Tackling Brazil’s C-Section Problem: Overcoming Myths And Barriers Using National QI Scale-Up

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**Aims**

- Use the C-section example to understand the role of variation in driving poor performance.
- Understand how myths and evidence can be used to drive system redesign.
- Understand how a patient-centred approach can be used to drive change.
- Understand the progression of steps required for a national scale-up design.
Aligned Mission and Vision

**Mission:**
- Oferecer excelência de qualidade no âmbito da saúde, da geração do conhecimento e da responsabilidade social, como forma de evidenciar a contribuição da comunidade judaica à sociedade brasileira.
- Improve health and health care worldwide

**Vision:**
- Ser líder e inovador na assistência médico-hospitalar, referência na gestão do conhecimento e reconhecida pelo comprometimento com a responsabilidade social.
- Everyone has the best care and health possible

“When you come upon a wall, throw your hat over it, and then go get your hat.”
In 1955, a group of idealists from the Jewish community of São Paulo founded Albert Einstein Jewish Hospital.

VALUES
- Good deeds (Mitzvá)
- Health (Refuá)
- Education (Chinuch)
- Social justice (Tsedaká)

MISSION
To offer excellence in quality in healthcare, generation of knowledge, and social responsibility, as a means of making evident the contribution of the Jewish community to the Brazilian society.

VISION
To be leader and innovator in medical-hospital care, a reference in knowledge management, and acknowledged for its commitment to social responsibility.

In 1957 a ceremony was held to receive Ema Gordon Klabin’s donation of the land where Albert Einstein Hospital was built.
Value Based Healthcare: TRIPLE AIM

Einstein Quality System:

Adoption of the Triple Aim as part of the Albert Einstein’s principles and values in April 2014

- Improve the experience of care (IOM principles, patient experience, outcomes)
- Decrease per capita costs with health
- Improve population health

Albert Einstein is a private, non profit organization, with activities in 5 main areas (hospital, diagnostic medicine, education and research, and social responsibility)
The plan

- Context and burning platform
- A demonstration collaborative: design
- Results to date
- Next steps
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MEASURING THE GAP

Problem:
- Early Term C-Section
- Prematurity
- Maternal Morbidity

Global Trends in CS

WHO recommended zone
“The global rise of Caesarean sections is being driven not by medical necessity but by growing wealth—and perverse financial incentives for doctors”

Private sector approx 85%
Drivers – *private sector, Brazil*

- Incentives: fee for service
- Clinicians: comfort and predictability; skills gap over time
- Balance of power: nudging; vulnerability at delivery stage
- Physical space
- Lack of multidisciplinary team ethos
- Over time...a social norm; ‘exclusivity’
- Status symbol
Provocation

**United Kingdom:** National Institute for Health and Care Excellence (NICE): “healthy women with straightforward pregnancies are safer giving birth at home or in a midwife-led unit than in a hospital under the supervision of an obstetrician” CS rate in UK 26%
https://www.nice.org.uk/guidance/cg190

**USA:** ACOG strongly emphasizes the risks of under intervention and states unequivocally that “hospitals and birthing centers are the safest setting for birth.” CS rate 35%

**Brazil** – CS rate 46 – 85%
Violência Obstétrica
“Parirás com dor”

Em cinco anos, 17 maternidades fecham as portas no Estado

NATÁLIA CANCIAN
DE SÃO PAULO
31/08/2014 01h30
BRAZIL OBSTETRIC CONTEXT

2002

2011
Partogram

Insurance % CS rate each doctor

Pregnancy Booklet

BRAZIL OBSTETRIC CONTEXT

14/10/2014
Ministério da Saúde e ANS criam normas para reduzir cesarianas

Planos de saúde terão que divulgar taxas de partos de médicos e estabelecimentos de saúde. Atualmente, 84% dos procedimentos realizados na rede privada são cesarianas.

A partir desta quarta-feira (15/10), a Agência Nacional de Saúde Suplementar (ANS) coloca em consulta pública duas resoluções que visam à redução de cesarianas desnecessárias entre consumidoras de planos de saúde. Entre as medidas sugeridas pela Agência, está a ampliação de acesso à informação pelas beneficiárias, que poderão solicitar as taxas de cesáreas e de partos normais por estabelecimento de saúde e por médico – independentemente de estarem grávidas ou não.

As propostas para a mudança do modelo de assistência vigente foram anunciadas nesta terça-feira (14), em Brasília, pelo ministro da Saúde, Arthur Chioro, e o diretor-presidente da Agência Nacional de Saúde Suplementar (ANS), André Longo. As medidas foram elaboradas por um Grupo de Trabalho específico constituído por servidores da ANS.

Na ocasião, o ministro da Saúde destacou a importância do enfrentamento ao que pode ser considerada uma epidemia de cesarianas no país. "No setor privado, o percentual que temos de partos cesáreos deveremos ter de partos normais. Precisamos inverter essa situação, senão a vida vira uma mercearia. A natureza de nove meses para que a gestante se prepare para o parto, a respeitar a mulher e acima de tudo disponibilizar a ela todas as informações sobre o parto normal e fazer com que o parto cirúrgico seja adotado apenas quando indicado", ressaltou Chioro.

Além da transparência das informações, as resoluções prevêem ainda a apresentação de partograma, um documento que deverá conter as anotações do desenvolvimento do trabalho de parto, das condições maternas e fetais. O documento, além de uma importante ferramenta de gestão para as operadoras, será parte integrante do processo para pagamento do parto. Em casos excepcionais, o partograma poderá ser substituído por relatório médico detalhado.

2014

Public prosecutor (D A) sued ANS – Brazilian Regulatory Agency for Health Private Sector
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The birth of the collaborative

Before 2012 no demonstration to reduce CS rates private sector

First Pilot 2012 – Unimed Jaboticabal from 0% to 40% NB in 9 months (Paulo Borem)

3 more cities – same results
Jaboticabal experience: it’s possible
Jaboticabal experience: its possible shifts

Nurses added to teams

No reimbursement for CS

Empower women

Increasing the percentage of vaginal birth in the private sector in Brazil through the redesign of care model: Rev Bras Ginecol Obstet. 2015; 37(10):446-54

Borem P, Ferreira JB, Silva UJ, Valério Júnior J, Orlanda CM

NICU admissions

60% reduction
The Partners Roles

is the Proponent of the Collaborative. It Coordinates, monitors, interact with the health plans and with the media

gives the medical-scientific training and is responsible for logistics and test some changes in advanced

is responsible for teach improvement science, quality and clinical safety, process mapping, construction of the measures, data analysis and monitoring for improvement. It brings the Collaborative model.
Who are the 42 hospitals?

Criteria for participation:

Private
• > 500 births per year
• CS rate above 75%
• Hospitals with above 50% private beds
• Capital or a rural city

Public:
• > 1000 births per year
• CS > 65%

In average CS rate 80.9%
Represents 85.185 deliveries - 6% in Brazil
After 18 months we expect

1. Reduce maternal and neonatal morbidity
2. Reduce gap between science and the obstetric practice safely increase the % Natural Birth
3. Improve the experience of care (safety care, timeless, efficient, effective, equitable and focused on the needs of families and community)
4. Reduce per capita costs of maternal care and child
Plano de Trabalho do Projeto Parto Adequado – Learning system (IHI Breathrough Series Collaborative) - All teach, All learn

Maio/2015 16 meses 2 meses Dez/16

Legenda:
SAP – Sessão aprendizado presencial
*PA3 – informação continua sendo coletada para comunicar melhoria permanente
PA – Período de Ação

Suporte através dos relatórios mensais pelas equipes E-mail Conferencia por fone Extranet Visitas Análises

Disseminação
Publicação, Congressos, etc.
Sustentando as melhorias

Trabalho Preliminar
SAP 1
PA1
SAP 2
PA2
SAP 3
PA3
SAP 4
PA4*
The three questions provide the strategy:

What are we trying to accomplish?
How will we know that a change is an improvement?
What change can we make that will result in improvement?

The PDSA cycle provides the tactical approach to work.

Source:
### Aim

1. Coalition of major stakeholders aligned around primacy of safe mother, safe baby

2. Empower pregnant women and their families to choose the care (ensure readiness for NB)

3. New care model to accommodate the longer time frame of normal physiologic birth

4. Data systems that support learning
LEARNING SESSIONS - MODEL FOR IMPROVEMENT

TEAMS
4 people
200 participants
Managers, Nurses, Obstetricians
Learning session: all teach, all learn
Hospitals, teams of obstetricians, managers, nurses learn and teach
VISIT HOSPITALS UPON REQUEST

Creating a Network
TEAM TRAINING

ALBERT EINSTEIN
REALISTIC SIMULATION CENTER

NURSES
AND
MEDICAL DOCTORS
Training Together
TEAM TRAINING
Physician’s models of work – assisting birth

1. Obstetrician on duty with the nurse

2. Obstetrician responsible for the prenatal care, with the support from the multidisciplinary staff on duty. The team on duty would assist the delivery until the arrival of the obstetrician.

3. Obstetricians create a team and one of the team members will assist the birth.
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Support from the Health Insurances

1. Creation of a “Parto Adequado Space” on their websites with information about obstetricians that assist natural deliveries.

2. They monitor the actions/changes adopted, and disseminates information about the project amongst its beneficiaries.

3. Meetings are organized by ANS to discuss the forms of participation of health insurance agencies, and create a new compensation model aligned with quality and safety, value not volume.
**PROJETO PARTO ADEQUADO**

- **42 Hospitals**
- **85,000 Birth/year**
- **6% Birth/year**

### 2014
- **Average Before Project**
  - 82.4% C-section rate

### 2015
- **After 6 months**
  - 71.2% C-section rate

**Background**

2005 - 2015

75% - 85%
Preliminary results

- More than 300 health professional trained in clinical skills
- 90% showed increase in Natural Birth
- Hospitals hired nurses and established shifts for obstetricians
- Most of the hospitals adopted best practice to improve patient experience
All 42 hospitals: pilot population

% Vag Birth Pilot Pop. - All

- % VAG BIRTH

- 01/14, 02/14, 03/14, 04/14, 05/14, 06/14, 07/14, 08/14, 09/14, 10/14, 11/14, 12/14, 01/15, 02/15, 03/15, 04/15, 05/15, 06/15, 07/15, 08/15, 09/15, 10/15, 11/15, 12/15, 01/16

- 22%

- 31%

- Meta

- All
Einstein – Vaginal births – all patients
Mater Dei – vaginal birth – Pilot population
NICU Einstein - SP: Vaginal Birth - pop. Robson I a IV

- < 500g: 5 (2014), 0 (2015)

Changes:
- < 500g: + 290%
- 501 - 1000g: + 28%
- 1500 - 2500g: + 7.7%
- > 2500g: - 21%
Communications

2014: 77 matérias
2015: 511 matérias

The Economist
Caesar's legions

The global rise of Caesarean sections is being driven not by medical necessity but by growing wealth—and perverse financial incentives for doctors.

A YEAR ago a hospital in São Paulo announced that its maternity ward would henceforth only admit clients from 10am to 4pm, Monday to Friday. The message was clear: births by appointment only—that is, by Caesarean section. For Arthur Choes, Brazil’s health minister, it was equally unequivocal: the country’s attitude to birth “has become absurd”.

In 2009 Brazil became the first country where less than half of babies were born as nature intended. At the last count, in 2013, fully 57% of births were by Caesarean section, in which the baby is delivered through an incision in the abdomen and uterus—almost double the proportion five decades ago. In Brazil’s private health-care system, Caesareans now account for nearly nine in ten births. Brazilian mothers say, only half jokingly, that their obstetricians would not know how to pull out a baby without cutting them open.
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% Vag Birth Pilot Pop. - Pilot

ACTION PERIOD 4

Meta

31.2%

21.6%
**Challenges**

- Doctors engagement - respect patients preference willing and trust in doctors and nurses on shift to care patients until arrives
- Structure – Labor delivery rooms
- Quality and Safety

**Opportunities**

- Patients and Families engagement – information about importance of natural birth to mothers and babies
Co-Design and Co-Production


Healthcare is not a product manufactured by the healthcare system, but rather a service, which is co-created by healthcare professionals in relationship with one another and with people seeking help to restore or maintain health for themselves and their families.
Scale up: the framework

Leadership, communication, social networks, culture of urgency and persistence

Learning systems, data systems, infrastructure for scale-up, human capacity for scale-up, capability for scale-up, sustainability

Phases of Scale-up

Adoption Mechanisms

Support Systems
Phases of Scale Up

- Best Practice exists
- New Scale-up Idea
- Set-up
- Build Scalable Unit
- Test Scale-Up
- Go to Full-Scale & Sustain

Innovation
Adaptation
Adoption
Assessing where we are  

Set-up  
Build Scalable Unit  
Test Scale-Up 
Go to Full-Scale

Leadership, communication, social networks, culture of urgency and persistence

Learning systems, data systems, infrastructure for scale-up, human capacity for scale-up, capability for scale-up, sustainability

Phases of Scale-up  
Adoption Mechanisms  
Support Systems
The next 3 years

- Ongoing support from ANS, Einstein, Ministry
- Phase 2: 100 hospitals – 24 months (finer details under discussion)
  - Distributed learning system with hubs
- National scale up – 18 months after phase 2
- Estimated costs over 3 years: $3 million
Draft Activities

- **3 levels:**
  - National Team
  - Regional Teams
  - Hospital Teams

- Scale-up across **7 regions**, each running a Collaborative Learning System of **2 years** in duration

- Each region will have approximately **15 Hospital Teams** (100 hospitals in total)

- Each team has **5 members** (approximately 500 participants in total)