

14th PAN ARAB TRANSFUSION MEDICINE CONFERENCE QATAR 2024



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30 November to 2 December 2024

Sheraton Grand Doha Resort & Convention Hotel,
Doha, Qatar

Emergency Preparedness & Crisis Management

Securing Blood Supplies for Major Events

Lessons from FIFA World Cup Qatar 2022

SESSION 4-LECTURE 3

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**FIFA WORLD CUP
Qatar 2022**

14th Pan Arab Transfusion Medicine Conferences Qatar 2024

December 2, 2024 | 4:40 PM – 5:00 PM

Sheraton Grand Doha Resort & Convention Hotel, Al Majlis Hall

Doha, Qatar

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The SPC members

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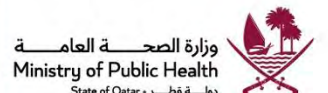
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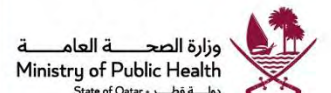
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How effective were the strategies employed by Qatar
to ensure an adequate blood supply during the FIFA
World Cup 2022?



Background

The FIFA World Cup Qatar 2022 presented a significant challenge in ensuring a stable blood supply to cater to the increased demand from the huge number of visitors and potential medical emergencies. The Transfusion Medicine Division (TRM) of Hamad Medical Corporation (HMC) organized extensive preparatory efforts to ensure an adequate blood supply throughout the event.



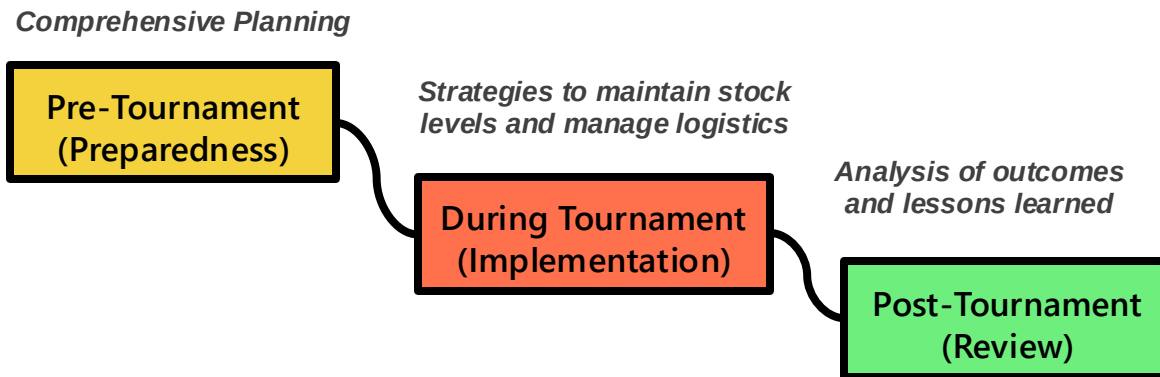
Introduction

Qatar's health authorities undertook extensive preparations to address the potentials increased Blood demand During the FIFA World Cup Qatar 2022.

These included proactive strategies & for readiness and rapid response and community engagement for successful blood supply management.

Aim To analyze the effectiveness of the blood supply management strategies employed during the FIFA World Cup Qatar 2022, focusing on planning, execution, and post-event evaluation.

Methodology & Data Collection



- ❑ This study contacted at the Qatar National Blood Donor Center (QNBDC).
- ❑ A quantitative approach was used for the data collection.
- ❑ The study evaluates a ten years data (2013-2023)
- ❑ The Blood Donation Data were Extracted by HMC, LIS Team from the Computer System databases of the QNBDC at HMC, in Doha, Qatar.

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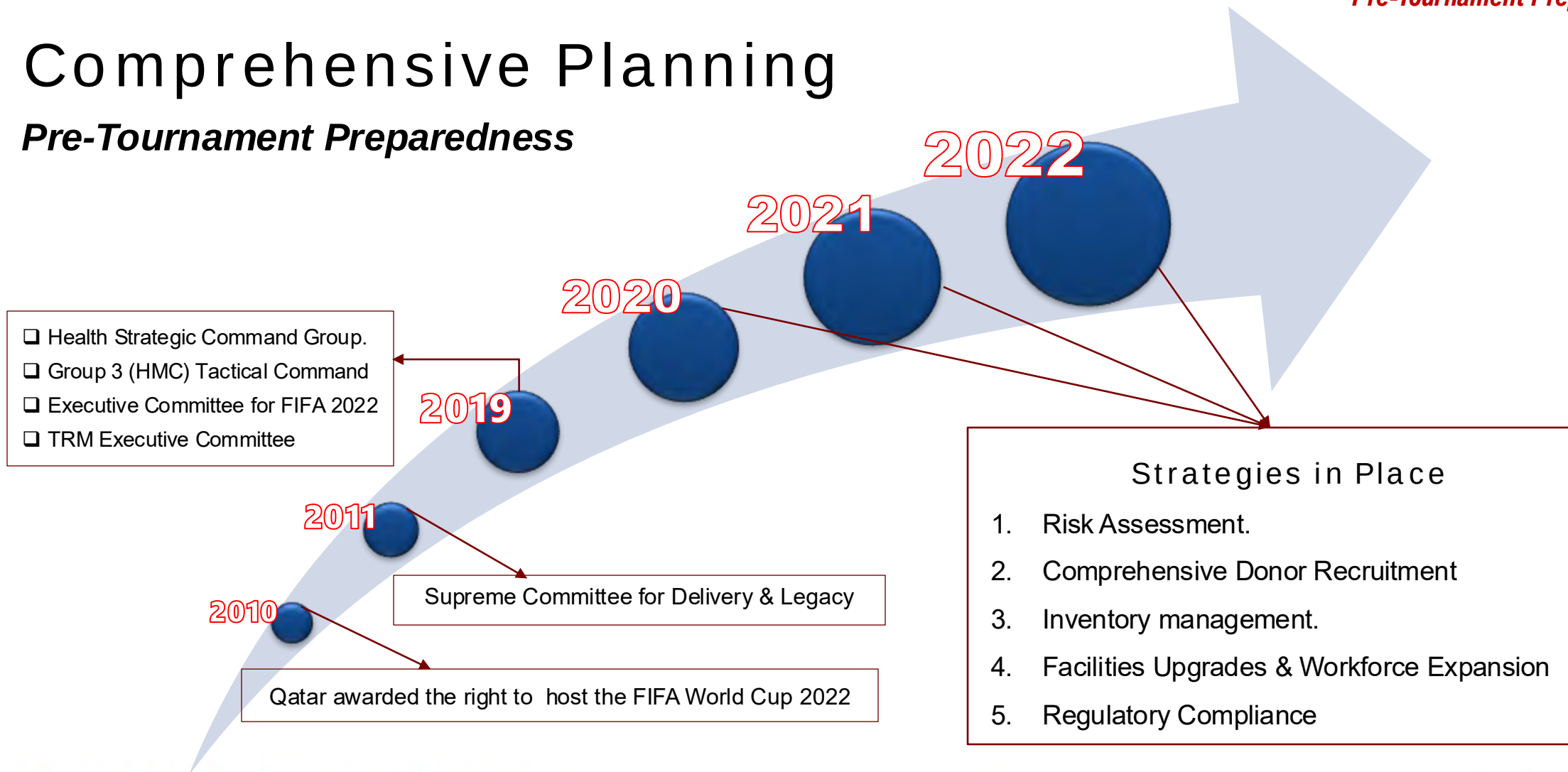
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Comprehensive Planning

Pre-Tournament Preparedness



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1. Risk Assessment



IDENTIFYING RISKS



ANALYZING RISKS



RISK SEVERITY
RATING



DOCUMENTING &
CONTROL

LIKELIHOOD		SEVERITY		RISK SCORING		
1	Highly likely to occur	3 - HIGH	Major	LIKELIHOOD	3	6
2	Likely to Occur	2 - MEDIUM	Serious		2	4
1	Unlikely to Occur	1 - LOW	Minor		1	2
				SEVERITY	6 - 9	HIGH
					2 - 4	MEDIUM
					1	LOW
					Identified risks are Further control measures required	
					Required risk justification	
					No further control measures are required	

TRM Risk Assessment for FIFA 2022 in Qatar

Blood Supply
Management

Regulatory
Compliance

Public
Awareness &
Educations

Contingency
Plans

Cross-Border
Collaboration
(Kuwait &
KSA)

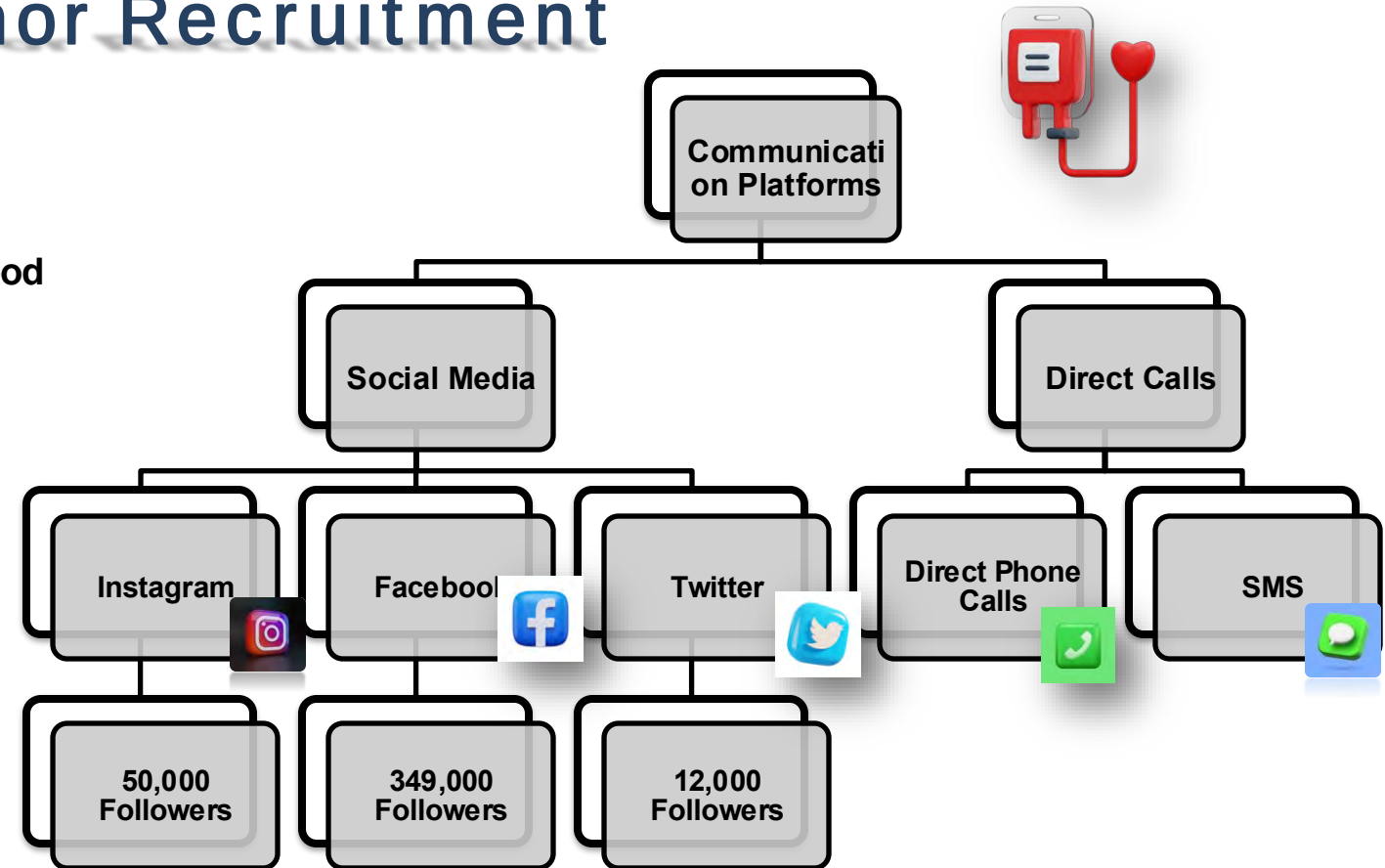
Emergency
Response
(Capacity &
Supply Chain
Disruptions)



2. Comprehensive Donor Recruitment

To increase awareness and build a sustainable Blood supply through:

- ☐ Call for Volunteer Blood Donors
- ☐ Blood Donor's Campaigns
- ☐ Community Engagement & Public's Education
- ☐ Communities Agreements (e.g. The Army, main corporations).

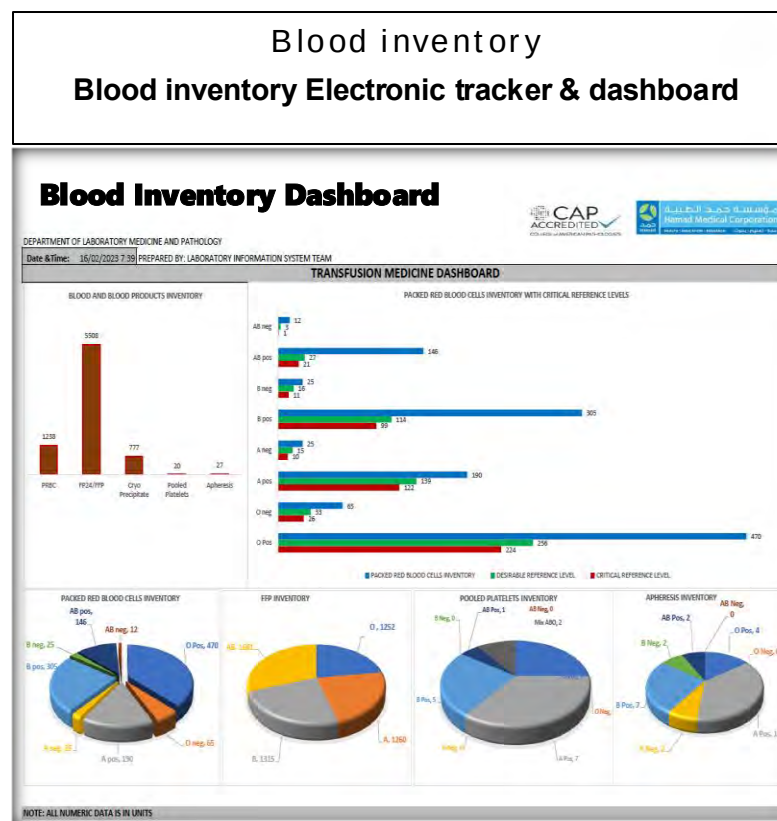


3. Inventory Management

Reagents & Supplies



Blood & Blood Products



Questions That Updated Our Critical Supplies Risk Assessment for FIFA World Cup 2022



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Qatar Blood Services

How much stock do we need for peak demand?

What is the optimal stock level for critical reagents?

Is our storage capacity sufficient for increased stock?

Who are our main and backup suppliers?

What could cause unexpected demand spikes?

What transport challenges do we face for the World Cup?

How can we ensure timely delivery under various conditions?

What contingency plans are there for supplier failures?

How will we meet demand for large events like the World Cup?

What are our backup plans for logistics disruptions?

What emergency stockpiles do we have for critical supplies?



4. Facility & Workforce

Workforce



Active Staff recruitments
from mid-2021 to early 2022.
Trained additional staff and
volunteers to support in
distastes.

Facility



Upgraded, Expanded
Launched an additional backup
facilities

5. Regulatory Compliance

- ❑ Ministry of Public Health of Qatar (MOPH)
- ❑ 2004: Joint Commission International (JCI)
- ❑ 2014: College of American Pathologists (CAP)
- ❑ 2021: Certification for Excellence in Person-Centered Care by Planetree International (PCC)
- ❑ 2022: Association for the Advancement of Blood & Biotherapies (AABB)
- ❑ 2024: EFLM certificate “Green & Sustainable Laboratories” (Green Lab)





Results (Pre-Tournament Preparedness)

Risk Assessment: Major Incident Drills & two mass casualty drills Conducted.

Donor Recruitment: Targeted campaigns led to increase in active donations.

Blood Donation Trends: Donations Rate rising from 0.67% to 1.90% of the population.

Facility Enhancements: Relocated to a larger facility and added more mobile collection vehicles.

Accreditation Complaints: TRM Reviews & update all her “PPP” to ensure standards compliance and to match the practice.

Blood Services During The FIFA World Cup Qatar 2022



FIFA WORLD CUP
Qatar2022



Qatar's Visitors During The FIFA World Cup 2022

FIFA World Cup Qatar 2022 was scheduled to start on 20th November 2022, ending with the Final on the 18th of December 2022 (Qatar National Day). A total of 1.89 visitors were forecasted, with over 1600 flights per day.

32 Teams

64 Games

Group Stage: 48 Matches

Round of 16: 8 Matches

Quarter Final: 4 Matches

Semi Final: 2 Matches

3rd Place: 1 Match

Final: 1 Match

TOTAL
1,898,000
People will visit Qatar
during the tournament

44,000 FIFA/LOC Constituent Groups
68,000 Event Workforce
936,000 Ticketed Fans + Dependants
850,000 Un-ticketed Fans

PEAK DAY
562,000
Visitors will be in Qatar
on the busiest day (Day 8)

19,000 FIFA/LOC Constituent Groups
68,000 Event Workforce
339,000 Ticketed Fans + Dependants
136,000 Un-ticketed Fans

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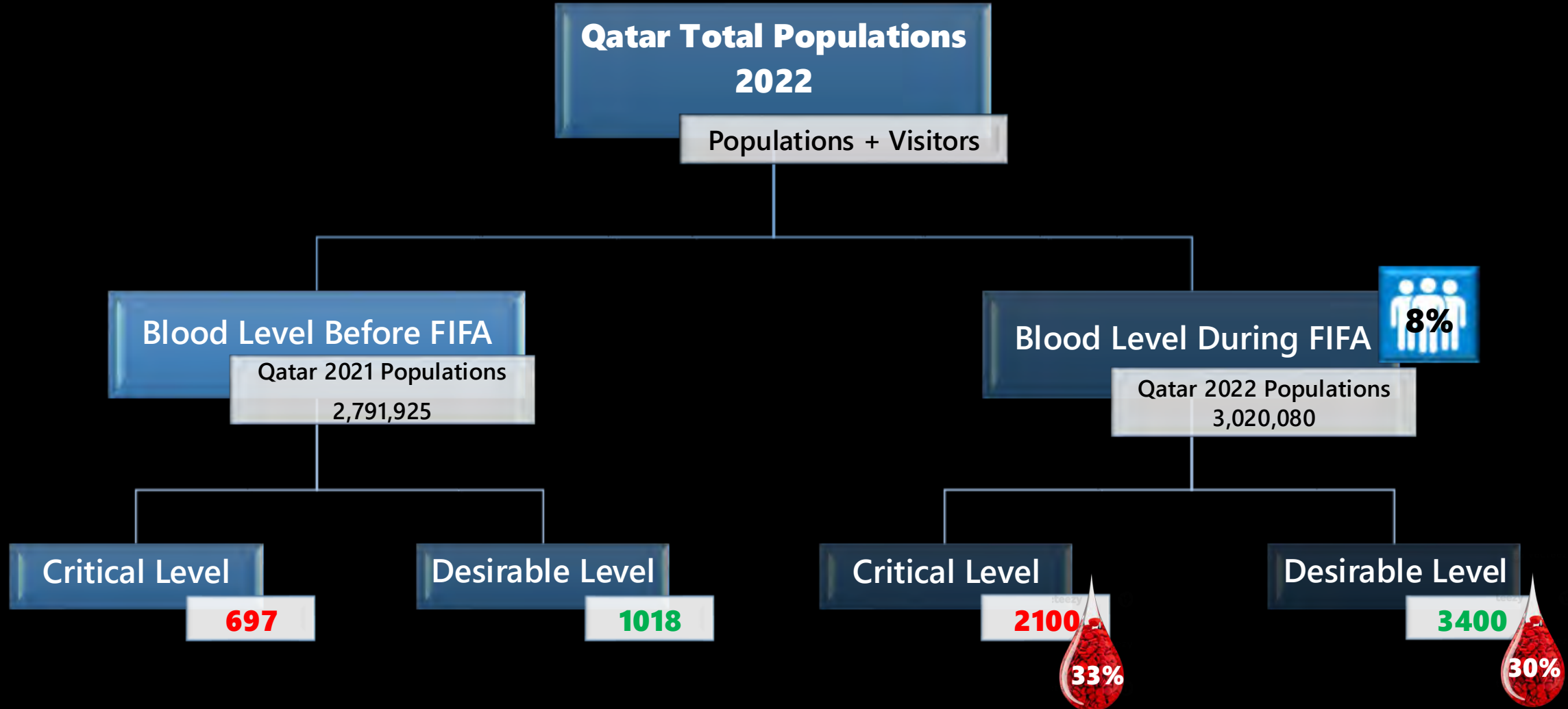
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How Much Blood is Needed ?



During the Tournament

Strategic Implementation for adequate blood supplies

Real-Time Inventory Monitoring blood supply and demand.

Maintain RBC and platelet stocks within 4-6 days and 2 days, respectively.

Rapid Response Teams were available 24/7 to manage any sudden spikes/ demand for blood.

TRM Successful Collaborations with:
hospitals deliver blood supplies on time.
local media to promote blood donations during the event.

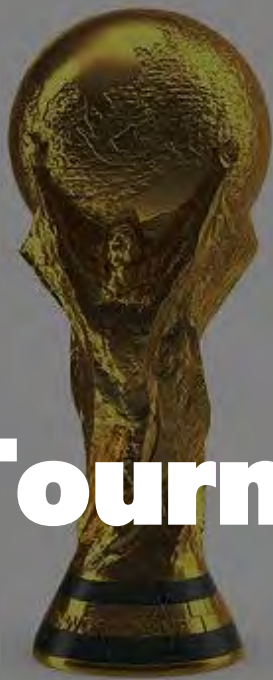
There were not Major incident encountered during the FIFA World Cup.
Adequate stock levels of blood and blood products met the needs of approximately 1.89 million visitors.

Qatar's Network of Healthcare & FIFA World Cup 2022 Stadiums



Hospitals	Location	Transfusion Services 	Stadiums 
Hamad General Hospital	East of Qatar	TS	Education City Stadium
Hamad Trauma and Emergency	East of Qatar		Al Bayt Stadium
Surgical Specialty Center	East of Qatar		Ras Abu Aboud Stadium
HMC Heart Hospital	East of Qatar	TS	Khalifa International Stadium
Rhumaila Hospital	East of Qatar-Doha		Al Thumama Stadium
National Center for Cancer Care & Research (Al Amal Hospital)	East of Qatar		Al Janoub Stadium
Qatar Rehabilitation Institute	East of Qatar	TS	Ahmed Bin Ali Stadium
Ambulatory Care Center	East of Qatar		Lusail Stadium
Women's Wellness and Research Center (WWRC)	East of Qatar		
The Cuban Hospital	West of Qatar	TS	
Aisha Bint Hamad Al Attiyah hospital	North of Qatar	TS	
Ras Laffan General Hospital	North of Qatar	TS	
Al Khor Hospital	North of Qatar		
Hazm Mubareek General Hospital	South of Qatar	TS	
Al Wakra Hospital	South of Qatar	TS	
Mesaieed General Hospital	South of Qatar		

Post-Tournament



**Blood Services Evolutions Post FIFA
World Cup Qatar 2022, Lessons & Gain**



THANK YOU
Heroes in white



I ♥ Qatar.net

HEALTHCARE
WORLD CUP 2022





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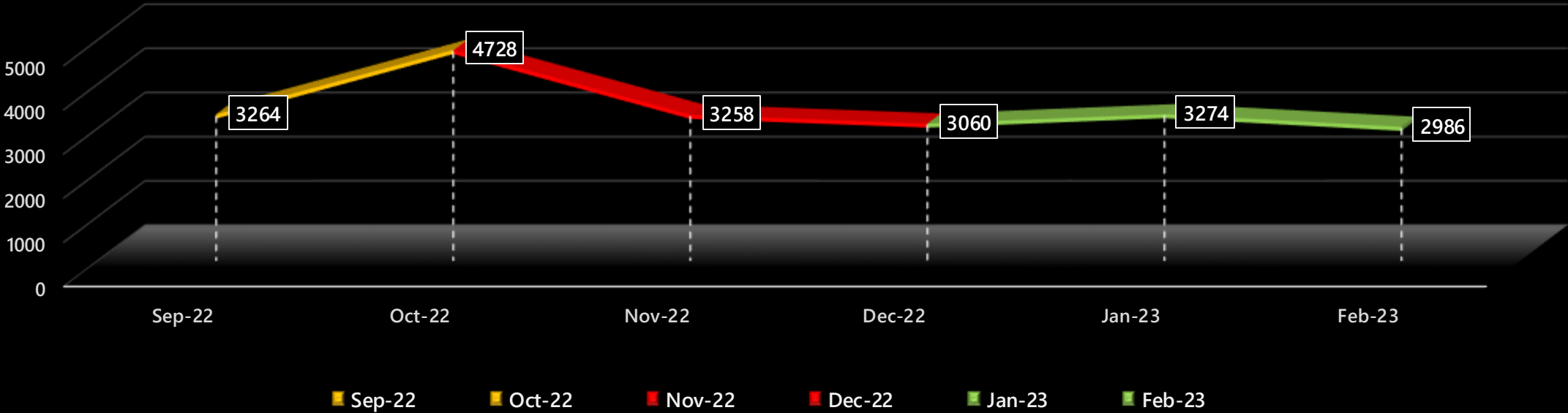


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Qatar Blood Services

Blood Donation Trends Among Qatar's Populations Assessment

Post The FIFA World Cup Qatar 2022

Blood Donations Trends: (Pre, During & Post FIFA World Cup 2022)



Pre-FIFA World Cup

(October vs. September)
45% increase

During-FIFA World Cup

November: 31% decrease
December: 6% decrease

Post-FIFA World Cup

January: 11% increase
March: 22% increase
February: 6% decrease

Blood Donation Trends Analysis in Qatar (2013-2023)

Population & Donor Data

Population (18-60)

- Grew from 1.81M (2013) to 2.26M (2023).
- Spike in 2022 due to FIFA World Cup job opportunities.

Number of Blood Donors

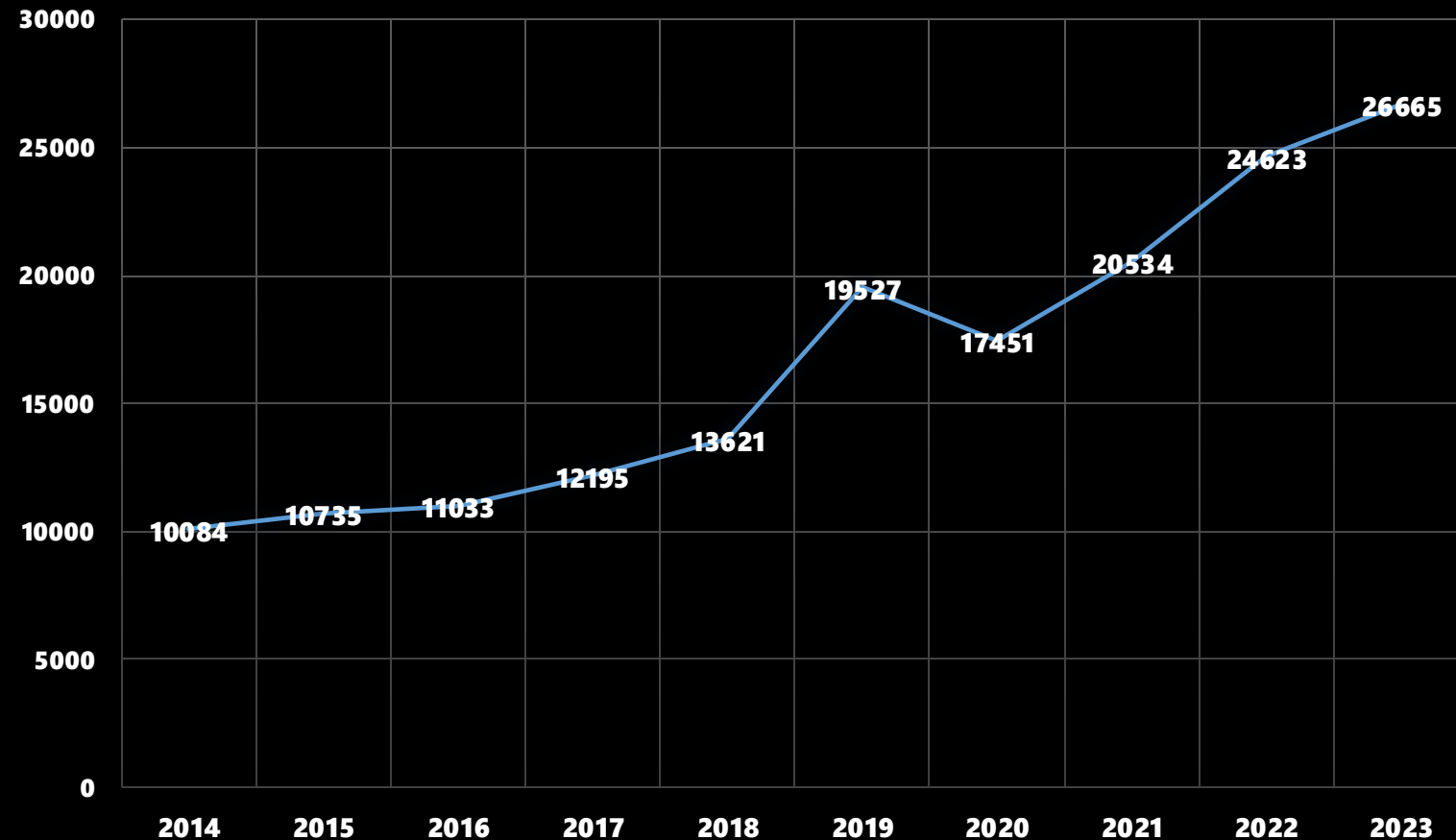
- Increased from 12,154 (2013) to 43,301 (2023).
- Spikes in 2020 and 2021 due to COVID-19 awareness.

Percentage of Blood Donors

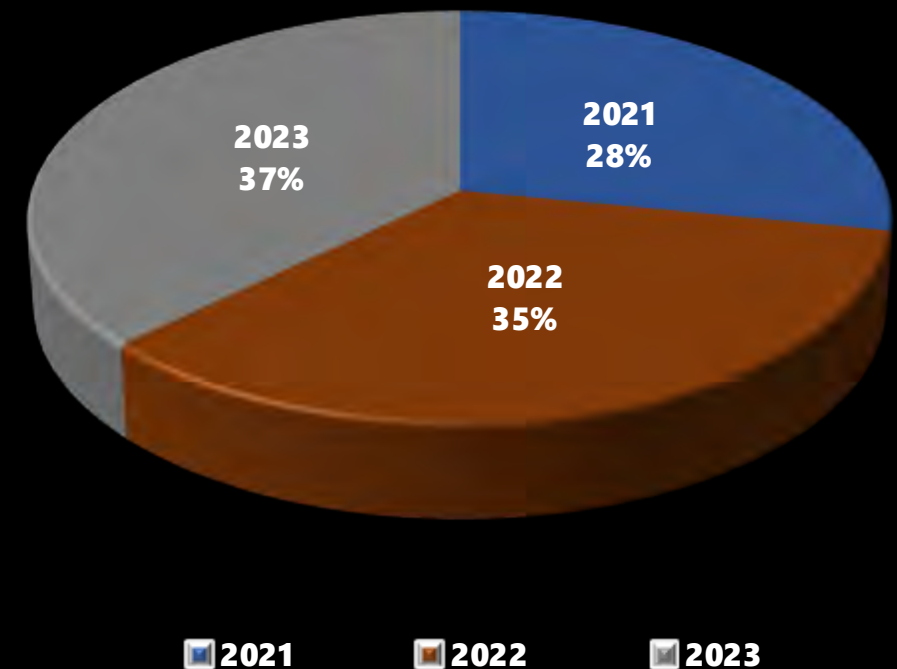
- Rose from 0.67% (2013) to 1.91% (2023).

Blood Donation Campaigns Overview

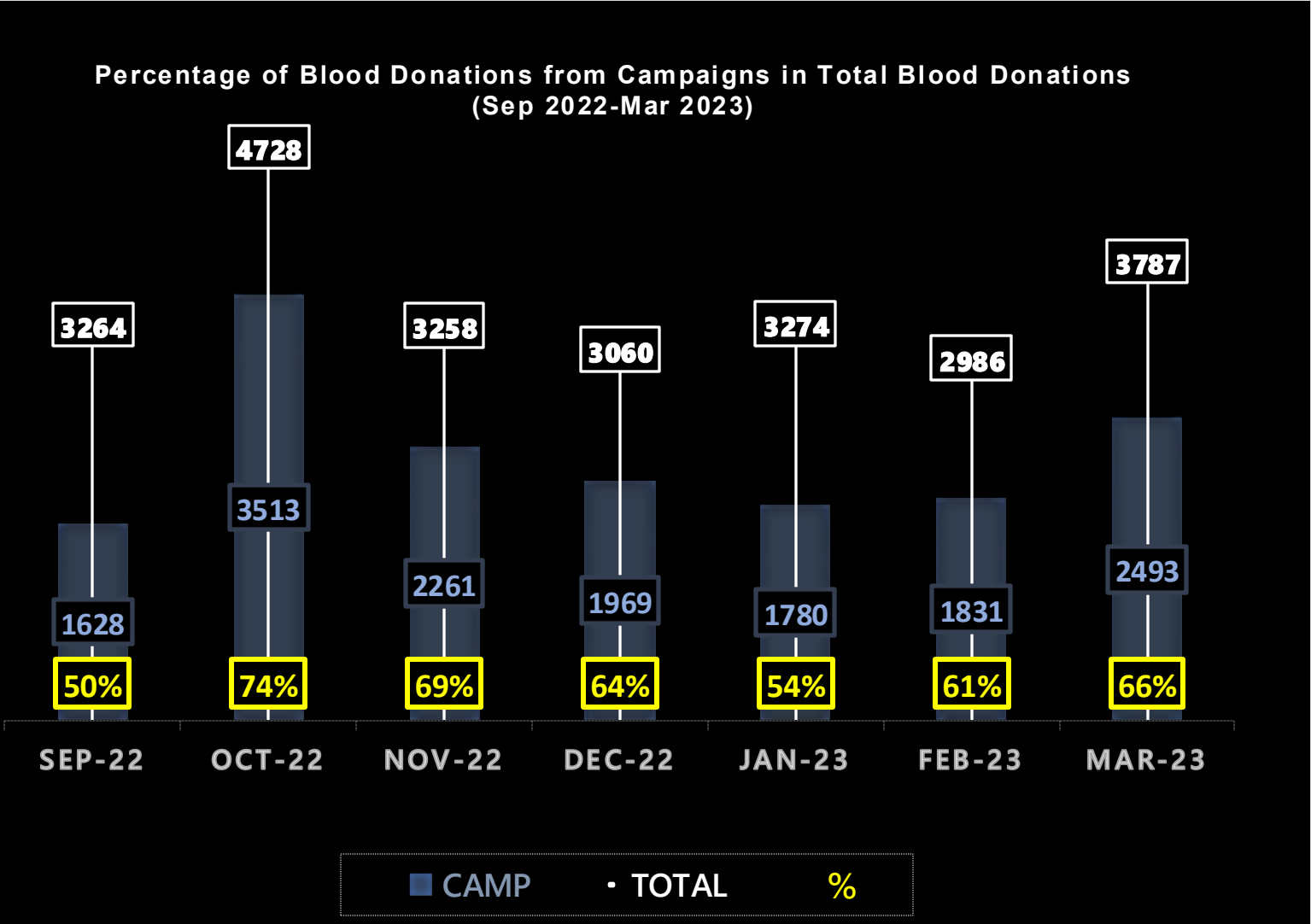
Blood Donor Campaigns Trends in Qatar (Between 2014 & 2023)



Percentage of Campaigns Blood Donations in Total Donations in Qatar (2021-2023)



Blood Campaigns Effectiveness Evaluation



A significant spike in donations (The campaign in October)

Sustained efforts during the World Cup maintained reasonable donation levels despite a drop from the peak.

From 2013 to 2023, blood donations increased steadily, with campaign contributions peaking in 2023.



Blood Stock Management Evaluation

FIFA World Cup 2022



RBCs (O positive)

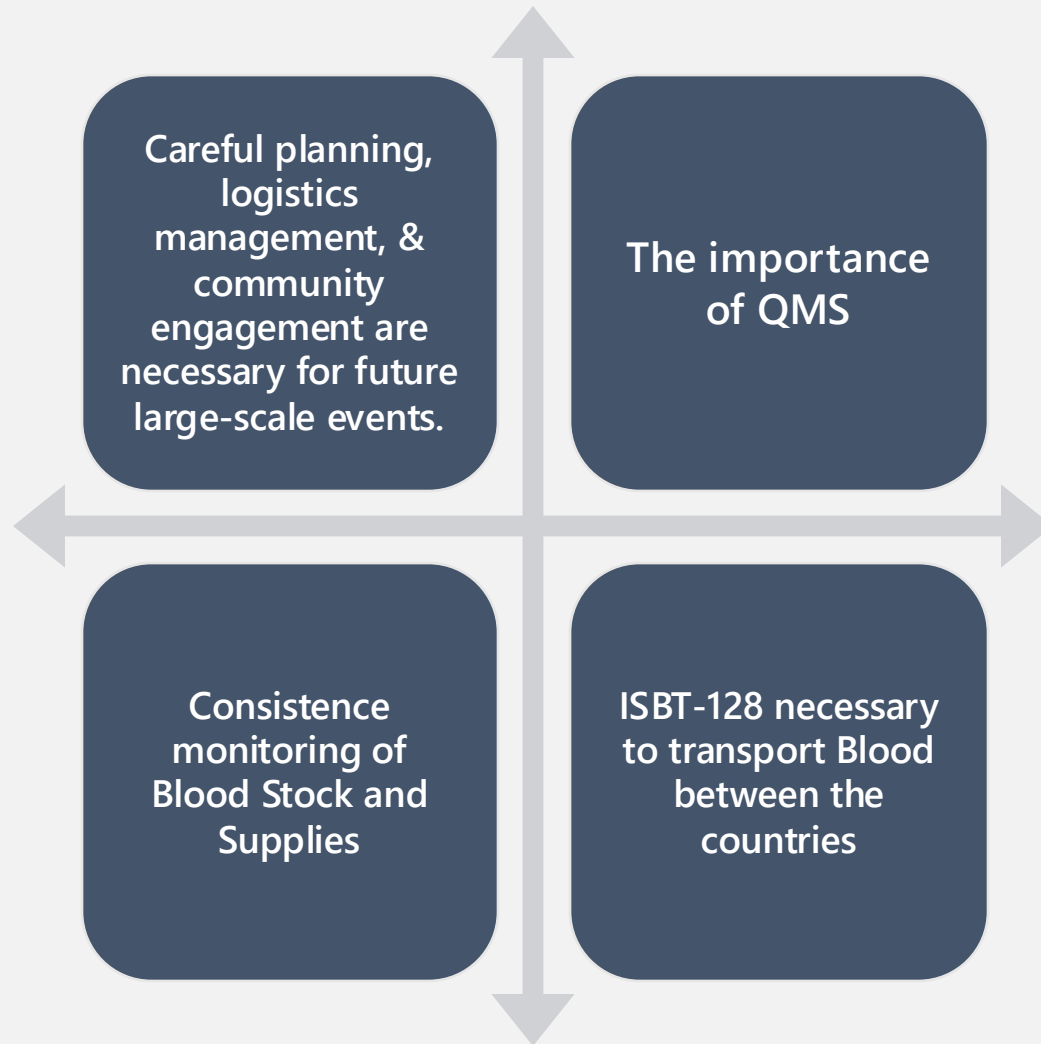
Stock levels remained well above the critical and desirable thresholds throughout the period.

RBCs (O Negative)

Stock levels fluctuated more significantly compared to O positive.

Despite fluctuations, levels were generally above the critical threshold and around or above the desirable threshold.

Lessons Learned



Pros & Cons

Cons

Blood Wastage

Financial Conscious

Pros

Organizational
Clarity

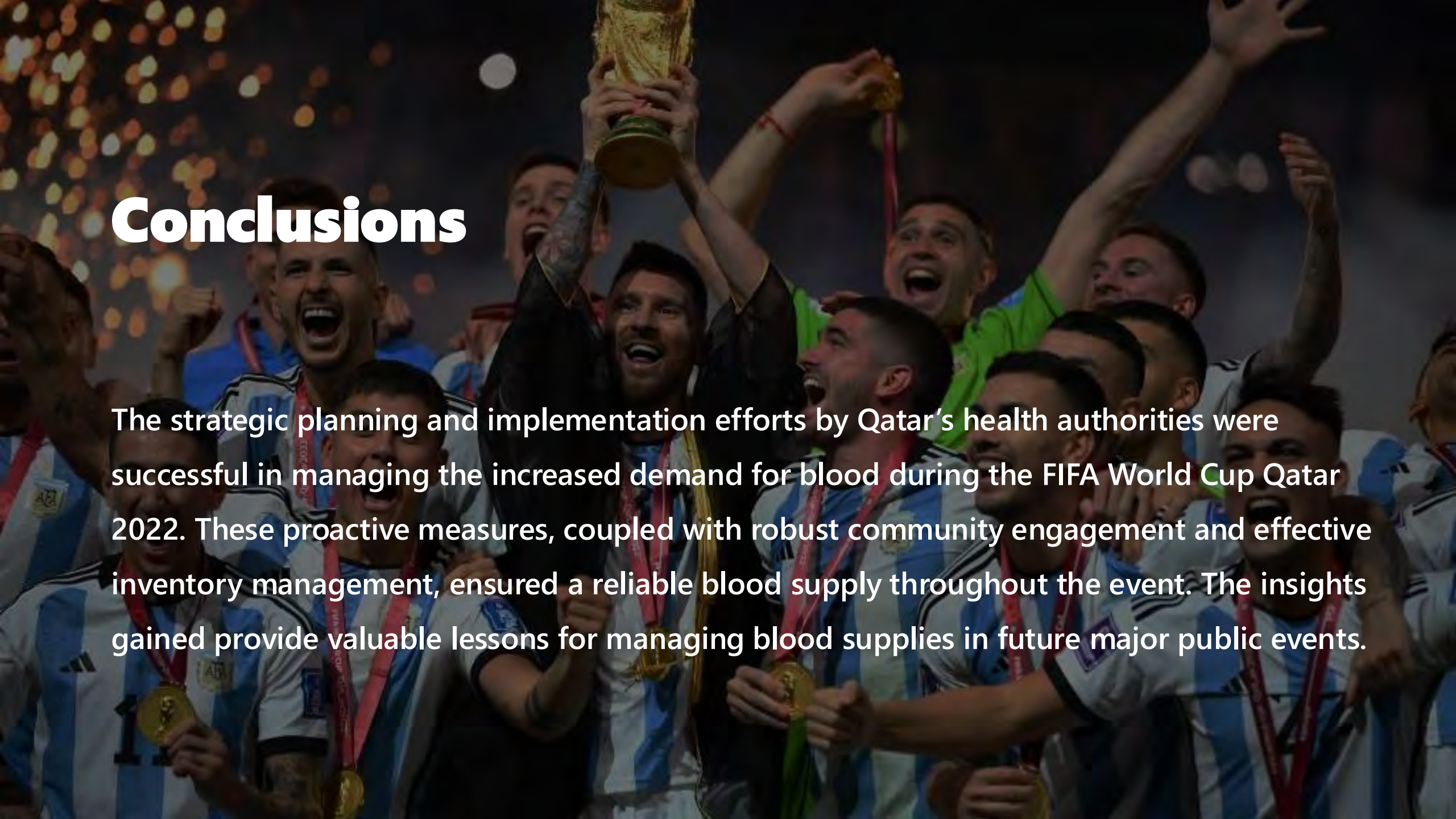
Increase of Blood
Stock

Enhance the
Donations
awareness

Enhanced Facilities &
Increase Workforces





A celebratory scene of the Argentine national football team. The players, wearing their iconic light blue and white striped jerseys, are shown in a state of intense joy. Several players are holding up gold medals, and one player in the center is triumphantly lifting the FIFA World Cup trophy. The background is filled with a shower of golden confetti, creating a festive and triumphant atmosphere. The overall image is slightly darkened to serve as a background for the overlaid text.

Conclusions

The strategic planning and implementation efforts by Qatar's health authorities were successful in managing the increased demand for blood during the FIFA World Cup Qatar 2022. These proactive measures, coupled with robust community engagement and effective inventory management, ensured a reliable blood supply throughout the event. The insights gained provide valuable lessons for managing blood supplies in future major public events.



References

Home. (n.d.). <https://www.hamad.qa/EN/About-Us/Our-Accreditations/Pages/default.aspx>

Number of Visitors to Qatar Increased by 138.3% Last August on An Annual Basis. (n.d.). <https://www.qna.org.qa/en/News-Area/News/2022-10/02/0040-number-of-visitors-to-qatar-increased-by-1383-last-august-on-an-anual-basis>

Standards & Accreditation - Association for the Advancement of Blood & Biotherapies. (n.d.). www.aabb.org. <https://www.aabb.org/standards-accreditation>

Anderlini, P. (2009). Donors, donors, and more donors. *Blood*, 114(18), 3721–3722. <https://doi.org/10.1182/blood-2009-08-239103>

Hussein, E., & Teruya, J. (2012). Evaluation of blood supply operation and infectious disease markers in blood donors during the Egyptian revolution. *Transfusion*, 52(11), 2321–2328. <https://doi.org/10.1111/j.1537-2995.2012.03592.x>

Kamareddine, L. (2019, June 1). ASSESSING THE CURRENT STANDING OF HAMAD MEDICAL CORPORATION BLOOD DONOR CENTER IN QATAR AND DEVELOPING A FORECAST MODEL FOR THE BLOOD STOCK NEEDS DURING THE 2022 WORLD CUP EVENT. <https://qspace.qu.edu.qa/handle/10576/11653>

Keep Donors and Prospects Engaged Through Special Events. (2020). *Special Events Galore*, 20(5), 6–6. <https://doi.org/10.1002/speg.31351>

Narayanan, D., & Rajan, A. (2020). A Study of Motivational Factors, Incentive Preferences, and Unpleasant Events during Blood Donation among Blood Donors. *Journal of Evolution of Medical and Dental Sciences*, 9(49), 3735–3738 <https://doi.org/10.14260/jemds/2020/820>

Sandage, E. (2023). Connect More Corporate Donors to Your Events. *Special Events Galore*, 23(11), 2–2. <https://doi.org/10.1002/speg.32065>

Use Events to Find Donors. (2015). *Special Events Galore*, 15(6), 3–3. <https://doi.org/10.1002/speg.30105>

What Donors Want to See and Experience At Special Events. (2022). *Special Events Galore*, 22(12), 5–5. <https://doi.org/10.1002/speg.31884>



Questions?





Thank you

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