



Unravelling What Works to Increase C-Sections in Bihar, India

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Declaration of Interests

- The improvement initiative was supported by the Government of Bihar (GoB) and development partners (Institute for Healthcare Improvement (IHI) and CARE India).
- The GoB provided essential resources for maternal and newborn care to the district hospitals. Medical staff from participating hospitals were all recruited and paid for by the Government of Bihar and were not financially incentivised to undertake this work. The provision of services for the population was entirely funded by the State of Bihar, and no insurance schemes were active for this population at the time.
- The Government of Bihar also provided comparative data on percentage of C- section deliveries for the remaining 26 district hospitals that were not included in the QI collaborative.
- The technical assistance provided by IHI and CARE India was funded by the Bill and Melinda Gates Foundation

Take Home Messages

- QI plus resources (vs QI alone or resources alone) are required interventions to effect change in poor resource settings.
- Context- sensitive collaborative approach for QI, in collaboration with local government, is an effective method to increase C- sections.

• The use of counterfactuals (non-QI hospitals) and time series data was critical to attributing the observed increase in C-section rates

Background – Setting the Context



- 3rd most populous state in India 130 million people
- Bihar Maternal Mortality Ration (MMR) was 149/100,000 live births Vs National Average of 113/100,000 (2016-2018)



Intervention – Collaborative of 10 district hospitals



Model for Improvement



Support Monthly Onsite visits, Coaching feedback from peers, Leadership Review



Engaging state and district leadership Leadership meeting (8 Feb 2018)



Building QI Capability Building Improvement Coach Workshop (20-22 Feb 2018 and 22-24 May 2018)



Three Learning Sessions



Action Periods - QI Teams Testing PDSAs



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Solutions > Orient all LR stage on the importance of correctly documenting the weight of the newborn > Assess the general knowledge of all LR nurses and train theory who need to be paired when - 3/4/18 who - DTOF, DS where _ BH - meeting hall How - Task. Propane knowledge tool (Whore) Iskning on letter Autor Orues fin Paper Preform Contents for training

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Driver diagram showing collaborative aim, four primary drivers, linked secondary drivers and examples of changes

AIM	PRIMARY DRIVERS	SECONDARY DRIVERS	EXAMPLE CHANGES
		Engage leadership for: a) Organized MCH unit as per MNH toolkit	calation mechanism (when to escalate
	Engaged Leadership for Improved Inputs	 b) Rationalized HR c) Build clinical knowledge & skills of healthcare providers d) Stock management of essential RMNCHA medicines 	sual management: synchronize staff tention and guide activities
Increase proportion of emergency C- sections in 10	Strengthen Data System	a) Improved data quality in HMIS b) Capable QI team using data for decision making b) Derron contend core	echanism to define and disseminate andard work (what to do & how to do uddles: supplement visual anagement (daily huddles: current start issues (problems and priorities
district hospitals of QI Collaborative to 10% from	Improved Quality of Clinical care	 a) Person centered care b) Correct identification of maternal complications c) Adherence to clinical protocols and timely care by C- section, Eclampsia management, PPH management, etc. 	countability: process to review ecution of standard work oblem-solving at the front-line (see
February 2018 to May 2019	Quality Management System	a) Engaged leadership with regular update of QI work b) Functional QI teams and engaged frontline healthcare providers c) Managers & improvement coaches supporting QI d) Enhanced QI skills of healthcare providers & Learning collaborative	a solve; use of MFI/PDSA and other ols; supported by improvement aches) tegration (of goals, standard work i.e. tegrating improvement into daily work ad prioritization of QI projects; moving om QI to QC) Ilture of high performance (policy, edback, transparency, trust)



1. Engaged Leadership for Improved Inputs

1.1 Organize MCH Unit for Person-Centred Design (as per the updated MCH Toolkit)

Change Concept	Change Idea
Create a healing environment	Create a clean and welcoming spaceEnsure comfort and privacy
Streamline patient flow	 Identify steps in the patient care process Decrease Overcrowding Maximize ease-of-use for providers
Change the culture to support improvement	 Build a culture of trust and transparency Interact and engage with staff to support person-centred Demonstrate by doing

1.2 Optimize Use of Resources

Change Concepts	Change Ideas
Maximize provider and staff capacity and capability	 Build clinical expertise Build paramedical staff expertise Clarify roles and responsibilities Share skilled expertise
Manage medicine and equipment	 Create and maintain a stock register Rationalize procurement



2. Data Systems to Support Improvement

2.1 Build Reliable Systems for Data Collection

Change Concept	Change Idea
Standardise data collection	Complete a daily and monthly summary and review of records

2.2 Strengthen Data Quality

Change Concept	Change Idea
Create transparency in data collection and use	 Track and address data, defects, and results for patient-centred healthcare

2.3 Use Data for Improvement

Change Concept	Change Idea
Use available data appropriately for continuous improvement	 Use data in QI meetings Incorporate storytelling Use visual display boards Use data for decision making



3. Quality Management System

3.1 Build Leadership Accountability

Change Concept	Change Idea
Create vision and build will	Regularly review and follow-up QI work

3.2 Create and Nurture Frontline teams

Change Concept	Change Idea
Change the culture to support improvement	Acknowledge and support improvement efforts

3.3 Build a Cross-district Learning System

Change Concept	Change Idea
Build QI capability	Build and support functional QI teams



4. Improve Quality of Clinical Care

Change Concept	Change Idea
Increase accountability	 Form a c-section response team Involve leadership to remove barriers and facilitate changes
Redesign process to identify and manage maternal complications resulting in c-section	 Sensitize nurses on indications for c-section Redesign OT for hassle-free c-section services Conduct referrals with two-way timely communication betwee Primary Health Centre (PHC) and DH Ensure post-operative monitoring compliance
Redesign instrument sterilization and procurement process	 Designate area for CSSD Define roles and responsibilities Regularly monitor compliance Standardise procurement of required instruments
Increase availability of key services and resources	 Increase doctor availability for c-sections Ensure emergency laboratory tests are available 24/7



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Action Periods

Sharing & Learning through Social Media and Virtual Platforms





Dr Sanjiv Gopalganj

Right now we are faced with bed shortage for next cases. Trying to work out some mechanism for both short term and long term solution

I did 6 LSCS + 6 ligation operation on Monday..... Too hectic

This is what Dr Manju our lady doctor 10:45

This is what she has to say It's feeling so nice at SH Gopalganj

Dr Vinita

Nice to read all d news 10:51

Postoperative care needs to be strengthened everywhere 10:52

Lack of hr a challenge 10:52



CQI Meeting conducted in the CS office regarding to improve the Quality services of the OT. And to provide the betterment services to the beneficiaries timely and also to do c-section in the eligible cases. This meeting has conducted in the CQI leadership CS sir & DPM shaheb with district improvement coach team DS sir Dr Alok sir DTOF and all surgeon and anesthetist. Ds sir has taken lead to implement the better services. Dr Alok sir provide the list which is required to strengthen the OT and give his valuable input to improve the services . DPM shaheb discussed to improve the 3rd delay. 18:42



Caesarean section (C-section) percentages in quality improvement (QI) and non-QI hospitals



B Non-QI Hospitals



Six hospitals that demonstrated sustained increase in caesarean section (C-section) percentage after initiation of the quality improvement (QI) collaborative



Two hospitals that demonstrated no change in caesarean section (C-section) percentage.



Two hospitals with baseline caesarean section (C-section) percentage >10% at the start of the initiative, that showed further sustained increase in C-section percentage



Take Home Messages

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Thank You

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Improving the efficiency of PrEP*consultations

Dr. Harry Coleman Mortimer Market Centre, Central North West London NHS Trust, London, UK

* Pre-exposure prophylaxis for HIV

No declarations of interests to make

Start Av. 39min appointment

Quality improvement Project

Av. 16min appointment



Figure 11. New HIV diagnoses among people first diagnosed in England by probable route of exposure, England, 2019 to 2023



"In London, especially, it's like gold dust trying to get these appointments." (PrEP user)

"DIFFICULTIES ACCESSING SEXUAL HEALTH CLINICS IS THE NUMBER ONE BARRIER TO ACCESSING PrEP AMONG YOUNG GBMSM."

Nearly half of clinical respondents (47%) felt that their clinic did not have sufficient workforce levels to meet current need around PrEP





Only 35% of respondents reported getting access to PrEP at the time of responding, the majority of whom were first time PrEP requests



The top waiting time for a call back reported by the community was **12 weeks** (35%)

23% of community respondents reported being turned away from their clinic as they didn't have any available appointments



Adam 21yo

 Started on PrEP when he moved to London to study at university

• He tried to get a re-supply but there were never any appointments and he was busy with course work

• He borrowed his friends PrEP and sometimes used condoms

• 6 months later Adam finally got an appointment at the Sexual health clinic – his HIV test was positive



Background and Understanding the problem



High demand with not enough capacity, no more money



Majority of PrEP is delivered by nurses via PGD (patient group directive)



Nursing staff have fed back that 30 minutes is not enough time to complete a PrEP consultation

Team

- Charge nurse
 - Bobby Singh
 - Elinor Chisholm
- Specialist nurse
 - Silvia Belmondo
 - Amanda Marchesani
- Service user involvement
 - Expert by experience
 - PrEP new starter survey
 - Pre-assessment
- Consultant
 - Harry Coleman



Aim Statement



Reduce the time it takes to see patients for PrEP by 10 minutes over 12 months



Measure (outcome): PrEP appointment time in minutes (median/week)



Nursing staff baseline survey

- Majority feel confident in delivering PrEP
- Feel it takes ~39 min to see a patient for PrEP

"No POCT (point of care) testing for individuals who are currently on PREP and transferring from another clinic" "Easier access to complex prep"

"Have a form that they fill out online before and we just check it"

"Have them do urine and pooled CT/GC while they are waiting for appointment"

"Improve PGD so we don't have to do so many POCTs"



PDSA 1: PGD update -October 2023

This Patie profession it. The mo	nt Group Direction (PGD) must only be used by registered healthcare als who have been named and authorised by their organisation to practice under at recent and in date final signed version of the PGD should be used.
	PATIENT GROUP DIRECTION (PGD)
Sup	ply of emtricitabine 200mg/tenofovir disoproxil 245mg as
Pre	Exposure Prophylaxis (PrEP) for the prevention of HIV infection
b	v registered nurses in Sexual Health, Diggory Division
	Version Number 1.3
	Change History
Version and	Charge details
Version 1	New lemplate
1.1 Sept 2020	Adoption of national PrEP PGD template in CNVL with minor changes: Characteristics of staff-Central North West London NHS Trust adoed Inclusion criteria: Reference to the local Young Person's policy amended to include hyperlink to local policy Statement added to refer to the PGD policy and Standard Operating Procedures regarding remetries consultations Amount to supply. In line with commissioning arrangements, amount to supply amended to up to three months instead of six months Arrangement of and reporting procedure for adverse reactions- added CNWL Written advice and further information to be given to the patient-added the link to the Yallow Up- Statement to refer to curren: local guideline with relevant this added References-uptaged with local and trust guidelines and policies relevant to this PGD use in hitegrated Sexual Health CNWL Appendix A- replaced with the CNWL.
Dec 2020	National PGD updated to Version 1.1 Inclusion criteria amended in line with updated BHIVA/BASHH/BIA Adult HIV Testing guidelines 2020: Either documented regative combined HIV antigen/antibody test in the last four weeks or outside of the four-week window period after last risk amended to:

PDSA 2: Pre-assessment – November 2023

Central and North West London With Available front PrEP Pl	re-assessment
Have you taken PrEP before?	No Yes
What gender are your sexual partners (tick all which apply)	Male Female Other
How do you take/plan to take your PrEP?	Daily (one tablet every <u>day)</u> Event based/On demand (2-1-1)
Where did you have your last HIV test?	CNWL clinic
When was this test:	Online (Sexual Health London, <u>SHL)</u>
Have you had any condomless sex which wa	as No Yes
Do any of your partners make you feel afrai pressured to have sex you have not consen to?	d or No Yes – please discuss with your nurse
Do you have any medical problems?	No Yes
Do you take any medication or own	No Yes
supplements/protein shakes?	If yes please detail:
Do you have any allergies?	No Yes
Have you had varcinations for:	
Yes	No Month/Year
Hep A	
Hep B	
HPV (warts)	
Maax	
(man has seen)	

PDSA 3: Stop: Height/weight/BP Start: samples while waiting for the appointment

4th PDSA: Quick PrEP online assessment

Quick PrEP service launched in November 2024 in for PrEP follow-up

Central and North West London	CNWL Sexual Health Services in London and Surrey
Home Feedback Buy condoms and lube online Abo	ut Lis Useful leaflets and links News
Welcome to CNWL's Online PEP service.	
Privacy	Agreement
 Lonsent to providing my information to CNW. Sees London. for the purposes of prescribing PCP media Pulicy phase click hore: <u>Privacy Policy and Terms of</u> 	ail Hoadh' Survivas and Burn partner Survivas Cagnal aton riminating for the CNW, Social Hoad McGall Privacy they ECNIN. Sessal Health Services.
Have you previously received Pre-	P from one of our clinics in London*?
0 100	(Yes
*Archway Clinic, Edgewire Community Hospit	al Sexual Health Clinic or Monterner Market Centre
Have you got more t	than 1 week's PrEP left?
O No	(With)
	10/1 / Carol
So that we can match you to your CNWL clinical record, p	lease provide us with the following personal details:
Test	Test
Date of Birth 01 / 01 / 22	07885518600
WC1E 6(B	MORTINER MARKET CENTRE, MORTINER MARK
	INTIMUE
We need to sheck whether anything has changed	I since your last appointment. Please answer the short
questor	mare below.
 Are you doing 'event based/or PrEP (if you're blending the two, 	n demand' dosing, or daily dosing of , choose 'event based/on demand')?
() Carlo	On Demand/Event Based
2. Are you getting any side-effect discuss with	ts from PrEP which you would like to a doctor/nurse?
U No	
3. Since you were last	reviewed in our service:
a. Have you been told that you ha high blood pressu	ave any new medical conditions (e.g. re, kidney problems)?
No.	
b. Have you started on any new m started regularly taking non-s	nedications? This includes if you have teroidal anti-inflammatories (e.g.
ibuprofen or naproxen) or taking you have bought w	other medications/supplements that vithout a prescription?
No.	
c. Have you developed a new a	allergy to any medication or food?
Nu	O Yva
Summ	rr mequest



Over 19 months we have improved the efficiency of PrEP appointments through QI work We can now see twice as many patients in the same time, using the right staff, to meet our service users needs

Number of service users seen for PrEP over time



Challenges

- Perfect was the enemy of good enough
- "Its always been done this way"
- No one likes change
- Hesitancy/barriers from the top

Service user feedback

Would you use the Quick PrEP Service again?

Answered: 13 Skipped: 0



Compared to previous experiences of accessing repeat PrEP, how would you compare the Quick PrEP Service?

Answered: 13 Skipped: 0





Service user comments

"Honestly can't think of any, I was sorted in like 15 minutes!"

"Couldn't be friendlier. Super efficient"

"Friendly staff, great service. Thank you!"

"A first class service - friendly and with a welcoming smile too. Excellent system here"

Take home messages

• Change ideas driven from service users and front line clinical staff

- Increase ownership
- Simple interventions can drive meaningful change
 - Removing unnecessary steps in process
 - Simple pre-assessments
- Engage service users in their healthcare
 - Complete own assessment
 - Interventions whilst waiting for appointments





THANK YOU

Dr. Harry Coleman

Harry.Coleman@NHS.net

Mortimer Market Centre

CNWL NHS

Have you ever waited 6> hours in an Emergency Department?







Enhancing Emergency Department efficiency Fast-tracking COVID19 testing and patient flow with QI



Andrea X. Cortés Beltrán, MSc ISE, Deputy Director Quality Improvement & Innovation

- General Background
- Challenge
- Approach
- Takeaways



QUALITY & SAFETY

in HEALTHCAR

21-23 May 2025

Minister BMJ Group



About King's College Hospital, London, UK



Teaching hospital with King's College London



Major trauma centre SE London. Liver disease & neurosurgery





Quality Improvement and Innovation supports all staff with workshop improvement facilitation, advice and training. Work closely with patient outcomes, patient experience, IT (inPhase), patient safety, PMO, etc. Report to CMO.











Defining the problem

During the second COVID-19 wave, testing delays disrupted patient flow

- Average Turn Around Time (TAT) from swab labelling to lab was 14.8 hr average
- Patient flow impact, isolation decisions and bed management
- Increased pressure on lab services and ED capacity
- Slow results meant we couldn't separate patients fast enough

21-23 May 2025

Healthcare

BM Group







Our Approach

Used the KCH QI Methodology:

- 1. Define the problem
- 2. Understand the process (concerns, why)
- 3. Identify ideas to test
- 4. Test ideas
- 5. Implement and sustain improvements







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Describing the Current Status

ED COVID-19 Swabbing Process - Virology Lab pathway-





Quality

Innovation



Describing the Current Status

- Mapped process:
- $ED \square$ Portering \Box Lab
- No real time visibility on swab status
- Manual bottlenecks and unclear ownership of process steps
- Delays in registration of results into Electronic Patient Record (EPR)







Designing Solutions to Test

















Designing Solutions to Test

Multi-disciplinary Rapid Improvement Workshop (RIW)

#	Solution	Lead
1	ED and Guthrie Ward to use RED bags for COVID-19 swabs	David Fontaine-Boyd
2	Define porters process to drop off COVID-19 swabs at virology	Carlos Melo
3	Align times when labs makes PCR runs with porters drop off of swabs	Fearghal Tucker
4	Implement use of Yellow dots in Guthrie ward	Sara Hull
5	All COVID-19 specimens must go to 2 nd floor Virology within Cheynne Wing	Carlos Melo
6	Define and implement a standard process for Porters to drop samples at virology	Carlos Melo
7	Develop a process to confirm that lab has received swab	Gary Nicholson
8	Implement alerts on the system when results are ready	EPR resource (David McArdle)
9	Implement anytime collection by the porters	Carlos Melo
10	Have confirmation on EPR that swab has been taken (completed)	EPR resource (Imelda Shannon)







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7

6

21/09/2020

28/09/2020

05/10/2020

12/10/2020

19/10/2020

26/10/2020



B



16/11/2020 23/11/2020

Baseline

14.8

hours

27 nours

PDSA

11.50

9.70

Target

30%

reduction

12 hours

10.70

10.10

Actual

31.8%

10.10

20 hours

30/11/2020 07/12/2020

10.60

9.90

KPI

12.80

02/11/2020

Label to Lab Lab to EPR - TAT

TAT Label to Lab'

TAT Label - EPR

12.00

10.90

09/11/2020

PDSA

35.00

30.00

25.00

20.00

15.00

10.00

5.00

0.00

9.92

9.50

Overall Project Timeline

Project Milestones	Status & ECD
DEFINE: Complete PDS, boat chart	23/10/2020
DEFINE: Identify policies, collect data	23/10/2020
DESCRIBE: Collect data, Gemba walks (ED, lab, portering, Guthrie Ward)	04/10/2020
DESCRIBE: Rapid Improvement workshops	06/10/2020
DESIGN: Plan PDSAs	10/11/2020
DELIVER: Implement PDSAs	25/11/2020
DELIVER: Evaluate outcomes from PDSAs	4/12/2020
CLOSURE: Closure report/meeting	11/12/2020









Takeaways

- Use structured QI methodologies in crisis settings
- Change was only possible because we had all stakeholders involved
- Simple changes can make a big impact on safety and flow
- Never blame a person, focus on the process











Thank you!

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