



HOW TO LEARN FROM YOUR MATERNITY DATA? OUTPUTS FOR DECISION-MAKING

Increased use of non-clinically indicated caesarean section is challenging quality of care in maternity services.

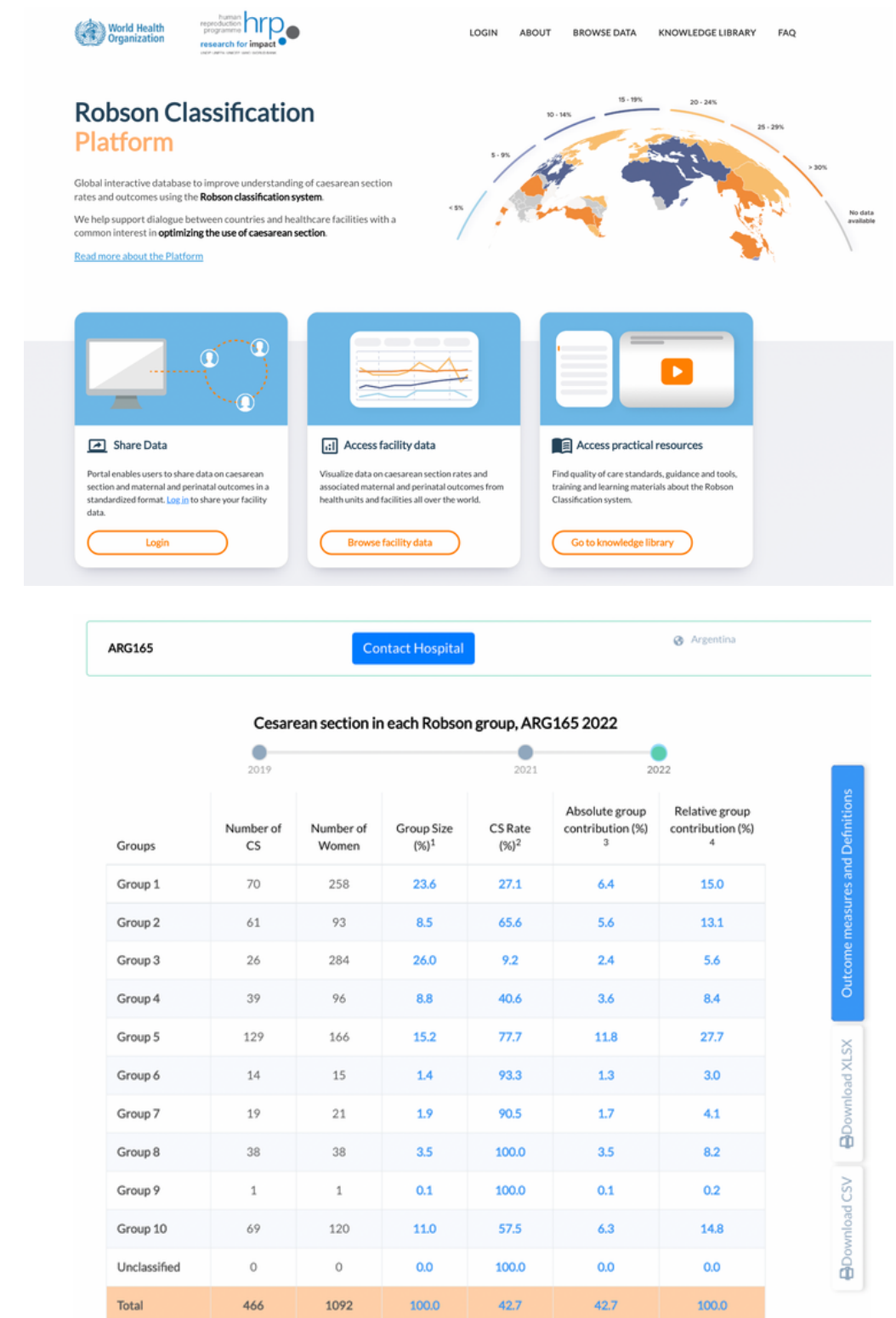
The Robson Ten Group Classification System has proved to be useful for institutional monitoring and auditing and for the evaluation of trends and determinants of caesarean section use in healthcare facilities.

You can transform your data into knowledge and improve the quality of the care provided by applying this classification. The use of this classification requires minimum effort and resources because it uses data collected routinely.

This policy brief is for decision-makers in order to support the use of routinely collected data to apply the Robson Ten Group Classification System (TGCS) for monitoring caesarean section trends in maternity services.

Introduction

- Increased use of non-clinically indicated caesarean section (CS) is challenging the quality of care in maternity services. The TGCS has proved to be useful for institutional monitoring and auditing and for the evaluation of trends and determinants of caesarean section use in healthcare facilities. [1]
- The World Health Organization (WHO) and the International Federation of Gynecology and Obstetrics (FIGO) stated that the TGCS should be universally applied to pregnant women.
- Maternity services routinely capture key information at different stages of care (antenatal visits, hospital admissions and re-admissions, labour and delivery, discharge). This data set often contains information on basic demographics, screening tests and interventions provided, that is collected while delivering care, but which can also be used to improve the quality of the care provided through the application of the TGCS.
- The WHO developed a platform where health units and facilities all over the world can share their data on caesarean section rates and associated maternal and perinatal outcomes.



Monitoring caesarean trends and other indicators using routinely collected data

- You can transform your data into knowledge by using the TGCS in your maternity unit.
- This is a system that classifies women into 10 groups based on few basic characteristics, which are routinely collected by obstetric care providers (parity, previous CS, onset of labour, fetal presentation, gestational age and number of fetuses) [1].
- The system places every woman who is admitted for delivery in one of this 10 categories or groups, which are totally inclusive and mutually exclusive and can be applied prospectively. Studies suggest that this classification system helps for critical assessment of care at delivery and can be used to foster practice change when applied on a continuous basis. [2]

- Results from one study (systematic review) on 27 internationally used classifications for CS suggest that women-based classifications in general, and Robson classification, in particular, were in the best position to assess, monitor and compare CS rates across different settings (or different times within one setting) and help to implement effective strategies targeted to optimize CS rates. [1]
- Other studies tested the classification in different facilities from different countries and concluded that the use of the TGCS allows standardized comparisons of data across units and time points and identifies the subpopulations driving changes in caesarean section rates. The classification is easy to implement and interpret and its use is increasing worldwide. [4,5]

Results



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APPROACH

By adding columns to the table, facilities can monitor maternal and perinatal indicators of their interest by group of people. These outcomes are also routinely collected during childbirth: Apgar score, admission to neonatal intensive care units, episiotomy, oxytocin use, infections, post-partum haemorrhage, admission to intensive care unit, perineal degree, birthweight, etc.

Groups	Number of Women	Number of CS	Outcome Measures					Definitions
			CS Rate (%)	NICU admissions	Hypoxic ischaemic encephalopathy or seizure	Oxytocin for induction or augmentation	Episiotomy	
Group 1	1283.0	113.0	8.8	110.0	0.0	690.0	629.0	38.0
Group 2	1531.0	646.0	42.2	0.0	0.0	0.0	0.0	No Data
└ Group 2A	1334.0	449.0	33.7	176.0	4.0	1084.0	560.0	22.0
└ Group 2B	197.0	197.0	100.0	0.0	0.0	0.0	0.0	No Data
Group 3	1567.0	11.0	0.7	96.0	0.0	57.0	127.0	15.0
Group 4	1112.0	177.0	15.9	0.0	0.0	0.0	0.0	No Data
└ Group 4A	985.0	50.0	5.1	109.0	0.0	484.0	101.0	6.0
└ Group 4B	127.0	127.0	100.0	0.0	0.0	0.0	0.0	No Data
Group 5	979.0	792.0	80.9	111.0	0.0	33.0	88.0	3.0

Implications

- Hospital administrators should ensure necessary technical and human resources to collect, analyse and interpret the data. They should also encourage feedback from users.
- Health teams should be committed with the classification and adhere to the proposed solutions. They should also be encouraged to decide on actions.
- It is an efficient way to compare practice, and maternal and perinatal outcomes among homogenous, similar groups of women. Women will therefore have access to a better quality of care.

Recommendations

- 1- Extract the data from the medical records to construct the TGCS.
- 2- Establish a team for interpretation of the TGCS.
- 3- Train the team in the analyses and interpretation of the TGCS.
- 4- Interpret the results extracted from the TGCS.
- 5- Provide feedback on the results of the analyses and interpretation of the TGCS to the personnel at the maternity services.
- 6- Follow-up the actions on a regular basis.

Sources

- 1-Torloni MR, Betran AP, Souza JP, Widmer M, Allen T, et al. (2011) Classifications for Cesarean Section: A Systematic Review. PLoS ONE 6(1): e14566. doi:10.1371/journal.pone.0014566
- 2-Robson MS (2001) Classification of caesarean sections. Fetal and Maternal Medicine Review 12: 23–39. rate. Best
- 3-Robson M, Hartigan L, Murphy M (2013) Methods of achieving and maintaining an appropriate caesarean section Pract Res Clin Obstet Gynaecol 27: 297–308.3.SIP GESTION. 2018. <https://bancos.salud.gob.ar/sites/default/files/2020-02/0000001376cnt-anuario-sip-2017.pdf>
- 4-Betrán AP, Vindevoghel N, Souza JP, Gülmezoglu AM, Torloni MR (2014) A Systematic Review of the Robson Classification for Caesarean Section: What Works, Doesn't Work and How to Improve It. PLoS ONE 9(6): e97769. doi:10.1371/journal.pone.0097769
- 5-Vogel JP, Betrán AP, Vindevoghel N, Souza JP, Torloni MR, Zhang J, Tunçalp Ö, Mori R, Morisaki N, OrtizPanozo E, Hernandez B, Pérez-Cuevas R, Qureshi Z, Gülmezoglu AM, Temmerman M; WHO Multi-Country Survey on Maternal and Newborn Health Research Network. Use of the Robson classification to assess caesarean section trends in 21 countries: a secondary analysis of two WHO multicountry surveys. Lancet Glob Health. 2015 May;3(5):e260-70. doi: 10.1016/S2214-109X(15)70094-X. Epub 2015 Apr 9. PMID: 25866355.