

Supply Chain Resilience Levers

28th February 2022

Setting the Scene



- This document outlines NHSBT's supply resilience plans to mitigate against future supply risks.
- It is developed out of the lessons learnt from the last two critical incidents.
- It provides a roadmap for early detection of potential supply disruptions and subsequent actions to avoid stocks decline below alert level (National stock trigger point).

Above the line: Excluded from BAU forecasts

- Weather disruptions
 - Fuel shortages
- Major sporting events
- Demise/Enthronement of a monarch
 - Pandemic
 - Public respiratory illness

Supply Disruption Scenarios

- Below the line: Included in BAU forecasts
 - Bank holidays
 - Festive periods
- Seasonal disruptions (Summer holidays, School half term holidays)

Out of scope: Disaster scenarios

- Wide scale Terrorist attacks
- War

List of Supply Levers

Walk-in appointments

NHS
Blood and Transplant

These levers have been segmented based on how they can be applied and the expected impact.

	Tactical - Short term Impact	Tactical - Medium term Impact	Transformational - Under development
or Down	 Increase capacity through overtime Appointment trade-off Increase Direct Marketing volumes Increase grid sizes Increase Campaign activity Regionalised Social Media Group specific urgent social media Increase press release activity Adjust cancellation priority by blood group De-book enrolees in favour of known donors 	 Increase team open days/hours (temps/agency) Ad hoc/Bespoke venues Increase campaign activity Reduce new donor cap Standardise system for appointment trade-off Develop stock media materials for urgent increase New donor pathway 	 Review of the staffing model Operating model implementation Pulse development on new donor cap throughout year to specific times of year Pulse developments to create blood group demand driven grids Develop advance booking seasonal group specific Home type testing

	Coll	ection	Levers
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	Collection revers	
 Implement appointment caps by blood group Increase team engagement/training time New donor focus Increase new donor cap Reduce grid sizes/appointment slots Reduce direct marketing volumes Adjust cancellation priority by blood group 	■ Not Applicable	 Review of the staffing model Pulse developments to create demand driven grids

Providing Context - Blood Supply Levers



Activation of each lever will be determined by its pros and cons and require appropriate approval.

#	Blood Supply Activity	Trigger	Owner	Pros	Cons	Approval Level
1	Flex capacity through overtime	Under collection	BD Ops	Quick to implement	 High cost 	Within Budget: Supply Review Above Budget: BOLT
2	Appointment trade-offs	'Wrong' BGM	BD Ops	Quick to implement	 Impact on donor recruitment/retention/reacti vation activities 	Supply Review
3	Appointment caps	'Wrong' BGM	Planning	Quick to implement	Manually intensive activity	Supply Review
4	Team engagement/training time	Under/Over collection	BD Ops	 More time for team upskilling Use time for extra sessions 	 Can only be used as a medium term lever to allow for adequate resource planning Adversely impacts team morale 	Supply Review
5	Team open days/hours (temps/agency)	Over collection	BD Ops	Organic increase of capacity, footprint expansion	 Time to implement due to staff training and recruitment 	Supply Review
6	Ad hoc/Bespoke venues	Under collection 'Wrong' BGM	Planning	Targeted collection	 Increased venue/collection cost 	Within Budget: Supply Review Above Budget: BOLT
7	Walk in appointments	'Wrong' BGM	BD Ops	Quick to implement	Could lead to sessions over running	Supply Review
8	Pull forward WIP by blood group	'Wrong' BGM	Planning	Quick to implement		Supply Review

Providing Context - Donor Experience Levers



#	DX Activity	Trigger	Owner	Pros	Cons	Approval Level
1	Flex donor cap	Under/over collection 'Wrong' BGM	DX Planning	 Regular donors have higher conversion and known blood groups 	 Adversely impacts recruitment Impact on plans to build donor base, donor frequency and ongoing patient supply 	Supply Review
2	Direct Marketing volumes Outbound calls and invitations, Letters, Emails	Under collection 'Wrong' BGM	DX Marketing	Quick to implementEffective in driving targeted group collection	 Cost implications and may require volunteers at NCC for overtime. 	Within Budget: Supply Review Above Budget: BOLT
3	Grid sizes/appointment slots	Under/over collection 'Wrong' BGM	DX Planning	Quick to implement	 Negative perception versus a right-sized grid 	Supply Review
4	Campaign activities Regionalised social media Group specific urgent Social media	Under collection 'Wrong' BGM Insufficient supply from targeted groups	DX Marketing	 Boost to new donor numbers Effective in driving targeted group and overall collection 	 Long lead time Ad hoc campaign activities could impact budget 	Within Budget: Supply Review Above Budget: BOLT
5	Press Release activity	Under collection 'Wrong' BGM Insufficient supply of targeted groups	Comms	 Proactive messaging to media outlets to control the narrative 	 Possible adverse impact on NHSBT reputation Media saturation could lead to less coverage 	Within Budget: Supply Review Above the line: BOLT
6	Cancellation priorities	'Wrong' BGM	DX Planning	Quick to implement	Adversely impacts recruitment/retention/reactivation	Supply Review
7	De-book enrolees in favour of existing donors	Under/over collection 'Wrong' BGM	DX Planning	Quick to implement	Adversely impacts recruitment/retention/reactivation	Supply Review
8	New donor pathway	Under collection 'wrong' BGM	DX Marketing	 Reduces new donor conversion time 		Within Budget: Supply Review Above the line: BOLT 5

How do we detect potential supply failures?



<u>Trigger points</u> based on <u>projected stock trends</u> have been identified which serve as an indication of a <u>potential</u> supply failure.

Settling Stuck High Overheated (BF) (BS) (BR) At Risk Secure **Overheating** (GF) (GS) (GR) Stuck Low Low Alert Recovering (RS & AS) (RF & AF) (RR & AR) **Rising Falling** Steady

Stock Level

- Maintain
- **Activate appropriate levers**
- !! Intensify appropriate levers

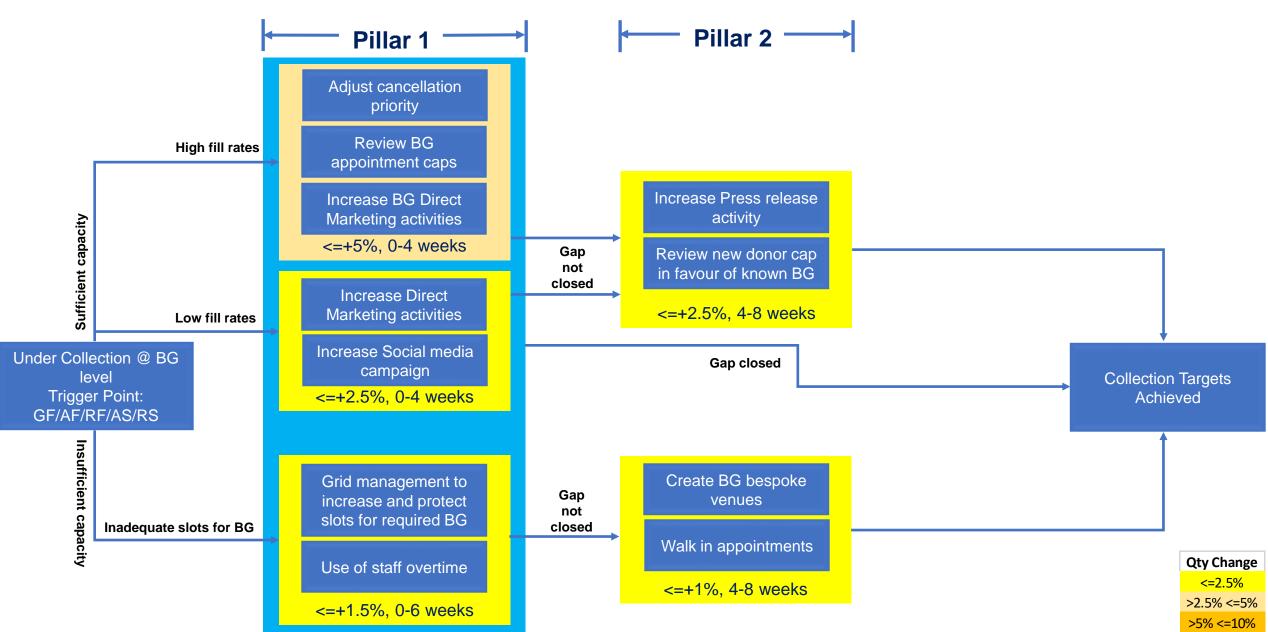
Key	Description
RF	Red Falling
AF	Amber Falling
RS	Red Steady
AS	Amber Steady
RR	Red Rising
AR	Amber Rising
GF	Green Falling
GS	Green Steady
GR	Green Rising
BF	Blue Falling
BS	Blue Steady
BR	Blue Rising

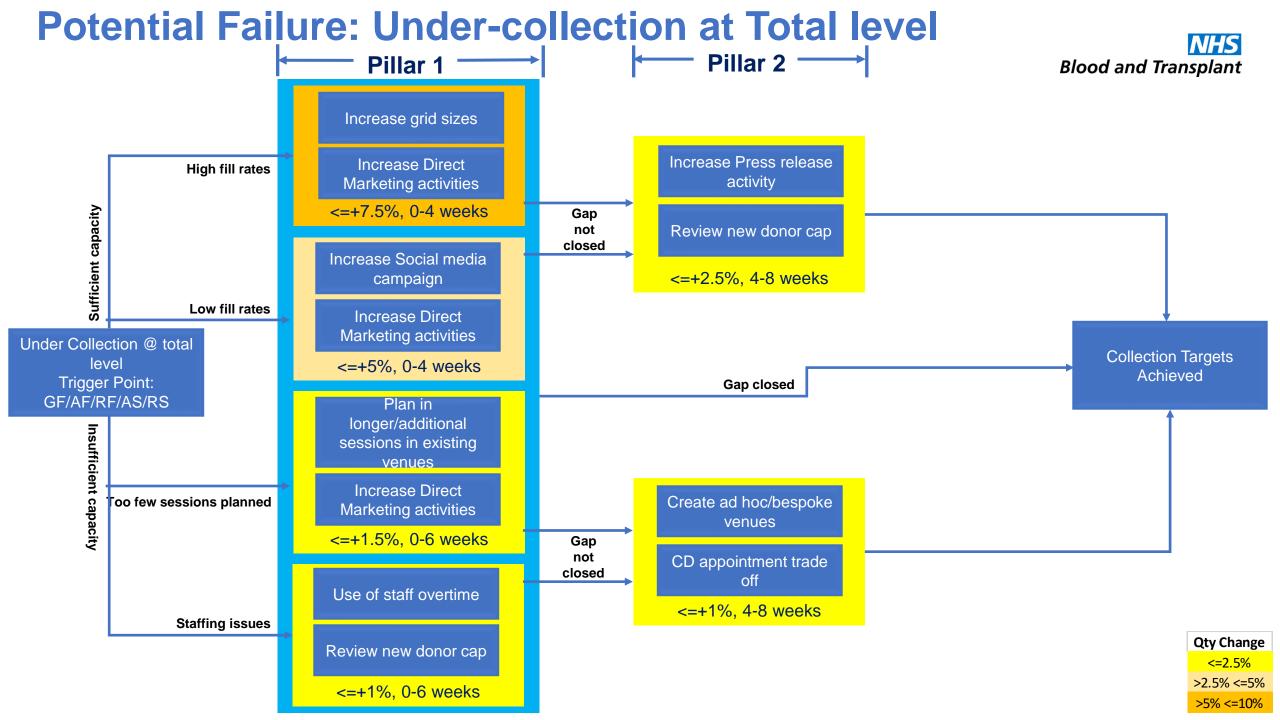
Potential Failure: Under-collection at Blood Group level

NHS

This answers the questions - What? In what order? For how long? Expected impact?

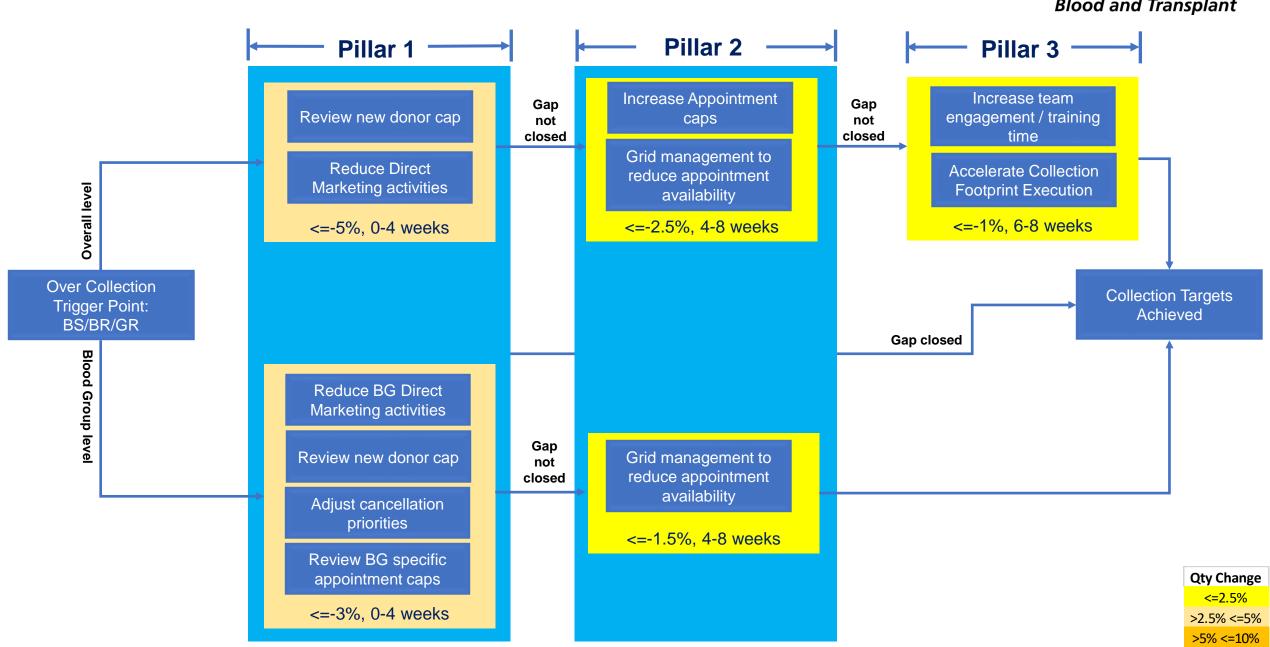
Blood and Transplant





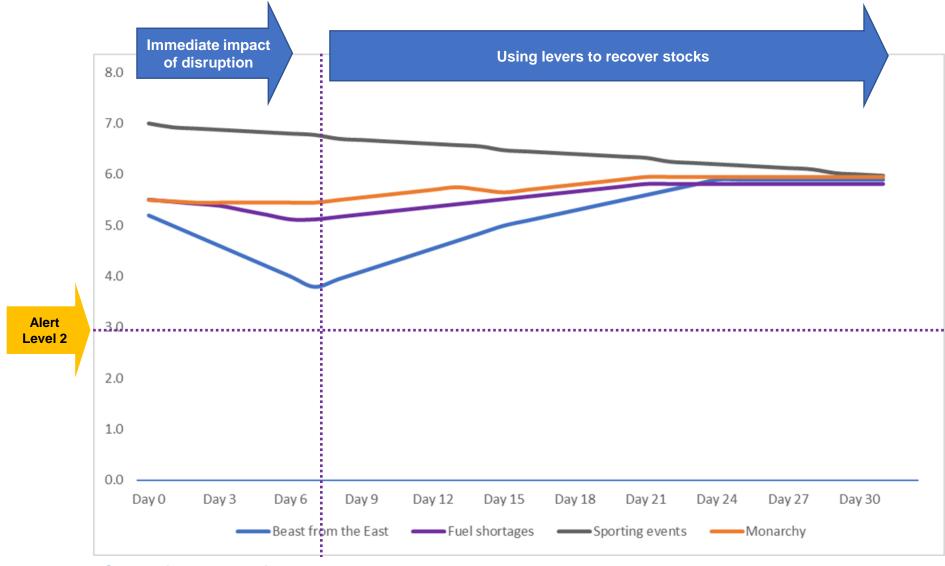
Potential Failure: Over-collection at Total & BG level





How sufficient are the Levers at Total level?





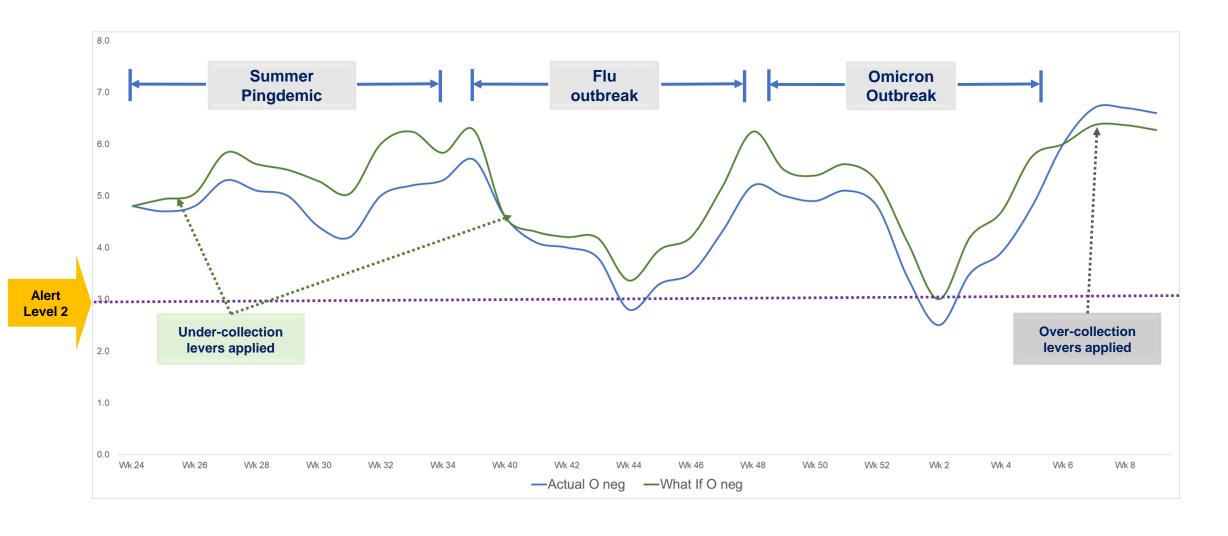
Scenario assumptions:

Beast from the East: Supply levers (+10%) applied from week 2 for 3 weeks Fuel Shortage / Monarchy: Supply levers (+5%) applied from week 2 for 2 weeks Sporting Events: No levers applied due to high stocks prior disruption (7 DOS)

How sufficient are the Levers at BG level?



The graph below compares stock profiles when levers are activated timely.

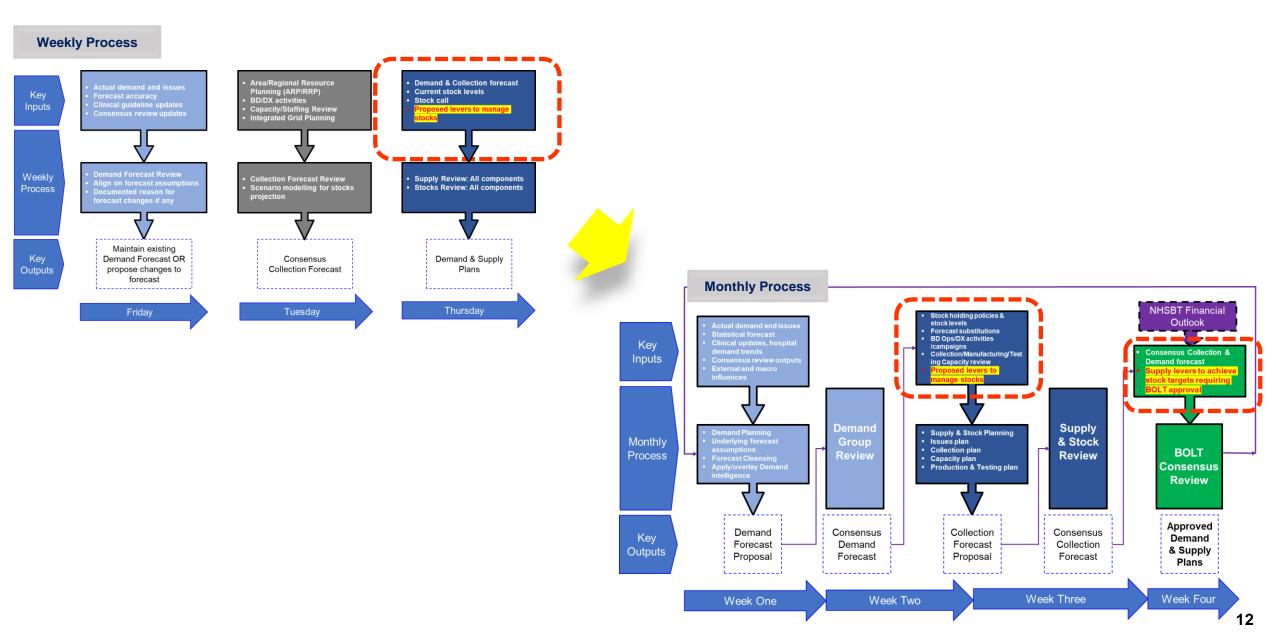


Learning: Early detection and activation of the levers is key to avoid stock decline.

Where does this sit in our ISP process?



Levers will be assessed against stock levels and proposals fed into supply review meetings.



Next steps



- Tactical levers:
 - Formal ratification in BOLT
 - Monitor implementation as part of ISR process to assess efficiency and build further resilience (Continuous Improvement)
- Strategic levers:
 - Finalise detailed plan
 - Monitor development & deployment as part of monthly ISR process