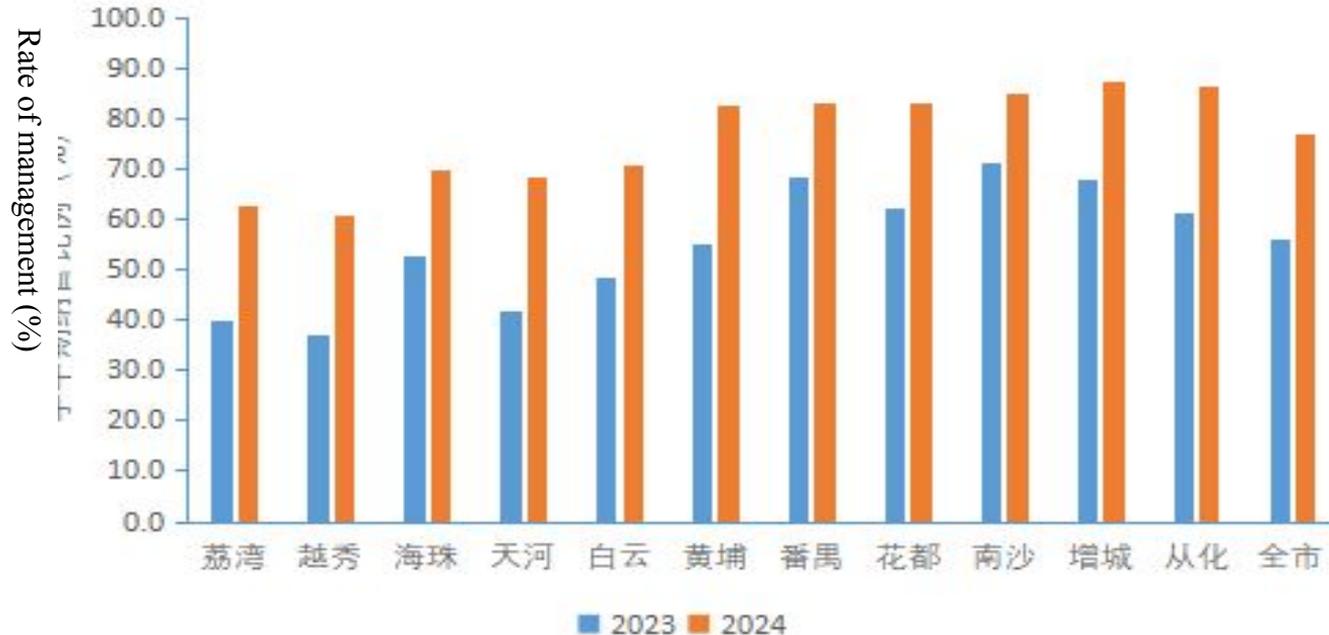


Fig. Rates of community management of pregnant women in the first trimester from January to May in 2023 and 2024

Priority Case Management



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12:55 产检后登记

签到记录

产检医院 广州市妇女儿童医疗中心 (妇婴院区)
签到时间 2022-04-19 12:54:55

产检结果

预产期 2022-10-08 [选择](#)

请确认预产期，如需修改，手动修改。

孕妇风险等级 (必填)

绿 黄 橙 粉红 红

疾病名称
请输入疾病名称

提交

< 穗好孕

- 全部孕产妇
辖区内全部孕产妇信息 **Pregnant Women List**
- 孕情管理
辖区内居民自报孕情信息
- 心理评估问卷
辖区内全部孕期/产期问卷情况 **Psychological Assessment**
- 危重报告卡
病情危重拒绝入院或放弃治疗出院 **Urgent Situations**
- 重点关注孕产妇 (7天内)
新增孕产妇/高危孕产妇等 **Pregnant Women Requiring Special Attention**
- 医院产检签到记录
辖区内产检情况 **Prenatal Care Record**

GZ Health Information Platform Give a Profile of Health History of the pregnant woman



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- Hierarchical Authorization
- Lab Test Result Mutual Recognition

Routine and Random Supervision on Obstetric Service



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Routine Obstetric Supervision

Municipal level



District level



Institution
self-evaluation

广州市卫生健康委员会

穗卫函〔2021〕1937号

广州市卫生健康委关于印发2021年度 广州市产儿科质量督导工作方案的通知

各区卫生健康局、市妇女儿童医疗中心：
为全面贯彻落实母婴安全工作要求，保障三孩政策顺利实施，进一步提升我市产科和新生儿科服务质量，加强防控医院感

广州市卫生健康委员会

穗卫函〔2022〕3089号

广州市卫生健康委关于2022年助产机构 产儿科质量市级督导情况的通报

各区卫生健康局，市妇女儿童医疗中心：
为进一步提升妇幼健康服务能力，推进母婴安全“两率”

Flight Inspection & Drill



Sustained Reduction in Maternal Mortality



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MMR in GZ remains at a low level for four years, $<5/100000$

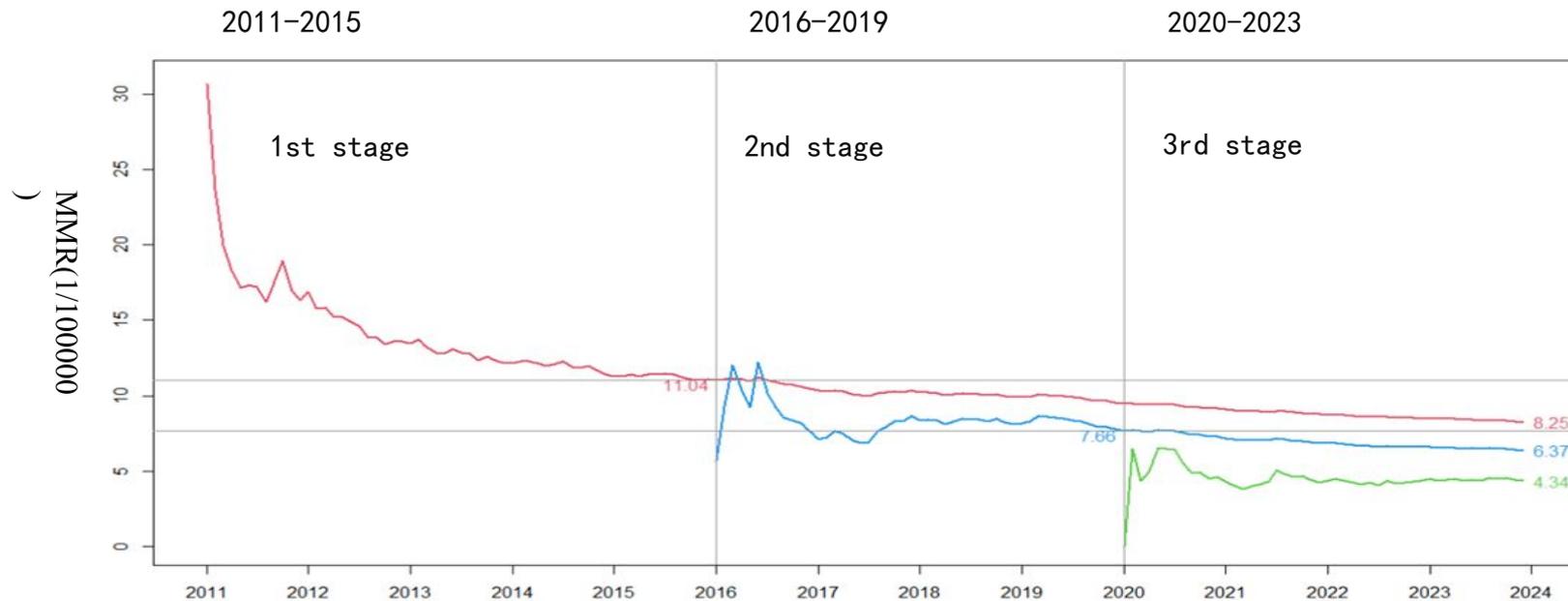


Fig. The cumulative MMR from 2011 to 2023 by months

Sui Hao Yun Mini Program 2.0



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Free prenatal check-up program in Guangzhou

Join the free prenatal screening programme



Free Voucher



Doctor's Suggestion



Test report



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Control of Cesarean Section Rate



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The rate of cesarean section have decreased and kept at a steady level

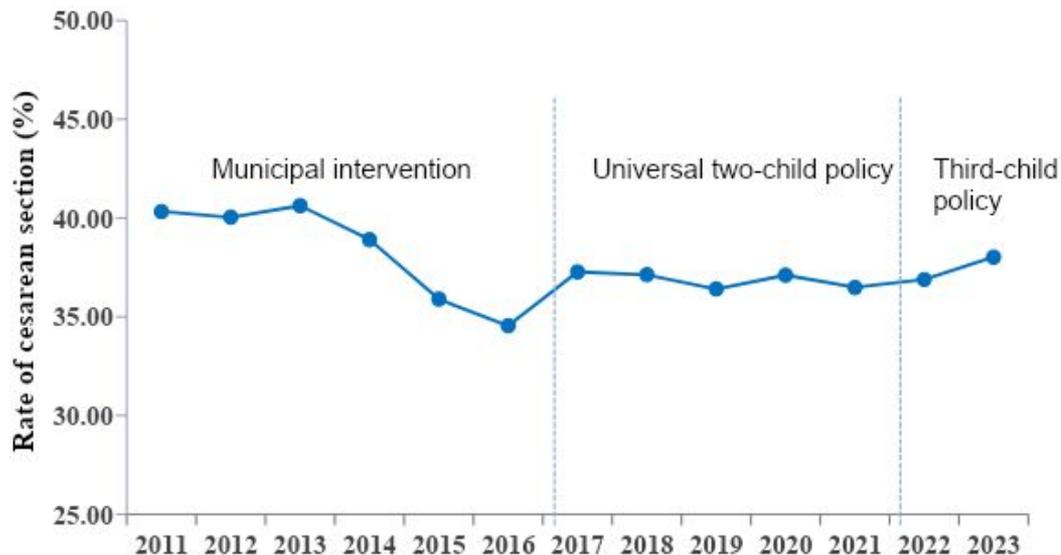


Fig. The trend of CS rates in Guangzhou, China, 2011–2023

Intervention package

Two stages:

- 1) Oct 2010–Sep 2014
- 2) Oct 2014–Dec 2016

Programs:

- Population health education
- Skills training for healthcare Professionals
- Equipment and technical support for local healthcare facilities
- Capacity building for the maternal near-miss care system

(Xia XY. Plos Medicine. 2019)

Shortening of Discussion-to-Delivery Interval, DDI



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Data warning

The DDI of emergency of cesarean section in Guangzhou in 2021

Type of CS	N	DDI (min) M(Q)	DDI≤30min n (%)	DDI≤75min n (%)
CS I	281	44.0(39.0)	92 (30.3%)	246(87.5%)
CS II	221	103.0(104.0)	7 (3.2%)	74(37.4%)

A big gap with developed countries

Root cause analysis

CS I

- Discussion location
 - Emergency room
 - Delivery room
- Anesthesia types

CS II

- Surgical time
 - Week day vs weekend
 - Day shift vs night shift
- Level/type of the hospital



Let women and children enjoys the benefits from technological developments



Thank you

Welcome to Guangzhou



Guangzhou



Xiu Qiu

Contact email : qxiu0161@163.com

Guangzhou Women and Children's Medical Center