

DELIVERING MATERNAL VACCINATION : STANDING ORDERS, A HOSPITAL-BASED IMMUNISATION SERVICE, AND PRIMARY CARE MODELS

Sushena Krishnaswamy
Infectious Diseases Physician, Monash Health
PhD candidate, Department of Obstetrics and Gynaecology, Monash University

MonashHealth A world of healthcare

MONASH University

HUDSON
INSTITUTE OF MEDICAL RESEARCH

Disclosures



Funding

- Glaxo Smith Kline Small Project Grant
- Victorian Department of Health
- Australian Government Research Training Program Scholarship

Background



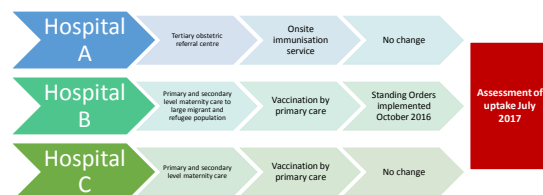
Maternal influenza and pertussis vaccination recommended for maternal and neonatal benefits but uptake variable in Australia

Barriers to uptake include a lack of integration of vaccination into pregnancy care and access to vaccination services

Standing order

- Order for administration of vaccine without need for doctor review or prescription

Existing standing order for post-partum administration of pertussis vaccine revised
*in line with recommendation to vaccinate preferentially during pregnancy
*Enabled midwife administration of pertussis vaccine during third trimester

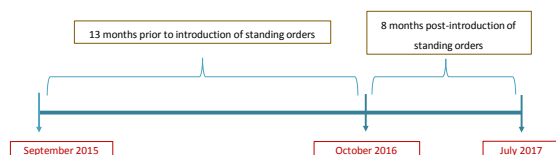


MonashHealth A world of healthcare

Methods



Time series analysis in fortnights from September 1 2015 – June 30 2017

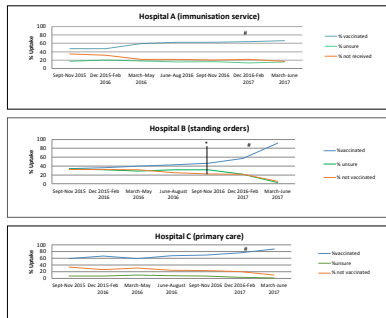


Uptake as recorded in Birthing Outcome System

- Prior to Jan 2017: self-reported uptake after delivery (up to 3 months post-vaccination)
- Since Jan 2017: self-reported uptake antenatally

Mother Postnatal - Postnatal	
Postnatal Score:	
Anti D:	
Hep B Status:	Negative
Rubella:	Not Required
Antenatal Influenza Vaccine:	
Antenatal Pertussis Vaccine:	
Postnatal Pertussis Vaccine:	
Received at any time during the pregnancy Not received for this pregnancy	

Mother Postnatal - Postnatal	
Postnatal Score:	
Anti D:	
Hep B Status:	Negative
Rubella:	Not Required
Antenatal Influenza Vaccine:	
Antenatal Pertussis Vaccine:	
Postnatal Pertussis Vaccine:	
Primary Blood Loss:	Received postpartum before discharge Not received postpartum before discharge



Conclusions

Study is unique in examining three models contemporaneously

Maternal immunisation coverage improved in all centres but most significant increase with standing orders

Lessons learned

Standing orders

- acceptable and effective model of vaccine delivery in maternity care settings
- may be particularly effective for:
 - women from migrant and refugee backgrounds
 - women living in rural and remote areas
 - young mothers and those with complex social circumstances

Primary care

- time and cost of attending additional healthcare appointments for vaccination by primary care was not a significant barrier
 - hospital C highest reported uptake at the beginning and 88% at the end

Strengths and limitations

Strengths

- Different models provided “control” groups against which to assess intervention
- Validated BOS as tool for monitoring uptake

Limitations

- Vaccine uptake in BOS based on women’s self-report- subject to recall bias
- Some of improved uptake may be attributable to improved data collection
- Effect of education could not be measured

Acknowledgments

Supervisors

Michelle Gilles
Jim Buttery
Euan Wallace

Research Midwife

Karen Bellamy

Monash Health Staff

Allison Deering
Jo Hickman
Michelle Knight



Funding Support

Australian Government Research Training Program scholarship
Victorian Department of Health and Ageing
Glaxo Smith Kline